

## **PEDC**

# SUSTAINABILITY REPORT 2024





## PEDC SUSTAINABILITY REPORT - 2024



#### ABOUT THIS REPORT

Pasargad Energy Development Company is proud to announce the publication of its first annual Sustainability Report this year. This milestone marks our first dedicated step into sustainability reporting, reflecting our strong commitment to the well-being of our company, the communities we serve, and the environment in which we operate. Developing this report demonstrates our recognition of the importance of responsible business practices and our dedication to integrating sustainability into our core strategy.

In preparing this document, we adhered to globally recognized standards and frameworks, to ensure the quality of the report and to meet the high standards of excellence we expect from all our work and operations. Specifically, our approach aligns with the standards set by the Global Reporting Initiative and the sustainability roadmap outlined by IPIECA, the global oil and gas industry association for environmental and social issues.

This report highlights the key strategies, programs, and initiatives undertaken by PEDC and its subsidiaries toward sustainability. Given the extensive scope of our activities within the energy sector, this report emphasizes the most prominent initiatives, achievement, and efforts.

Our company's sustainability approach is built around 4 main axes and its 13 underlying aims. These axes and aims align directly with 13 of the United Nations SDGs and indirectly with all 17 SDGs. This comprehensive framework ensures that our actions contribute meaningfully to both local and global sustainable development efforts, reinforcing our role as a positive force in the communities we serve.

The first phase of our sustainability journey involved establishing a clear strategy, which we will be reporting on this year. Moving forward, our next step in the coming year will be to establish mechanisms for systematically measuring and recording relevant data needed to evaluate our progress. This framework will enable us to monitor our sustainability indicators and our impacts. This ongoing process will support continuous improvement, and ensures our sustainability efforts align with our sustainability strategy.

Without further delay, we invite you to explore our sustainability report, which outlines our plans, actions, and our aspirations for a better future for our employees, our company, and the world.

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#### **ABBREVIATIONS**



**ABBREVIATIONS** 

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## OUR HISTORY

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#### DRIVING

#### **IRAN'S ENERGY FUTURE**



A VISION FOR THE FUTURE



A LEGACY ROOTED IN IRAN'S CULTURAL HERITAGE



WIDE INVOLVEMENT ACROSS THE ENERGY SPECTRUM

#### Pasargad Energy Development Company (PEDC)

was founded in 2008 as one of Iran's leading players in the energy industry. With a strong focus on smart investment and effective asset management, PEDC has developed a diverse portfolio across the entire energy value chain, spanning upstream and downstream oil and gas, power and utilities, infrastructure, trading, and renewable energy sectors. Our integrated approach and extensive capabilities are designed to support sustainable national development, deliver tangible benefits to shareholders, and implement impactful, socially responsible projects. To date, PEDC has invested over \$10.6 billion in diverse energy initiatives, solidifying its position as a committed corporate citizen with significant economic and social contributions.

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#### A Legacy Rooted in Iran's Cultural Heritage

The name "Pasargad" is deeply rooted in Iran's rich cultural heritage, symbolizing stability, prosperity, and respect for human rights. Derived from Pasargadae, the ancient capital of the Achaemenid Empire, it is associated with the legacy of King Cyrus the Great, who ruled in the 6th century BC. Cyrus is celebrated for his visionary leadership and the Cyrus Cylinder, a historic document often regarded as earliest expressions of tolerance, justice, and respect for diverse cultures. The principles embodied in the Cylinder such as the protection of rights, freedom of worship, and the promotion of peace are values that PEDC aspires to reflect in its operations and ethical standards. This historical connection underscores our commitment to responsible and ethical business practices, guided by the enduring principles of Iran's ancient heritage.

#### A Vision for the Future

PEDC's history is a testament to our dedication to innovation, sustainability, and social responsibility. As we look to the future, we remain committed to driving progress in Iran's energy sector while upholding the values of integrity, transparency, and community stewardship that have defined us since our inception. Our slogan, "Never Ending as Energy, Everlasting as Pasargad," encapsulates our mission to provide enduring energy solutions while honoring the timeless principles of our heritage.

## "NEVER-ENDING AS ENERGY. EVERLASTING AS PASARGAD,"

#### Comprehensive Involvement Across the Energy Spectrum

Since its founding, PEDC has achieved significant milestones that have shaped its growth and diversification. Our journey began with pioneering projects in upstream oil and gas, where we established ourselves as a leader in exploration, development, and production. Recognized for our expertise in drilling, reservoir management, and software development for oil and gas reservoir modeling, we have become one of Iran's top companies in this sector.

In downstream oil and gas, PEDC has leveraged advanced technological expertise to develop and petrochemical units and refineries, covering the full value chain from natural gas to Polyolefins. Our investments in this sector have earned us a top ranking by the National Iranian Oil Company, with a project handling capacity exceeding \$12 billion, positioning us as a powerhouse in Iran's energy landscape.

PEDC's entry into the power and utilities sector marked another milestone, solidifying our role as Iran's largest private electricity provider. We currently supply approximately 4% of the country's electricity through conventional thermal power plants, pipelines, and innovative boosting stations. Our infrastructure projects, including oil terminals and docks, have enhanced Iran's energy logistics and storage capabilities, further strengthening our contribution to the nation's energy security.

In recent years, PEDC has demonstrated its commitment to innovation and sustainability through investments in renewable energy. In 2022, we inaugurated a 10 MW solar power plant in Damghan, with plans for additional projects. This focus on renewables reflects our forward-looking strategy to support sustainable energy sources, contribute to Iran's energy security, and promote environmental resilience.

### A MESSAGE FROM OUR CEO

At Pasargad Energy Development Company, sustainability is central to our identity and operations. Since our inception, we have been dedicated to advancing our business while positively impacting the environment and society. In this Sustainability Report, we share our progress in renewable energy projects, challenges in resource management, and aspirations for a more sustainable future for our company and Iran.

Our commitment to sustainable development is rooted in the understanding that our success as an energy company in Iran is closely linked to the well-being of the society in which, we operate. Our operations face serious hurdles, including power outages that disrupt operations and supply chains, economic sanctions that limit procurement options, water scarcity that affects livelihoods, and climate change that necessitates resiliency. In response, we have adopted a comprehensive sustainability strategy that encompasses economic growth, environmental stewardship, and social responsibility.

At PEDC, sustainability is a core value that guides our decision-making. Our vision is to create a sustainable energy value chain that optimizes the use of natural resources through innovation, operational efficiency and strategic partnerships. We aim to ensure access to sustainable, low-carbon energy for all, aligning our goals with 13 of the 17 United Nations' Sustainable Development Goals. Our approach integrates sustainable practices across our operations in oil & gas production, refining, energy production and construction by focusing on increasing capacity, adopting new technologies, and reducing waste and emissions.

A key pillar of our sustainability strategy is transitioning to cleaner energy, with a plan to create 1,500 MW of solar farms across Iran, reducing outages and emissions to meet energy shortages. We have adopted new technologies like bifacial tracking panels, boosted efficiency, and reduced waste to enhance our resilience against international laws and regulations. We also conserve water with zero-liquid discharge, cut emissions across operations, and restore ecosystems to protect Iran's environment,

#### "SUSTAINABILITY IS A CORE VALUE

THAT GUIDES OUR DECISION-MAKING"



addressing stakeholder priorities for reliable power and resource stewardship. Safety is another cornerstone of our strategy. We prioritize the health and safety of our employees and communities, as well as safety in our processes. We believe a strong safety culture and secure operations prevent incidents and ensure stability for sustainable development. By safety measures and integrating promoting accountability, we aim to create a thriving workplace. Moreover, we commit to economic and social development in the communities where we operate by investing in local infrastructure, education, and healthcare initiatives. As a leading energy company, we recognize the significant impact our activities have on local communities. We strive to minimize negative effects while maximizing positive contributions like job creation and community development. Our goal is to empower communities, ensuring that they share in the benefits of our operations.

As we present this Sustainability Report, I invite you to join us in creating a sustainable energy future that benefits generations to come. Thank you for your support as we navigate this essential journey.

Alireza Sadegh Abadi

CEO, Pasargad Energy Development Company

### A MESSAGE FROM THE SUSTAINABLE DEVELOPMENT COMMITTEE

At PEDC, our sustainability approach is embedded in balancing productivity daily operations, efficiency with environmental and social responsibility, recognizing that our success is intertwined with the well-being communities and environment. As the Sustainable Development Committee, we are proud acknowledge our employees and subsidiaries dedication, whose hard work and innovation drive our sustainability efforts. This report celebrates their achievements, and we invite all stakeholders to deepen our collective impact across our operations in oil and gas, refining, power generation, renewables, and construction.

We prioritize delivering reliable energy, conserving Iran's resources, ensuring safety, and boosting local economic growth under sanctions, navigating persistent power outages, economic constraints, water scarcity, and environmental pressures with a strategic, adaptive approach.

engage local communities, employees, regulators. and partners through surveys, workshops, and field studies, aligning our strategy with their needs for stable power, reduced emissions, clean water, safe workplaces, and jobs, grounding our efforts in Energy Transition, Protecting Earth, Safety, and Economic and Social Development. Through our commitment to productivity and efficiency, we've achieved tangible results. Our teams have increased energy capacity and operational efficiency by implementing advanced technologies, such as bifacial tracking panels in our 15 MW solar plant, which we are currently monitoring, with plans to implement them in the rest of our solar contracts, including our 1,500 MW commitment across Iran, and technologies like M.O.S. (Mobile Oil Separator) to reduce oil burning and emissions, and operations digital monitoring centers to enhance efficiency.

We conserve water with zero-liquid discharge systems, significantly reducing use, and restore ecosystems through mangrove planting along Iran's coastlines, supporting biodiversity and carbon sequestration. We phase out oil burning to lower our carbon footprint, aligning with Iran's energy needs under sanctions.

Safety is paramount, and we've introduced a Health, Safety, and Environment award based on annual assessments for our companies and implemented safety protocols based on a holistic Operational Management System to prevent incidents and ensure a secure workplace. Our subsidiaries actively support community development, constructing schools in areas near our operations, backing the Autism NGO of Iran for inclusivity, creating local jobs, and training staff and youth for energy shifts, countering sanctions' economic challenges.

This report showcases our progress driven by our collective effort. We invite you, employees, subsidiaries, partners, and communities, to share insights and collaborate on future initiatives, refining our approach to balance operational excellence with environmental and social responsibility for Iran. Together, we can build a sustainable PEDC legacy of resilience and progress.

"WE ENGAGE LOCAL COMMUNITIES.

EMPLOYEES, REGULATORS, AND PARTNERS"

Sustainable Development Committee Pasargad Energy Development Company



### **PEDC** At a Glance

The Pasargad Energy Development Company PEDC is an independent, privately owned energy company based in Tehran, Iran. As a leading integrated energy company, PEDC operates across the oil and gas, power and utility, infrastructure, commercial and trading, and high-tech venture capital sectors. It manages its asset portfolio strategically and plays a key role in developing a sustainable national economy while creating value for stakeholders. One of PEDC's distinctive features is its continuous activity across the entire energy value chain, spanning six business areas.

- 1) Upstream Oil and Gas
- 2) Downstream Oil and Gas

3) Power and Utility

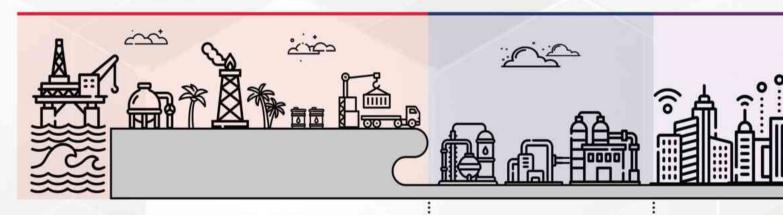
- 4) Renewable Energy
- 5) Infrastructure

6) Trading and Commercial

**Upstream Oil and Gas** 

**Downstream Oil and Gas** 

Innovation































### Our Vision, Mission and Values

#### Vision



To become one of the top 10 companies in Iran's energy industry within the capital market in terms of sales by the year 2029, through smart investment, high productivity, and innovation in delivering quality products and services.

#### Mission



To provide competitive products and services in the energy sector through smart investments and collaborations, technological development, and optimized asset management at national and regional levels, with the aim of securing sustainable benefits for our stakeholders.

#### **Values**



Excellence and Innovation

Accountability and Transparency

Sustainable Value Creation for Stakeholders

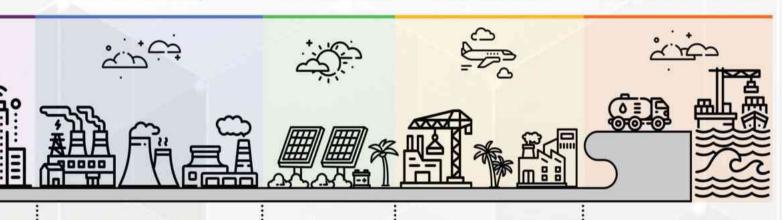
Commitment to Sustainable Development and Safety

#### **Power & Utility**

#### Renewable Energy

#### **Infrastructure**

#### **Trading & Commercial**



















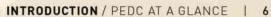














#### **OUR JOURNEY**



01 INTRODUCTION 02 OUR APPROACH AXIS I ENERGY TRANSITION AXIS II PROTECTING EARTH AXIS III SAFETY AXIS IV ECONOMIC & SOCIAL DEV









SOUTH PARS PHASES 20 & 21 DEVELOPMENT DRILLING



COMMENCEMENT OF THE QESHM HEAVY OIL REFINERY

#### 2015



2014



PURCHASE OF PASARGAD OFFSHORE DRILLING RIG (PASARGADI00)

#### 2023



2024



SEPHER AND JUFAIR OIL FIELDS INAUGURATION



PASARGAD SPECIALIZED LAYER FRACTURING LAB INAUGURATED AT AMIRKABIR UNIVERSITY



WRFM SYSTEM LAUNCH



PURCHASE OF PASARGAD OFFSHORE DRILLING RIG (PASARGAD200)



ACQUISITION OF ONSHORE DRILLING RIGS PASARGAD 21, 22, AND 31



#### CORPORATE GOVERNANCE FRAMEWORK

#### BOARD OF DIRECTORS

The Board of Directors at PEDC is composed of highly accomplished professionals whose expertise and vision guide the company toward sustainable growth and operational excellence. Each member brings a wealth of experience and a commitment to upholding the highest standards of corporate governance.

#### Mr. Mohammad Malaki, (Chairman),

With a Master's degree in Electrical Engineering, Mr. Malaki brings over four decades of experience in the energy sector. His leadership roles include serving as Deputy Minister of Energy, Deputy Minister of Petroleum, and CEO of Tavanir Company and the National Iranian Gas Company. Today, as Chairman of the Board of Directors, he continues to drive the company's vision of innovation and sustainable growth.

#### Mr. Alireza Sadeghabadi, (CEO),

A Mechanical Engineering graduate, Mr. Sadeghabadi has held pivotal positions such as Deputy Minister of Petroleum, CEO of the National Iranian Oil Refining and Distribution Company, and CEO of Siraf Comprehensive Refining Infrastructure Company. As the CEO of , he leads the company with a focus on operational excellence, while driving strategic growth and innovation across the sector.

#### Dr. Mohsen Safajoo, (Board Member),

With a Ph.D. in Accounting, Dr. Safajoo has managed companies such as Saman Tejarat and Darupakhsh Distribution Company, bringing deep expertise in corporate affairs and governance. In his role as a Board Member, he ensures robust governance and accountability across the organization.

#### Mr. Esfandiar Azimi, (Board Member),

Bringing extensive experience in finance and economics, Mr. Azimi contributes strategic financial oversight to PEDC's board. His background includes leadership roles as CEO of Pars Arian Company and Vice Chairman of Pasargad Capital Market Services Company, supporting informed economic decision-making for the company's diverse energy investments

#### Dr. Mojtaba Kobari, (Board Member),

With a Doctorate in Business Administration, Dr. Kobari offers expertise in business strategy and organizational development to PEDC's governance. His experience leading Pasargad Value Creation Group and serving as Vice Chairman of Pasargad Capital Market Services Company informs his approach to value creation and strategic development within Iran's energy sector

PEDC governance framework is designed to ensure transparency, accountability, and alignment with our long-term strategic goals, including sustainability and social responsibility with in the parent company and its subsidiaries. This framework is built on a foundation of strong leadership, clear policies, and collaborative mechanisms that enable us to navigate challenges, seize opportunities, and create value for all stakeholders. At the core of this structure is our Board of Directors, supported by specialized committees, departments, and a commitment to sustainability at every level of the organization. Below, we outline the key components within our governance model



## RELATIONSHIPS WITH SUBSIDIARIES AND GOVERNANCE INTEGRATION

To ensure cohesive operations and strategic alignment across its subsidiaries, PEDC has established a robust corporate governance model. This framework standardizes planning, monitoring, and reporting processes, enabling the company to implement its strategic objectives and sustainability commitments effectively across the group. Key elements of this model include

Corporate Governance Policies: Clear guidelines on strategy, investment, budgeting, risk management, procurement, human capital, and sustainability, ensuring accountability and long-term value creation.

**Monitoring Tools:** Annual evaluations using PEDC Total Assessment Model based on the EFQM 2020 and compliance checklists to ensure subsidiaries adhere to PEDC's governance requirements.

**Regular Reports and Meetings:** Periodic reporting and meetings between the parent company and subsidiaries to ensure alignment and address challenges.

The strength of PEDC's governance framework lies in the seamless collaboration between its various components. The Board of Directors, management committees, and operational departments work in harmony to ensure informed decision-making, effective risk management, and alignment with the company's strategic sustainability goals. communication and coordination among these entities foster accountability, operational excellence, and continuous improvement across the organization. This integrated approach ensures that the parent company's goals and policies are consistently applied across all subsidiaries, fostering operational efficiency and accountability while enabling PEDC to navigate complex challenges, seize opportunities, and achieve its long-term objectives. By embedding transparency and adaptability at every level, PEDC reinforces stakeholder trust and strengthens its position in the energy sector, while setting a benchmark for corporate governance in the region.

#### MANAGEMENT COMMITTEES

To oversee critical aspects of its operations and ensure effective governance, PEDC has established several specialized committees. These committees operate under the supervision of the CEO and Board of Directors, providing focused oversight in key areas.





## MANAGEMENT COMMITTEES CONTINUED

#### RISK COMMITTEE



#### AUDIT COMMITTEE



#### INVESTMENT COMMITTEE



The Risk Committee oversees the company's risk management framework, ensuring that risks are identified, assessed, and mitigated effectively. It approves the overall risk management policy, monitors high-priority risks, and reviews risk response plans. The committee also reports on risk management performance to the Board of Directors, ensuring alignment with the company's strategic objectives.

The Audit Committee ensures the effectiveness of internal controls and compliance with regulatory requirements. It oversees internal and external audits, evaluates financial statements, and reviews IT security and data protection measures. The committee reports on internal control effectiveness to the Board, ensuring transparency and accountability in financial operations.

The Investment Committee oversees the company's investment strategies and portfolio management. It reviews and approves investment policies, evaluates major projects, and makes decisions on mergers, acquisitions, partnerships, and divestments. The committee ensures that all investments align with the company's strategic and sustainability goals.

## CYBER SECURITY COMMITTEE



#### GOVERNANCE COMMITTEE



## NOMINATIONS & REMUNERATION COMMITTEE



The Information Security Committee oversees the protection of the company's digital assets. It develops and implements information security policies, coordinates incident response teams during cybersecurity breaches, and ensures the integrity and confidentiality of company data.

The Governance Committee is responsible for corporate governance policies and practices. It defines and approves the corporate governance framework for Pasargad Energy Development Group, ensuring alignment with best practices and regulatory requirements. The committee also reviews and approves comprehensive evaluation reports on the performance of the group's subsidiaries, strengthening oversight and accountability.

The Nominations and Remuneration Committee oversees the selection, appointment, and removal of senior executives within the holding company and its subsidiaries. It develops policies for leadership development and capacity building for senior managers, CEOs, and board members across the group, and evaluates and approves performance assessment reports for senior executives, ensuring leadership effectiveness and alignment with corporate goals.

## SUSTAINABILITY COMMITTEE



## SUSTAINABILITY COMMITTEE'S **KEY RESPONSIBILITIES**:

While the previous committees focus on specific operational and governance areas, the Sustainability Committee holds a unique and cross-cutting role within PEDC's governance framework. Chaired by the CEO, the committee includes senior executives and representatives from key departments and is responsible for setting sustainability objectives, monitoring compliance, and ensuring alignment with the company's long-term sustainability goals.

- Setting sustainability objectives, policies, and roadmaps.
- Monitoring compliance with sustainability policies.
- Allocating resources to achieve sustainability goals.
- Reviewing investment & development plans for ensuring alignment with sustainability principles.
- Proposing investment & development projects that align with the core sustainability goals & policies.
- Making decisions on major issues that could impact sustainable development.
- Defining & approving corporate social responsibility (CSR) initiatives.
- Reviewing & approving annual sustainability reports.

#### MANAGEMENT OF SUSTAINABILITY IN OUR ORGANIZATIONAL STRUCTURE

To ensure a comprehensive approach to sustainability, PEDC has established structures and responsibilities across multiple levels, including the Sustainability Committee, specialized departments, and employee roles, all integrating sustainability into operations and culture.

#### SAFETY & SUSTAINABILITY DEPARTMENT

The Safety & Sustainability Department plays a pivotal role in embedding sustainability into PEDC's operations, acting as the secretariat for the Sustainability Committee & ensuring sustainability principles are integrated across the company's activities.

#### THE DEPARTMENT'S KEY RESPONSIBILITIES INCLUDE:

- Acting as the secretariat for the Sustainability Committee.
- Setting sustainable development goals and policies.
- Monitoring subsidiary performance in sustainability.
- Promoting a culture of sustainability across the group.
- Developing and promoting the mindset and culture of sustainable development throughout the parent company
- Leading the preparation of the annual sustainability report.
- Ensuring alignment of all activities with the group's sustainability policies.
- Overseeing all activities and actions at the parent level to ensure alignment with the group's sustainability policies.

#### GENERAL SUSTAINABILITY RESPONSIBILITIES:

Sustainability is a shared responsibility at PEDC, and all employees are encouraged to integrate sustainable practices into their daily work. From adhering to sustainability policies to contributing innovative ideas, employees play a vital role in driving the company's sustainability agenda.

#### **EMPLOYEES' KEY** RESPONSIBILITIES:

- Adhering to sustainability policies and objectives.
- Collaborating across departments to implement sustainability strategies.
- Promoting resource efficiency and waste reduction.
- Participating in CSR activities and community engagement programs.
- Supporting health, safety, and environmental (HSE) practices.
- Contributing innovative ideas sustainable process for improvements.
- Encouraging sustainable practices within teams and across departments.
- Supporting process improvements that enhance the company's sustainability performance
- Providing data & reports to support sustainability performance

This collective effort ensures that sustainability is woven into the fabric of PEDC's corporate culture.

#### SOCIAL RESPONSIBILITY DEPARTMENT

PEDC's Social Responsibility Department is dedicated to creating a positive impact on society and the environment. It develops and implements programs that align with the company's commitment to sustainable development and community engagement.

#### THE DEPARTMENT'S KEYRESPONSIBILITIES INCLUDE:

- Developing and implementing CSR policies and programs.
- corporate Designing and implementing the social responsibility models.
- Monitoring the execution of CSR initiatives across the group.
- Implementing corporate social responsibility policies and programs at the parent Company.



#### PEDC CODE OF CONDUCT

At PEDC, our core values revolve around harmonizing sustainable development with long-term profitability. We expect all subsidiary companies to uphold ethical business practices, ensuring fair competition and compliance with all regulatory standards. Customer satisfaction is at the heart of our operations, driving us to meet their needs efficiently and cost-effectively. Integrity and transparency are non-negotiable principles that guide all business transactions and relationships within our organization.

Our commitment extends to fostering a workplace free from conflicts of interest and political affiliations, with safety as a top priority. Subsidiary companies are encouraged to implement robust safety measures and environmental sustainability practices while contributing to the improvement of local communities. We treat all stakeholders with respect and dignity, emphasizing equal opportunities for individuals regardless of background. Transparency and accountability are the cornerstones of our financial activities, with strict adherence to laws, regulations, and industry standards across all levels of the organization.

In line with PEDC's mission, all employees whether in the holding company or subsidiary companies—are expected to support and adhere to a Code of Ethics that reflects our core values. These values include:

- Excellence and Innovation
- Accountability and Transparency
- Sustainable Value Creation for Stakeholders
- Commitment to Sustainable Development and Safety

These principles form the foundation of our organization's commitment to ethical conduct, guiding the actions of every employee, manager, and partner. To uphold these values, we have established a comprehensive Code of Ethics that outlines specific expectations and responsibilities for all individuals and entities associated with PEDC. This code serves as a practical framework for translating our core values into day-to-day practices, ensuring consistency and integrity across all aspects of our operations.

The PEDC Code of Ethics includes the following key principles:

#### Empowered Employees -A Productive Organization



- Employees should use their knowledge and expertise to perform effectively, often exceeding their job descriptions.
- We prioritize personal development and strive to achieve the company's goals through hard work and perseverance.
- We embrace empathy, collaboration, and teamwork as core principles, fostering healthy competition and cooperation across the holding company.
- We believe that preserving the company's brand requires making the best use of its resources, equipment, positions, and reputation

#### Forward Thinking Managers -A Pioneering Organization



- Managers at PEDC are responsible for creating an environment where organizational values and ethical behavior are promoted and upheld.
  - Managers are aware that they represent the company's
- reputation and avoid actions that could tarnish its brand.
   By respecting our colleagues, we earn mutual respect.
- We cultivate a vibrant and effective workplace by
- fostering secure interpersonal behavior and camaraderie.
- Managers should manage workplace stress appropriately to avoid transferring psychological pressure to our colleagues and provide them with honest, relevant information within established frameworks.

#### Satisfied Customers -A Reputable Organization



- At PEDC, we believe that serving customers is the key to success and builds their trust in us.
- We prioritize understanding and addressing both current and future customer needs
- We never make promises we cannot keep. This ensures that the company's reputable brand remains prominent and enduring in the industry.
- We maintain customer trust through honest and professional behavior, transparent and efficient communication, and adherence to commitments and timelines.
- We ensure full compliance with safety and quality standards in delivering services to our customers.

#### Strong Partners and Stakeholders -A Sustainable Organization



- At PEDC, we understand that meeting commitments on time, providing accurate reports, adopting a win-win business approach, and maintaining data confidentiality help us select strong partners and stakeholders ensuring the organization's sustainability in the industry.
- We maintain impartiality and avoid personal interests in all activities. We refrain from unfair competition for resources or benefits and promptly report any conflicts of interest or illegal activities.

#### Risk-Tolerant Shareholders -A Profitable Organization



- At PEDC, we recognize the immense value of our brand in the energy industry and remain committed to safeguarding this vital asset.
- By bolstering our financial and managerial foundations and diversifying our portfolio of products and services, we continue to expand on our capital-raising strategies and strengthen our financial competitiveness.
- We are committed to creating value for our shareholders.
- We provide shareholders with transparent information for decision-making.
- We avoid engaging in business activities that conflict with the interests of the company or its shareholders.

#### Capital Acquisition Experts-A Secure Organization



At PEDC, we prioritize maintaining strong and stable relationships with financial institutions consistently preparing accurate, timely business reports and presenting fully transparent financial statements, free of any concealment. commitment to openness and integrity not only builds trust with our stakeholders but also plays a vital role in safeguarding the company's long-term economic and financial stability. By fostering this financial transparency, we create a solid foundation for sustainable growth continued investor and confidence.

#### **Expert Suppliers -**A Transparent Organization



- We strive to provide equal opportunities for all suppliers and share transparent, verified information with them.
- We respect suppliers' laws and regulations and expect them to respect ours. This helps us select top domestic and international suppliers, foster win-win relationships, and support the country's economic growth and employment.
- We avoid unfair competition, monopolies, and corruption, and we report any violations of laws or company principles by suppliers to senior management.

#### A Sustainable Society -An Enduring Organization



- At PEDC, we place a strong emphasis on environmental stewardship, ensuring that all our programs and operations respect and protect the natural world. We are equally committed to maintaining the highest standards of occupational health and safety, as well as process safety, across all levels of our organization. Furthermore, we uphold the dignity of society and humanity, integrating ethical considerations and social responsibility into every aspect of our approach.
- We understand that our growth and survival depend on preserving the environment and shared human values. Therefore, we dedicate all our efforts to safeguarding this divine gift for future generations.
- Through thoughtful policy-making, strategic planning, and impactful cultural initiatives, we are fully committed to the development and implementation of environmentally friendly technologies. Our goal is to integrate sustainability into every aspect of our operations, promoting innovation that minimizes environmental impact and supports a greener future.
- By optimizing the use of limited resources such as energy, water, and raw materials, we aim to preserve this divine heritage for future generations.
- We clearly understand our responsibilities toward surrounding communities and society at large. We are committed to eliminating any potential negative impacts on communities and strive to play a significant role in achieving sustainable development goals through our sustainability approach.



#### **OUR BUSINESSES & VALUE CHAIN**

Through strategic investments and efficient asset portfolio management, PEDC delivers competitive products and services while playing a key role in sustainable national development and ensuring value for its stakeholders. What sets PEDC apart is its comprehensive presence across the entire energy value chain, encompassing six distinct sectors. This integrated approach allows PEDC to maximize operational efficiency, drive innovation, and adapt swiftly to the evolving demands of the energy market.

- Upstream Oil & Gas
- Infrastructure
- Downstream Oil & Gas
- Trading & Commercial
- Power & Utilities
- Renewables Energy

This integrated approach enables PEDC to maintain a strong, competitive position while contributing to the long-term growth and sustainability of the energy sector. It also allows the company to effectively respond to industry challenges and seize emerging opportunities with agility and confidence.



#### **UPSTREAM OIL AND GAS**

PEDC is a leading company in the upstream oil and gas industry, providing a wide array of services including engineering, drilling, well services, operations and maintenance, and smart well, reservoir, and facility management (Smart WRFM). Our goal is to maximize the value of our hydrocarbon resources through innovative, efficient, and environmentally responsible field development practices. In 2017, PEDC became the first Iranian exploration and production (E&P) operator company to sign an Iranian Petroleum Contract (IPC) with the National Iranian Oil Company (NIOC) for the development of the Sepehr and Jofir onshore green oil fields in southwest Iran, valued at USD04 billion. This twenty-year contract aims to extract more than one billion barrels of oil equivalent and reach a production plateau of 150,000 barrels per day; as of this day, PEDC has successfully achieved a production rate of 65,000 barrels per day. We maintain a strong presence in upstream oil and gas activities through our subsidiaries. Our two offshore drilling rigs, as well as three onshore drilling rigs, are staffed with highly skilled and experienced crews, providing professional offshore and onshore rig chartering and drilling services. We also offer a broad range of well-based and rig-less services, including directional drilling, well intervention, coiled tubing, mobile oil treatments (MOT), wireline services, well maintenance and repair, and integrated drilling and workover operations for oil and gas wells.

#### DOWNSTREAM OIL AND GAS

PEDC is a prominent player in Iran's downstream oil and gas sector, recognized as the most active investment company in refinery and petrochemical projects. To date, our total investments in this sector have reached \$4.3 billion, with \$2.57 billion allocated to completed downstream projects.

Leveraging Iran's abundant oil and gas resources, PEDC has developed strategic initiatives to invest in, develop, operate, and maintain refineries and petrochemical facilities. These initiatives aim to diversify product offerings, enhance the value chain, and support the growth of our downstream industries.

Our downstream operations are further strengthened by integrating products with our trading and commercial expertise, as well as leveraging key infrastructure assets like the Hara Port in the northern part of Qeshm Island. This comprehensive approach maximizes value creation for our shareholders while expanding our market share in the sector.





#### POWER & UTILITIES

Since its establishment in 2008, PEDC has been a key player in Iran's power generation industry, strategically investing in power plants to drive sector growth. Today, PEDC owns and operates facilities generating approximately 3,000 MW, about 4% of Iran's total power capacity. Our role spans the entire value chain-from construction and power generation to operation, maintenance, equipment supply, and management consulting for steam and gas turbine power plants. PEDC also undertakes development projects through Turnkey, EPC, and MC contracts, providing comprehensive Operation and Maintenance services. These activities are carried out by our specialized subsidiaries, leveraging their expertise to deliver high-quality solutions across the power generation and utilities sector. With a focus on innovation and sustainability, PEDC continues to expand its capabilities to meet the evolving energy needs of the country.



#### **INFRASTRUCTURE**

In collaboration with the Qeshm Free Zone Organization, PEDC has invested in constructing and operating an oil jetty and terminal on Qeshm Island. This project supports import and export of feedstock and products from the Qeshm Heavy Crude Oil Refinery and the under-construction Condensate Gas Refinery, and supplies seawater to PEDC's utilities plant on the island. As the sole private company authorized for this build-operate-transfer venture, PEDC is responsible for construction, operation, and ownership of the oil jetty in northern Qeshm Island. The third berth, with a 35,000 DWT capacity, is completed and operational for exporting products like bitumen from the Qeshm Heavy Crude Oil Refinery. Construction of the first and second berths, accommodating 7,000 to 70,000 DWT capacities with dolphins and mooring systems, is nearing completion.



#### TRADING & COMMERCIAL

PEDC strategically working to establish comprehensive value chain in trading and commercial activities within the oil and gas sector. The company plans to achieve this through the following initiatives:

Leveraging production from the Qeshm Heavy Oil Refinery and the developing Qeshm Gas Condensate Refinery, PEDC intends to offer a diverse range of refinery products. Upcoming petrochemical units will further expand PEDC's portfolio, enhancing competitiveness over time.

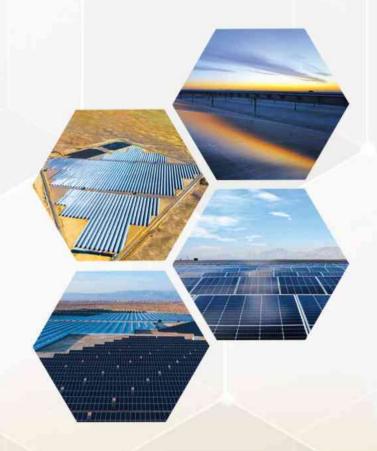
PEDC plans to utilize storage facilities and the Hara Jetty Oil Terminal in northern Qeshm Island. This strategic advantage will streamline storage, import, and export, enabling efficient customer fulfillment and supporting international trade to expand market reach.

To support trading activities, PEDC is investing in a team of experts specializing in oil and petrochemical product trading. By developing these capabilities infrastructure, PEDC aims to position itself as a leading trading company for oil, products, and petrochemicals in Iran.

#### RENEWABLES ENERGY

PEDC has made significant strides toward its strategic goal of becoming a key player in Iran's renewable energy sector, highlighted by the successful launch of its first solar energy project in Damghan, central Iran. This 10 MW solar plant, operational since winter 2023, is the first in the region to use bifacial solar panels and solar trackers, boosting efficiency by 30% compared to traditional fixed-panel plants. In line with our commitment to sustainable energy production, PEDC is expanding its technological capabilities and increasing investments in solar power both domestically internationally. Our ongoing investments include the construction of the Sorkheh and Mehdishar Solar Power Plants, each with 12 MW capacity, and a dedicated 4 MW solar plant serving as a utility for one of our projects. Additionally, Pasargad Energy Group has secured a landmark tender to invest in the construction and operation of 1,500 MW of solar power plants. Through these expansion initiatives, PEDC aims to strengthen its position in the renewable energy sector and contribute significantly to building a sustainable future.







## MEMBERSHIP IN ASSOCIATIONS

Pasargad Energy Development Company is committed to enhancing its interactions with industrial and academic communities by strengthening ties with national and university associations. These efforts are a vital step toward boosting scientific research, developing innovative technologies in the oil and energy industry, and creating a dynamic platform for knowledge exchange with industrial and academic institutions. Our memberships span three national associations and cooperative relationships with five university student associations.

#### NATIONAL ASSOCIATIONS

- Iranian Chemical Engineering Association (IAChE): Publishes the Iranian Journal of Chemical Engineering and organizes international and national congresses, promoting research in chemical engineering (www.ijche.com).
- Iranian Management Association (IMA): Promotes effective management practices through educational programs and professional development, supervised by the Iranian Ministry of Science, Research, and Technology (iranmanagement.net).
- Iranian Financial Management Association (IFMA): Specific activities not detailed in available data; further information required (ifmaweb.ir).



#### UNIVERSITY ASSOCIATIONS

PEDC collaborates with university student associations, yielding a dual advantage by exposing students to the energy industry through student-led platforms that engage them with industry challenges and opportunities, equipping them for careers in energy, while also strengthening university partnerships and talent acquisition by building enduring academic connections that allow us to spot and attract promising talent, supporting our long-term growth. Through these partnerships, we work with the following scientific student associations:

- International Petroleum Engineers Association of Sharif University (Sharif SPE)
- Scientific Association of the Institute of Petroleum Engineering, University of Tehran
- Scientific Association of the Faculty of Petroleum and Geothermal Energy Engineering, Amirkabir University of Technology
- Scientific Association of Chemistry, Faculty of Chemical and Petroleum Engineering, Sharif University of Technology
- Chemical Engineering Association, University of Tehran

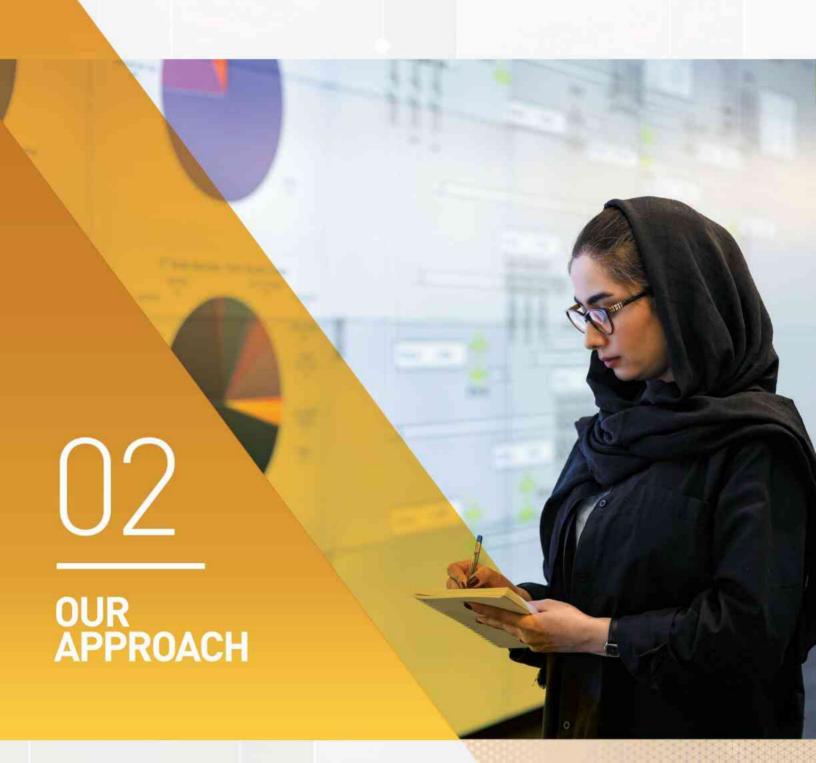
Through these memberships and cooperative relationships, Pasargad Energy Company leverages professional and academic networks to drive innovation and sustainability. The national associations enhance industry-wide advancements, while our cooperation with universities and their student associations connects us with emerging talent and cutting-edge research, aligning with our commitment to a sustainable energy future.







PEDC SUSTAINABILITY REPORT - 2024



#### DRIVING IRAN'S ENERGY FUTURE

PEDC secures Iran's energy needs today while building a cleaner, sustainable tomorrow by blending global trends with local expertise.

#### A CLEAR PLAN FOR GROWTH

Our four pillars: Energy Transition, Protecting Earth, Safety, and Economic and Social Development, turn challenges like emissions and resource scarcity into actionable solutions.

#### TOGETHER FOR A SUSTAINABLE FUTURE

We collaborate with stakeholders to deliver reliable energy, create jobs, and protect the environment for a shared future.



#### **GLOBAL ENERGY TRENDS**

#### THE GLOBAL ENERGY TRANSITION

The so called Petro States, countries with economies heavily reliant on oil and gas are entering an era filled with uncertainty and limbo. The global energy transition has begun, and the upcoming changes appear to be irreversible. Even the world's largest oil giants have been influenced, diversifying their activities to align with the new energy transition. In the 20th century, the global energy landscape was characterized by consistently growing demand and constrained supply. However, in the 21st century, with the development of unconventional oil resources in North America, the discovery of significant reserves in Europe and Russia, deepwater oil production, and technological advancements in the field, the supply side of oil and gas has seen substantial growth. On the demand side, a shift is likely as the growing focus on climate change and countries' commitments to the Paris Agreement drive a decline in the share of fossil fuels. The COP26 climate summit, held in late 2021 in Glasgow, reaffirmed the determination of major global powers particularly the US, its European allies, and China, the world's largest emitter of carbon dioxide to advance energy transition and combat global warming.

#### THE RISE OF RENEWABLE ENERGY

In the past two decades, the levelized cost of renewable energy for producing each megawatt of electricity has decreased significantly, and it is expected that this downward trend will continue in the current decade and the next two decades due to technological development and increasing competition among companies. Two-thirds of the world's population lives in regions where the use of renewable energy is cheap and affordable. The European Union is actively pursuing its decarbonization plan, aiming to reduce emissions by 55% by 2030.













This commitment was reiterated in subsequent conferences in the following years. In line with this perspective, the share of electricity in the global energy mix is expected to grow significantly in the new century. Furthermore, the adoption of highly efficient hybrid and electric vehicles in road transportation is expected to significantly reduce the demand for fossil fuels. Over the next 30 years, despite global population growth and an increase in global GDP, energy consumption will not follow the rising trend of previous decades. Technological advancements are expected to enhance efficiency and productivity, leading to a reduction in energy intensity. An assessment of various trends in the energy sector indicates that the strategic and economic significance of oil and gas will diminish to some extent in the coming decades. In other words, while the 20th century was defined by the dominance and influence of oil-producing states, the 21st century is likely to be recognized as the era of electricity-producing states. Consequently, dependence on a limited number of oil and gas producing countries will decrease, while the share of clean energy will rise.













In recent years, the U.S. has made significant efforts to enhance energy security and address climate change, including major investments in renewables and resiliency. Many European nations are also advancing policies to phase out fossil fuel vehicles, as global electric vehicle movement momentum. While potential changes in U.S. leadership could affect climate policy, existing measures and key stakeholders may help moderate those shifts."



#### BENCHMARKING CHINA'S ENERGY STRATEGY: A BALANCED ENERGY TRANSITION







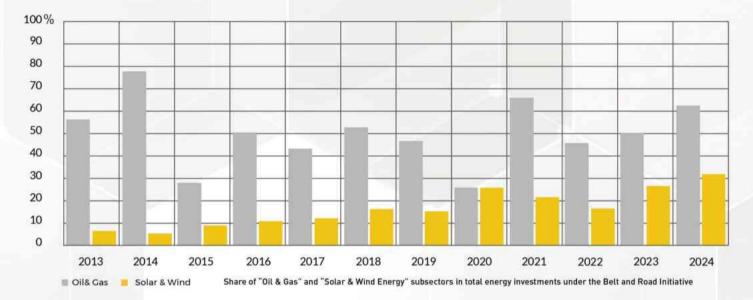




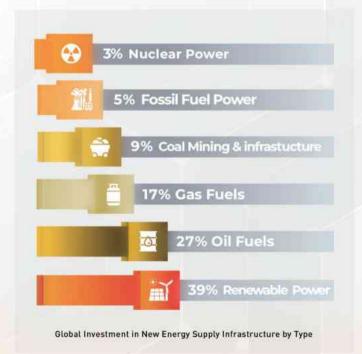


The clean energy sector contributed approximately \$1.6 trillion to China's economy in 2023, marking a 30% increase compared to the previous year. Thus, the clean energy sector was the largest driver of China's economic growth in 2023, accounting for 40% of the country's GDP growth that year. The significant role that clean energy played in boosting China's growth in 2023 means that this industry is now,

and will continue to be, a crucial part of the country's broader economic and industrial development. China's shift towards green industries with advanced technologies as key growth drivers is increasing, and experts predict that the 'new trifecta' photovoltaics, lithium-ion batteries, and electric vehicles will play a fundamental role in shaping the country's economic landscape in the coming years.



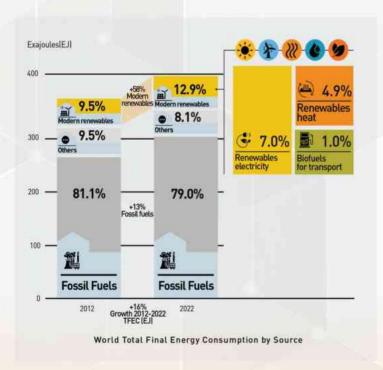
Although the oil and gas sector is expected to dominate the global energy outlook for at least the next decade, contributions from this subsector, particularly in upstream operations, may gradually decrease. China remains keen on expanding its assets or partnerships in this sector. For example, in 2021, about 80% of China's energy investments under the Belt and Road Initiative were allocated to oil and gas. Figure 1 shows that China, as the world's largest energy consumer, continues to invest in the oil and gas sector abroad while also setting new records in renewable capacity at home. Despite increasing oil and natural gas imports, the growth of China's clean energy sector is remarkable. In 2023, China set a record by adding 217 gigawatts of solar capacity—equivalent to over 500 million panels—far more than the total installed solar capacity in the U.S. Notably, China's energy policy differs from other regions. As shown in Figure 2, global investment in renewables surpassed fossil fuels in 2023, reflecting a shift toward greater electrification.





#### CHALLENGES AND DYNAMICS OF THE ONGOING ENERGY TRANSITION

The energy transition is clearly a process, not a sudden shift. The move from wood to coal, then oil, and the rise of natural gas has been gradual. Yet, technological advances and varying economic, social, and environmental conditions have continually shaped new energy pathways.















Today, 79% of the world's energy is supplied by fossil fuels, and two-thirds of global emissions are generated from this source. With the advancement of renewable energy technologies, increased competition among companies in this sector, a reduction in electricity production costs, and the growing shift towards electric vehicle production by major global companies, a paradigm shift towards greater electricity generation can be observed. While renewable energy, especially through innovations like electric vehicles and renewable electricity generation, is growing rapidly, fossil fuel energy still remains dominant. Despite the growth of companies like Tesla, whose energy division is expanding, the fossil fuel sector, including major companies like ExxonMobil, Chevron, and those active in the U.S. shale industry, continues to see relative growth. It should not be forgotten that despite heavy promotion of green energy under the democratic administration, the United States set new records in crude oil production. While the upward trend in crude oil and natural gas production may continue under the new Republican administration, assessments suggest that sustaining this trend in the coming decade and beyond will be impossible for the United Stated. Figure 3 illustrates world total final energy consumption based on various energy sources. As shown in the figure, while the absolute consumption of fossil fuels has increased over the past decade, their share in the world energy consumption mix has declined.



## CHALLENGES AND DYNAMICS OF THE ONGOING ENERGY TRANSITION (CONTINUED)







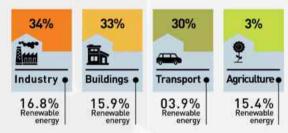






According to the International Renewable Energy Agency (IRENA), despite significant advancements and increased support for renewable energy policies and measures, the path forward in the energy transition remains fraught with key obstacles. These challenges go beyond political, regulatory, institutional, and administrative barriers, encompassing technology, capacity, costs, infrastructure, awareness, and public acceptance. In many countries, renewable resources continue to face stiff competition from subsidized fossil fuel-powered thermal plants. Figure 4 illustrates the distribution of global energy consumption by sector and the share of renewables within each. Energy experts and policymakers emphasize the beginning of a new phase in the energy transition, moving from fossil fuels to cleaner or less polluting energy sources.

In this phase, renewable energy and natural gas are anticipated to take on a more prominent role compared to other energy sources. The main drivers of this transition are the Paris Climate Agreement and the growing global primary energy demand, particularly in Asia, underscores the necessity of increased reliance on clean and renewable energy.



Share of Total Energy and Renewable Energy in Final Energy Consumption by Sector

## NAVIGATING IRAN'S ENERGY TRANSITION: CHALLENGES AND PROSPECTS







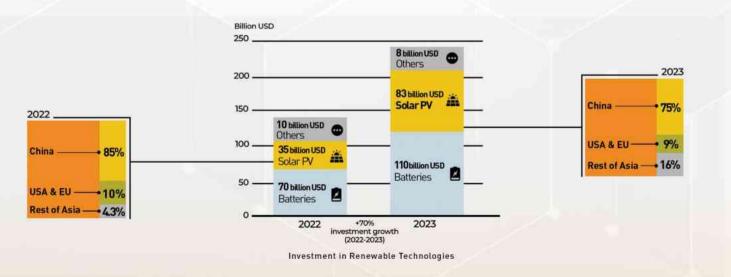






Closely monitoring trends and technological developments in these sectors is crucial for timely and up-to-date policymaking in energy industry organizations worldwide, including PEDC Especially since Iran holds the second-largest gas reserves and the fourth-largest oil reserves in the world. However, due to sanctions and insufficient investment in upstream oil and gas development,

Iran has not been among the largest oil and gas exporters in recent years. Moreover, the shortage of gas and electricity in Iran during both the winter and summer seasons is gradually leading to a national crisis. In such circumstances, the development of both renewable energy and the oil and gas sectors is essential.





Considering two energy scenarios—one following the planned energy transition and another pursuing renewables aggressively (the more Transforming Scenario), as outlined by COP and IRENA—the projected energy supply would differ significantly. In the Planned Energy Scenario, modern renewables would account for 17% of final energy by 2030 and 25% by 2050. In the Transforming Scenario, this would rise to 28% by 2030 and 66% by 2050. Thus, renewables would need to increase six-fold from today's levels, and more than twice as much as in the Planned Scenario.

Substantial investment is needed to meet global energy transition targets. As shown in Figure 5, investment in this sector is rising-a trend expected to continue. Energy efficiency and renewable energy are key to ensuring a sustainable global supply, together accounting for over 90% of the measures required to cut energy-related greenhouse gas emissions in the Transforming Scenario. Achieving this requires carbon dioxide emissions to fall by an average of 3.8% annually, reaching 70% below current levels by 2050.

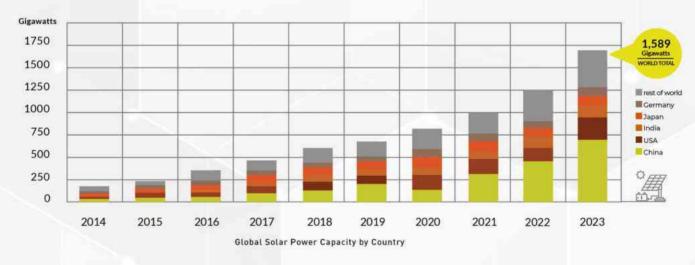


Figure 6 illustrates the increasing global solar power capacity, broken down by country. The most significant sectors of energy use, in general, are electricity generation, heating, and transportation. While renewable energy has rapidly expanded in the electricity sector, its progress in heating and transportation has been slower. Currently, electricity use in the transportation sector marks the initial signs of accelerating shifts in established trends, further bolstering the energy transition.

Progress in the energy transition is evident in the sharp decline in solar and wind costs. Key technologies like batteries-and their rapidly falling production costs—are expected to address the intermittency of these energy sources. Green hydrogen is also emerging as a potential game-changer. In Iran, there are many reasons to promote renewable energy development.



#### NAVIGATING IRAN'S ENERGY TRANSITION: CHALLENGES AND PROSPECTS (CONTINUED)

Power outages in industries and residential areas during the summer, and this year in the fall and winter, are major indicators of the ongoing energy crisis. Additionally, the gas supply to various industries has been cut off during the cold season in recent years, adding another dimension to the energy crisis in Iran. Recently, the crisis of gasoline and diesel shortages has also been added to this mix. These shortages, combined with excessive energy consumption, high carbon dioxide emissions, and the costly electricity generated from fossil fuels to which the government allocates significant subsidies, are some of the reasons why Iranian policymakers are eager to attract private sector investment in the renewable energy market. As the renewable energy capacity grows in Iran, more opportunities for exporting additional oil, natural gas, refined products, and petrochemical products will emerge, enabling optimal utilization of this capacity. Moreover, strengthening the power sector is crucial to address the power outages that occur throughout various months of the year. Additionally, engaging in the downstream oil and gas sector,















which generates significant export revenue for both the company and the country, requires the simultaneous development of the upstream sector to ensure feedstock for refineries and petrochemical complexes, as well as the power sector to address the power outages that occur throughout various months of the year. The holding company has thus made efforts to simultaneously develop all these sectors for these reasons. Additionally, while engaging in the downstream oil and gas sector, which generates significant export revenue for both the company and the country, it is essential to simultaneously develop the upstream sector to ensure a steady supply of feedstock for refineries and petrochemical complexes. Looking at the issue from a broader perspective, should the role of crude oil in the global market decline over the next decade, accompanied by a reduction in demand during the energy transition period, it becomes essential despite Iran's abundant resources in this sector to increase renewable energy capacity during the remaining period until global oil demand reaches its peak. This approach would facilitate the production and export of more oil, gas, and refined products, enabling investment in future technologies and creating added value through the generated foreign exchange resources. Despite the high domestic gas consumption and the inability to meet demand during peak periods, the development of renewable energy will help meet the needs of the residential, commercial, and power generation sectors. This will enable the use of natural gas to generate additional foreign currency income for the country through various industrial sectors.

By developing renewable energy, it is possible to generate significantly greater value by producing hundreds of products rather than burning hydrocarbon resources. Thus, another key opportunity for the holding company in the renewable energy sector is the large electricity export market near Iran. This market will not only increase foreign currency revenue from clean exports free of conventional pollutants but also enhance the country's position in supplying electricity to neighboring countries, thereby strengthening long-term ties with Iran. Given the strategic advantage of the country's vast fossil and renewable resources, Iran also has the potential to become one of the world's hydrogen hubs. The low cost of oil, gas, and renewable energy production in Iran is the country's most significant advantage for the energy transition period and for hydrogen production as the fuel of the future.

## SUSTAINABILITY RISK PROFILE: RISKS AND OPPORTUNITIES













#### RISKS:

Shifts in the global energy landscape create challenges and prospects for energy companies, especially those in oil and gas, with major risks including:



#### REGULATORY AND POLICY RISKS

New national and international regulations on greenhouse gas emissions, such as emissions trading systems and carbon taxes, may raise operational costs and necessitate compliance efforts. The Iranian parliament has tasked the DOE with developing a carbon mechanism, with reported cooperation from the Securities and Exchange Organization of Iran. Given evolving carbon policies, particularly in Iran, adaptive strategies are essential to mitigate associated risks.



#### **ENERGY DEFICIT CHALLENGES**

Iran's energy deficit poses significant risks to domestic operations and economic stability, particularly affecting downstream activities and their feed supplies. Energy shortages could constrain production, increase costs, and disrupt supply chains, especially in energy-intensive sectors.



#### WORKFORCE IMPACT

As the industry shifts to cleaner energy solutions, there is potential for significant job losses in traditional oil and gas sectors, affecting local economies reliant on these industries. While this impact may not be as pronounced for our company given the current realities in Iran, preparing our workforce for this possible future will strengthen their commitment to the company and ensure a ready, skilled workforce if such transitions become necessary.



#### **ECONOMIC AND FINANCIAL INSTABILITIES**

The global energy market is saturating due to rising production, energy diversification, and increased adoption of renewables and electric vehicles, reducing demand for Iranian resources. For PEDC, this poses a risk to market position and revenue as surplus supply and shifting energy trends lower reliance on Iranian imports.



#### TECHNOLOGICAL AND CYBERSECURITY CHALLENGES

To stay competitive, companies must invest in innovation but face risks in cybersecurity and data privacy. Without strong security, they risk breaches, compromised integrity, and operational disruptions that could harm reputation and performance.



#### DECREASING DEMAND FOR IRANIAN ENERGY IN THE GLOBAL MARKET

Global energy transitions could affect oil and gas prices, impacting financial performance. Moreover, meeting international climate goals—such as the Paris Agreement—imposes operational constraints and requires investment in cleaner technologies, affecting profitability if not managed efficiently.



#### SUSTAINABILITY RISK PROFILE: RISKS AND OPPORTUNITIES (CONTINUED)













#### OPPORTUNITIES:

The evolving global energy landscape presents both risks and opportunities for companies in the energy sector, particularly within the oil and gas industry. The key opportunities include:



#### INNOVATION & DIVERSIFICATION OPPORTUNITIES

The shift towards alternative energies presents opportunities for investing in and developing renewable technologies, allowing companies to diversify their energy portfolios and capture emerging market segments.



#### ADDRESSING DOMESTIC ENERGY NEED

Iran's energy deficit poses a challenge but also offers opportunities in oil and gas exploration, drilling, and Supporting extraction. local renewables enhances sustainability, ensures stability, and attracts government incentives.



#### OPERATIONAL EFFICIENCY

Advancements in technology offer potential for improving efficiencies and reducing costs in both traditional fossil fuels and new energy sectors, enhancing competitive positioning.



#### DOMINANT POSITION IN THE IRANIAN MARKET

As a key player in Iran's energy sector, PEDC can address the energy deficit while adapting to the global shift from fossil fuels. Our strong reputation ensures market presence, secures niche projects, and leverages contracts like the Iranian Petroleum Contract.



#### STRATEGIC PARTNERSHIPS

The evolving energy market encourages forming alliances and partnerships, enabling companies to benefit from shared expertise and resources for mutual growth.



#### SUSTAINABLE **GROWTH INITIATIVES**

Investing in sustainable energy meets rising demand, enhances brand reputation, and boosts customer loyalty. It also attracts global sustainability funds for further eco-friendly innovation.



#### INTEGRATED ENERGY VALUE **CHAIN PRESENCE**

PEDC's involvement across all segments of the energy value chain, including renewables, provides diversification, mitigates risks, and maximizes value opportunities.



#### RENEWABLE ENERGY FOCUS

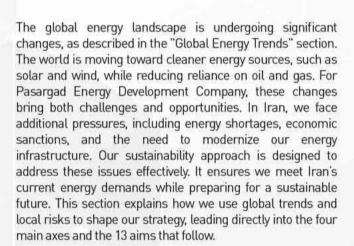
PEDC's solar investments and 1500 MW expansion align with global decarbonization trends, ensuring regulatory compliance, profitability, and access to government renewable energy investments.



#### **EMBRACING** DIGITAL INNOVATION

By adopting digital technologies, PEDC can optimize production, efficiency, and resource use while enhancing competitiveness. These innovations reduce costs, support sustainability, and strengthen operations.

#### **OUR SUSTAINABILITY** APPROACH AND FRAMEWORK



#### LINKING GLOBAL TRENDS AND RISKS TO OUR STRATEGY

Global energy trends show a clear shift toward renewable energy and electricity, with less emphasis on traditional fossil fuels. International agreements, such as the Paris Climate Agreement, encourage countries to lower emissions, and major economies like the United States, Europe, and China are investing heavily in clean energy. For PEDC, this means the demand for oil and gas—our main focus—may decrease over time. In Iran, we also deal with a crowded global market, sanctions limiting our exports, and domestic energy shortages that affect homes and industries. These are significant risks. However, the falling costs of renewable energy and the chance to strengthen Iran's energy supply offer us new paths forward.













PEDC's sustainability framework is built on four strategic axes: Energy Transition, Protecting Earth, Safety, and Economic and Social Development. These axes reflect a pathway that is our intuition and understanding of worldwide energy shifts and Iran's specific needs. To develop this framework, we referred to the IPIECA Sustainability Roadmap, an industry-standard guide that helped us identify the most important issues for our operations. These four strategic axes direct our efforts to manage risks, such as stricter regulations or declining oil demand, and to pursue opportunities, like expanding renewable energy and improving efficiency. Each axis includes specific aims that turn our strategy into practical, measurable actions.





## OUR SUSTAINABILITY APPROACH AND FRAMEWORK (CONTINUED)

The Energy Transition axis tackles energy stability, efficiency, and low-carbon adoption. Iran faces seasonal power and gas shortages, prompting investments in solar energy and improved natural gas use. A planned 1,500 MW solar project aims to meet local demand and ease fossil fuel reliance, while also creating global market opportunities.

The Protecting Earth axis addresses climate risks such as rising temperatures, water scarcity, and potential carbon taxes. It focuses on circular economy practices, water efficiency, emissions control, and ecosystem restoration. Measures like zero-liquid discharge systems help reduce waste and bolster both compliance and resource conservation.

Technology and workforce adaptation are also key. While new systems enhance performance, they introduce risks like cybersecurity threats. The Safety axis prioritizes occupational and process safety. The Economic and Social Development axis promotes health, education, local community strength, and national value creation—helping Iran navigate tech shifts and build resilience through innovation.

## A STRATEGY TAILORED TO OUR CONTEXT

PEDC's strategy blends global energy trends with Iran's specific needs. As a major player across oil, gas, and power sectors, we adapt to market shifts while balancing traditional energy reliance with renewable growth. While Iran still depends on oil and gas, we are expanding solar capacity to meet evolving demands. Energy shortages, like winter gas cuts and summer blackouts, drive our action. Our solar projects aim to support both cities and industries, easing pressure on existing resources and enabling energy exports.

These efforts not only stabilize supply chains but also position us to benefit from regional EPC opportunities. Anticipating environmental regulations, we are already working to reduce emissions and waste—helping us avoid future costs and stay competitive. Our approach secures today's operations while building resilience for tomorrow.

#### CONNECTING TO THE FOUR AXES AND 13 AIMS

Our four strategic axes emerge directly from these global trends and local conditions. Each axis has specific aims that make our strategy actionable. Here's how they work:

#### **ENERGY TRANSITION**



This axis includes three aims, Energy Security, Energy Efficiency, and Low Carbon and Renewable Energy. Energy Security ensures a steady supply, addressing outages with solar power and improved grids. Energy Efficiency focuses on using resources wisely, such as upgrading equipment to burn less fuel. Low Carbon and Renewable Energy shifts us toward solar and cleaner gas, reducing emissions while meeting Iran's energy needs.

#### PROTECTING EARTH



Four aims guide this axis, Circular Economy, Water Efficiency, GHG Emissions Management, and Ecosystem Revitalization. Circular Economy encourages reusing materials and specifically considering the life cycle of equipment and increasing it but also like recycling waste products. Water Efficiency saves water with new technology, vital in Iran's dry climate. GHG Emissions Management lowers pollution through better processes. Ecosystem Revitalization repairs land affected by our work, such as planting trees or cleaning sites.

#### SAFETY



This axis has two aims, Occupational Health and Safety and Process Safety. Occupational Health and Safety protects our workers with training and equipment. Process Safety prevents accidents by maintaining pipelines and systems, ensuring reliable operations.

#### **ECONOMIC & SOCIAL DEVELOPMENT**



Four aims drive this axis: Health and Welfare, Local Community Stewardship, Creating Value Locally, and Quality Training/Education. Health and Welfare improves lives of workers and families. Local Community Stewardship supports nearby areas with jobs or infrastructure. Creating Value Locally boosts Iran's economy through work. Quality Training/Education prepares staff and youth for future energy roles.

#### CONNECTING TO THE FOUR AXES AND 13 AIMS (CONTINUED)

These 13 aims, detailed in the following sections, offer a clear roadmap for PEDC to navigate the future sustainably. They address global energy shifts and Iran's challenges with practical steps, ensuring value for our company, country, and stakeholders. Each aim is based on careful analysis of local conditions and global best practices.

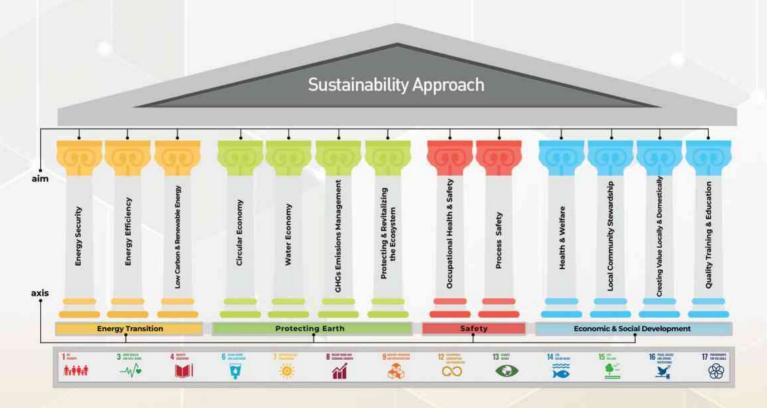
Energy is vital in Iran powering homes, farms, and factories. Sanctions limit our options, but we adapt. While global oil demand may decline, Iran needs energy now. PEDC's strategy addresses both needs. Our solar expansion, like the 1,500 MW project, can reduce blackouts and free up oil and gas for export, boosting revenue. This supports the economy and strengthens our role.

Risks like new regulations or tech issues may arise, but we're prepared. Strong safety measures protect against disruptions. Opportunities are growing neighboring countries need electricity, and Iran's resources, from sun to gas, position us to supply it. Our approach isn't about chasing trends, but using them to build a stronger PEDC and a more secure Iran.

Our sustainability strategy is not fixed; it will evolve. We will track our results, learn from others, and adjust as needed. Our employees, communities, and partners play a key role, offering insights to improve our work.

The IPIECA Roadmap gave us a starting point, but Iran's needs drive us forward. Our approach remains adaptive, ensuring that we stay relevant in a rapidly changing world. We recognize that long-term success depends on collaboration, innovation, and continuous feedback. By remaining open to change, we can better align our efforts with emerging global standards and local priorities.

The four axes and 13 aims are our commitments to our people, our nation, and our future. In the next sections of this report, we outline the plans, actions, and measures behind these aims, showing how we turn strategy into results. These efforts reflect our belief that sustainable progress is both a responsibility and an opportunity.



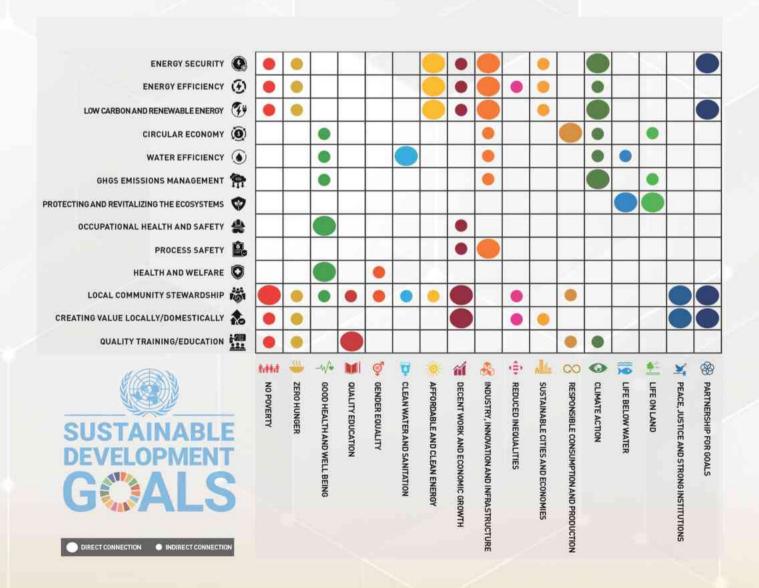


# OUR AIMS AND THE SDGS

The Sustainable Development Goals (SDGs) outline 17 global targets to address poverty, climate, and inequality by 2030. For Pasargad Energy Development Company (PEDC), they connect our strategy to worldwide priorities. In Iran, facing energy shortages, sanctions, and environmental challenges, our four strategic axes—Energy Transition, Protecting Earth, Safety, and Economic and Social Development—and their 13 aims align with SDGs where we can act. This alignment allows us to contribute meaningfully to both national resilience and global progress.

We've strived to directly or indirectly address all 17 SDGs, ensuring our efforts reflect both global goals and Iran's needs. The matrix below maps these links, showing "Direct" (core contributions) and "Indirect" (secondary benefits) impacts. This alignment helps us track our progress and communicate our role in advancing sustainable development more clearly. It also reinforces our commitment to responsible growth, resilience, and long-term value for stakeholders. By continuously evaluating these connections, we can adapt our strategies to maximize positive outcomes.

SDGs-AIMs Alignment



## **MATERIALITY**

Understanding what matters most to PEDC and our stakeholders is critical to our sustainability strategy. Materiality ensures we focus on issues that drive value for our operations, our country and the planet, especially amid energy shortages, sanctions, and environmental pressures. This section outlines how we identified material issues, guided by global energy trends, industry benchmarks, IPIECA guidelines, and domestic/company realities, and how they shape our four strategic axes, Energy Transition, Protecting Earth, Safety, and Economic and Social Development and their 13 aims.

#### **IDENTIFYING MATERIAL ISSUES**







We began by aligning global energy trends such as the shift to renewables and declining oil demand with industry standards and IPIECA guidelines, a key framework for oil and gas sustainability. We then grounded this in Iran's domestic realities (e.g., energy deficits, water scarcity) and PEDC's specific context, our operations and business lines. This process included: an integrated assessment of environmental, economic, and regulatory factors shaping our strategic approach. We also incorporated stakeholder perspectives to ensure our strategy remains both inclusive and forward-looking.

- Risk and Opportunity Analysis: We assessed risks like energy shortages, emissions, regulatory pressures (e.g., potential carbon taxes), and cybersecurity threats, alongside opportunities like renewable growth and local job creation, considering our operations' environmental impacts.
- Sustainability Committee Review:Our sustainability committee, comprised of internal experts and top management, reviewed and refined these issues, ensuring alignment with PEDC's strategic goals and our stakeholder's needs.
- Stakeholder Engagement Mechanisms: We established ongoing engagement with our stakeholder groups like employees, local communities, government bodies, and investors through surveys, meetings, events, exhibitions and regular forums. These mechanisms capture stakeholder insights, prioritizing reliable energy, job security, emissions reduction, water conservation, and safety so we can adjust our strategies accordingly, fostering stronger alignment with shared goals

This approach identified key issues: energy security, reducing greenhouse gas emissions, improving water efficiency, enhancing safety, creating local jobs, and protecting nearby ecosystems. These align our strategies with stakeholder expectations, Iran's priorities power, economy, environment and global demands.

#### PRIORITIZING MATERIAL ISSUES

We ranked issues by their impact on PEDC's business (e.g., revenue, operations) and stakeholders (e.g., community welfare, environmental health), benchmarking against industry leaders. High-priority issues include energy shortages disrupting supply chains, emissions affecting Iran's climate goals, and water scarcity in our dry southern regions. We also considered long-term risks, like declining oil demand, and opportunities, like solar exports, ensuring relevance amid global shifts. Consultations with internal experts and external partners provided a comprehensive perspective to align strategic planning with immediate needs and the broader transition to a sustainable energy future.

#### PEDC's Material Issue Identification Process





# **MATERIALITY (CONTINUED)**

These issues directly shape our four axes and all 13 aims, ensuring our sustainability efforts are focused and actionable:

# **Energy Transition**



Energy security ensures reliable power, reducing outages; energy efficiency cuts waste, lowering costs; low-carbon and renewable energy shifts to solar and gas, reducing emissions. Together, these pillars form the foundation of a resilient, future-ready energy system. They also support national goals for energy independence and environmental stewardship, reinforcing long-term economic and ecological stability, while driving innovation in sustainable technologies and infrastructure development. As these strategies gain momentum, they create new opportunities for job creation and local industry growth. Moreover, integrating these pillars strengthens a country's ability to adapt to global energy market fluctuations and climate-related risks.

# Protecting Earth



Circular economy reuses materials, minimizing waste; water efficiency conserves scarce water; GHG emissions management cuts emissions across facilities; ecosystem revitalization restores ecosystems near operations. These actions work together to reduce environmental impact while supporting long-term operational sustainability. By integrating these practices, we also enhance resilience to regulatory changes and market shifts, ensuring continued success. They foster stronger relationships with local communities and stakeholders by promoting transparency and stewardship. Over time, this approach helps build a more adaptive and resource-efficient business model, capable of thriving in a low-carbon future.

#### Safety



Occupational and process safety protect workers and ensure operational reliability by preventing incidents and failures. These measures help minimize downtime, avoid costly disruptions, and maintain productivity across all operations. They also contribute to a strong safety culture, fostering trust among employees, regulators, and the wider community. Moreover, a proactive safety approach supports continuous improvement by encouraging regular risk assessments, training, and adoption of best practices.













## **Economic & Social Development**

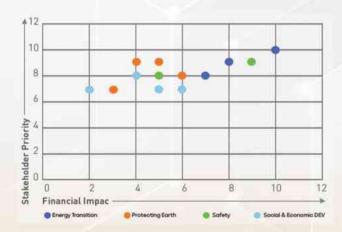


Health and welfare enhances worker/community well-being; local community stewardship engages communities, creating jobs; creating value locally boosts Iran's economy via sourcing/exports; quality training/education prepares staff/youth for the future. These efforts contribute to a more inclusive and sustainable economic model, fostering long-term growth and improving quality of life for all stakeholders. By investing in people and communities, we build a foundation of trust and shared purpose that strengthens social cohesion. This approach not only supports national development goals but also ensures our operations are welcomed and sustained over time.

# Materiality Assessment Approach



This materiality assessment, rooted in IPIECA, industry benchmarks, and Iran's realities, keeps our strategy focused and actionable, aligning priorities with stakeholder expectations; our plans, actions, and metrics track progress on these issues, ensuring PEDC delivers value for our stakeholders and maintains operational transparency; by continuously refining our approach, we remain adaptable to evolving challenges and opportunities in the energy sector and positioned for sustainable growth, fostering long-term relationships and building trust with key partners.



# ENGAGING STAKEHOLDERS

Stakeholder engagement helps PEDC build trust and address energy challenges, aligned with key strategic go als.

# Stakeholder Groups



PEDC engages a diverse range of stakeholders critical to our operations across Iran, identified through our management process:

- Shareholders: Major investors (>30% stake) influencing strategy, prioritizing profitability and transparency.
- Group Companies: Subsidiaries and affiliates needing support (e.g., financial, legal) and policy alignment.
- Customers: Organizations receiving PEDC's products/services, expecting ethical, timely delivery.
- Key Business Partners: Collaborators in projects, seeking timely commitments and knowledge sharing.
- Financial Suppliers: Lenders funding operations, expecting timely repayments and transparency.
- Human Capital: Full/part-time employees, needing fair pay, growth, and training for energy shifts.
- Government Bodies/Regulators: Entities like the Ministry of Health or Environmental Protection, enforcing laws and policies.
- Local Communities: Groups near facilities, prioritizing jobs, infrastructure, and reduced environmental impacts.
- Media: Journalists seeking accurate information on PEDC's activities.
- Competitors: Industry peers monitored for ethical practices and market dynamics.
- Universities and Innovation Centers: Partners for research, training, and technology development.
- Major Suppliers (Goods/Services): Providers needing safety, timely payments, and transparency.

#### Stakeholder Communications



Our engagement uses structured methods, as outlined in our process:

- Tools: Surveys (e.g., employee satisfaction), workshops, interviews, focus groups, site visits, and industry forums.
- Frequency: Annual stakeholder reviews, quarterly updates for key groups (shareholders, regulators), and ongoing for communities via field studies.
- Channels: In-person meetings, questionnaires, newsletters, and digital platforms for media/universities.
- Monitoring: We track engagement via our stakeholder management matrix and responsibility assignment matrix, ensuring responsiveness to Iran's context (e.g., energy needs, sanctions).



Frequency

Channels



#### STAKEHOLDER EXPECTATIONS



These expectations drive our focus on energy security, emissions, water, safety, and jobs, as identified in materiality.

**Shareholders, Financial Suppliers:** Profitability, transparency, and investment planning to secure PEDC's future under sanctions.

**Group Companies, Customers, Partners:** Timely commitments, ethical practices, and knowledge sharing for operational stability.

**Human Capital:** Fair pay, career growth, and training, addressing workforce readiness.

**Government Bodies:** Compliance with laws (e.g., labor, environmental), active participation in policy forums.

**Local Communities:** Reliable energy, jobs, infrastructure, and reduced environmental impacts (e.g., emissions, water use).

**Media, Universities:** Accurate information, innovation partnerships for sustainability solutions.

**Competitors, Suppliers:** Ethical conduct, safety, and timely payments to maintain trust.

#### IMPACT ON STRATEGY



Engagement shapes our axes/aims, ensuring relevance:

**Energy Transition:** Government reports on outages informs Energy Security; partner insights guide Low Carbon solutions.

**Protecting Earth:** Local concerns on water scarcity shape Water Efficiency; regulator input drives Emissions Management.

**Safety:** Worker input enhances Occupational Health and Safety; supplier feedback strengthens Process Safety.

**Economic and Social Development:** Community needs for jobs and health guide Local Community Stewardship, Creating Value Locally, and Health and Welfare; university partnerships support Training/Education.

This process, rooted in industry best practices, keeps our strategy actionable and delivers value for Iran and stakeholders.





# **ECONOMIC SNAPSHOT**





# PROJECT SNAPSHOT





# PEDC GROUP SNAPSHOT



















19,700,000 BARRELS OF OIL PRODUCED



347163-TON HYDROCARBON PRODUCT PRODUCED IN 2024



13,313,298 MWH ELECTRICITY **GENERATED IN 2024** 



325916-TON BITUMEN PRODUCED IN 2024



22.4 MWH RENEWABLE (SOLAR) ENERGY **GENERATED IN 2024** 



3,624,751-TON TOTAL WEIGHT OF IMPORT/EXPORT IN 2024







5,000 M3 POTABLE WATER DELIVERED DAILY



7,000 MANGROVES



100% EIA COVERAGE



1,221,000 M2 GEOMEMBRANES PRODUCED FOR SPILL CONTAINMENT/WASTE ISOLATION



**20.5 HECTARES TERRESTRIAL TREES** PLANTED



140-180 TONS OF CO<sub>2</sub> SEQUESTERED ANNUALLY FROM AFFORESTATION





**181 SAFETY DRILLS** PERFORMED





0.28 SR



**178 HSE TRAININGS** CONDUCTED



50.1% HSE PERFORMANCE SCORE



15% INCREASE IN GROUP HSE PERFORMANCE

#### **AXIS FOUR ECONOMIC & SOCIAL DEVELOPMENT**





38 HOURS **ANNUAL TRAINING** PER EMPLOYEE



> 200 MILLION USD INVESTED IN KNOWLEDGE-BASED INITIATIVES



100% GENERAL CONSUMABLE MATERIALS & SERVICES SOURCED LOCALLY



**ACADEMIC SCHOLARSHIPS** 



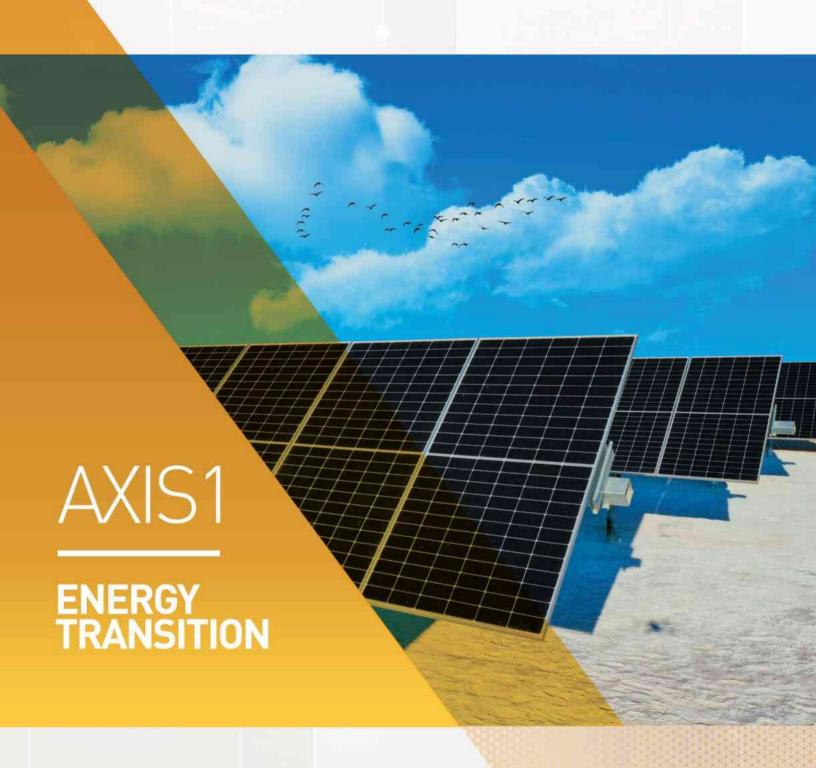
4 SCHOOLS CONSTRUCTED 17,940 M2



**MANAGEMENT** COMPOSITION (HEADQUARTERS)



PEDC SUSTAINABILITY REPORT - 2024



# AIM 01 ENERGY SECURITY

We ensure a reliable energy supply by strengthening infrastructure and adopting advanced technologies to overcome local deficits, supporting Iran's needs and contributing to SDGs 7 and 9.

# AIM 02 ENERGY EFFICIENCY

We optimize energy use to reduce costs and environmental impact, supporting SDGs ,9 ,7 13, and 17 through efficient technologies and collaborations.

# AIM 03 LOW CARBON & RENEWABLE ENERGY

expand renewable energy to lead Iran's clean energy transition, contributing to SDGs 13.9.7, and 17.



# **AXIS 1: ENERGY TRANSITION**

The global energy landscape is undergoing a profound transformation, driven by the urgent challenges of climate change, energy security, and sustainability. As the world shifts toward cleaner energy sources, the necessity for a strategic energy transition has become more critical than ever. For Pasargad Energy Development Company. transition presents both challenges opportunities to redefine our role in Iran's energy future while contributing to global sustainability goals, including the United Nations Sustainable Development Goals.

# NAVIGATING THE GLOBAL & REGIONAL CONTEXT

The energy transition demands a dual focus: ensuring a stable and secure energy supply while accelerating the adoption of renewable energy sources. Investments in renewables such as solar energy not only reduce carbon footprints but also enhance resilience against volatility in the oil and gas markets, supporting SDG 7 by ensuring access to clean energy. For a developing country like Iran, which holds significant fossil fuel reserves, this transition requires a balanced approach. PEDC recognizes the need to maintain energy security to support national development while simultaneously improving the efficiency of fossil fuel use and diversifying our energy portfolio to include cleaner alternatives. This strategic balance ensures that we meet Iran's growing energy demands without compromising on sustainability, contributing to SDG 9 through resilient infrastructure and innovative solutions.













The Energy Transition axis forms the cornerstone of our strategic roadmap, guiding our efforts to balance energy reliability with innovation and environmental stewardship, aligning with SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals).

By investing in renewable technologies and enhancing energy efficiency, we are preparing our portfolio for a low-carbon future. These efforts also support the development of resilient infrastructure and foster international collaboration in advancing clean energy solutions.

















# PEDC'S STRATEGIC ROLE IN IRAN'S ENERGY TRANSITION

As a leading energy company in Iran's private sector, PEDC is uniquely positioned to shape the nation's energy transition. Through targeted investments in infrastructure, strategic partnerships, and forward-looking policies, we aim to enhance energy security while advancing toward a low carbon future, aligning with SDG 17. Diversifying our energy portfolio drives business growth and innovation, meeting global demand for clean energy and supporting SDG 9.

# OUR INTEGRATED APPROACH: THREE CORE AIMS













We are also committed to optimizing energy use across operations, reducing costs. and minimizing environmental impacts throughout our value chain, contributing to SDG 13 by cutting greenhouse gas emissions. By adapting to emerging trends such as carbon pricing, taxes, and regulations curbing fossil fuel demand PEDC ensures long-term competitiveness in a fast-evolving energy landscape.







PEDC's approach to the energy transition is built on three interconnected aims that address the multifaceted challenges of this shift:

#### Aim 1-Energy Security

We prioritize a reliable and resilient energy supply for our operations by strengthening infrastructure, adopting advanced technologies, and building adaptive systems to withstand Iran's energy deficit and climate challenges. This ensures operational continuity and supports Iran's energy needs in an uncertain global market, directly contributing to SDG 7 (Affordable and Clean Energy) and SDG 9 (Industry, Innovation and Infrastructure).

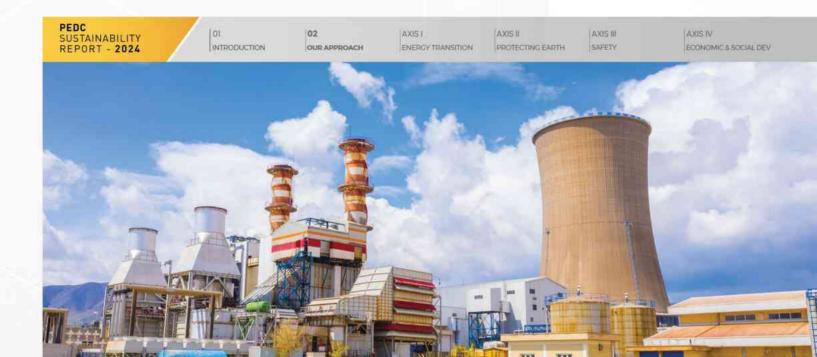
## Aim 2-Energy Efficiency

By implementing energy optimization programs across our operations, facilities, and processes, we reduce operational costs and environmental impacts, enhancing the sustainability of our energy production while maintaining reliability. This aim supports SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals) through efficient technologies and stakeholder collaborations.

# Aim 3-Low Carbon and Renewable Energy

We are committed to reducing our carbon footprint and expanding renewable energy adoption, aligning with global energy transition and sustainability goals. This aim focuses on integrating low-carbon technologies and renewable sources into our portfolio, positioning PEDC as an influential player in Iran's clean energy future and contributing to SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals).

The Energy Transition axis reflects PEDC's vision for a sustainable and secure energy future. By integrating energy security, efficiency, and low-carbon innovation, we address global energy shifts and Iran's energy deficits while advancing a cleaner, more resilient energy landscape. Our efforts align with global development goals, contributing to sustainable progress nationally and internationally. The following sections outline our strategies and progress under each aim, highlighting PEDC's role in shaping Iran's energy future. Through this commitment, we strive to balance immediate national needs with long-term global sustainability priorities. Our approach ensures that Iran remains competitive in the evolving global energy market while fostering innovation and resilience across the sector.



# **ENERGY TRANSITION -**ALIGNMENT WITH GLOBAL GOALS













Pasargad Energy Development Company aligns its Energy Transition strategies with the United Nations Sustainable Development Goals to contribute to global sustainability while addressing Iran's energy needs. You can see the SDGs directly affected by our initiatives in Axis 1 diagram. This alignment ensures that our efforts are both globally responsible and locally relevant, reinforcing our commitment to a just and inclusive transition.









## AIM 1- ENERGY SECURITY: POWERING IRAN'S FUTURE

Energy security is a cornerstone of sustainable development and economic stability, ensuring a reliable, resilient, and accessible energy supply to drive industrial growth, enhance national resilience, and improve quality of life. For Pasargad Energy Development Company, a leading private energy group in Iran, energy security is a strategic priority that aligns with our core business functions, yet prolonged sanctions have restricted access to modern technologies and infrastructure, posing challenges to sustainable progress across our diverse operations.













pede development and power generation, including combined-cycle plants, CHP units, and solar installations. Regulatory shifts requiring energy group in Iran, pedigns with our core and technology, securing cleaner energy, driving innovation, enhancing resilience, and improving efficiency and scale—strengthening energy security while supporting Iran's economic and environmental goals across oil, gas, and power operations.

# PEDC'S COMMITMENTTO ENERGY SECURITY













Our strategy to achieve energy security centers on five key approaches, each designed to address Iran's unique energy challenges and contribute to a sustainable energy future across our oil and gas (upstream and downstream) and power generation operations, including combined-cycle plants, CHPs, and solar installations:



#### INVESTING IN ENERGY INFRASTRUCTURE & TECHNOLOGY

PEDC is strengthening Iran's energy infrastructure by upgrading facilities, power plants, and transmission networks, while adopting Al monitoring and smart grids. Upstream optimizes well production, downstream modernizes refineries, and power generation boosts combined-cycle and CHP efficiency. These steps ensure reliable energy access and reinforce national security.



#### SECURING ACCESS TO CLEANER ENERGY SOURCES

We are expanding natural gas and renewable energy, especially solar, to reduce oil dependence while optimizing upstream gas production for stable supply. This mitigates price volatility, leverages Iran's solar potential and gas reserves, and ensures a balanced energy mix aligned with our diversification goals.



#### DRIVING INNOVATION THROUGH KNOWLEDGE-BASED SOLUTIONS

Innovation is vital for a secure energy future. PEDC invests in R&D and partners with academia to advance CCS for power plants and CHPs, and enhanced oil recovery for upstream operations. These initiatives boost reliability and tackle sustainability challenges, reducing vulnerabilities across extraction, refining, and power generation.



#### BUILDING RESILIENCE AGAINST CLIMATE CHALLENGES

We are strengthening our energy system against climate impacts through carbon reduction, solar energy storage, and climate-resilient designs for oil, gas, and power facilities. Enhancing resilience ensures consistent energy supply from combined-cycle plants, CHPs, upstream production, and downstream refining, even amid environmental and geopolitical challenges—an essential pillar of energy security.



#### ADVANCING EFFICIENCY &SCALE

PEDC is advancing distributed power generation, decentralized networks, and strategic energy carriers to strengthen grid stability and reliability. Upstream and downstream efforts optimize gasoline production and fuel supply chains, while solar and CHP systems reduce outage risks and expand access in remote areas. These initiatives enhance energy security and drive greater efficiency across all sectors.



# A VISION FOR A SECURE ENERGY FUTURE













PEDC's focus on infrastructure, cleaner energy, innovation, resilience, and efficiency ensures energy drives growth and stability in Iran, covering oil and gas (upstream and downstream) and power generation via combined-cycle plants, CHPs, and solar installations. These efforts meet current demands while building a secure, sustainable energy ecosystem that supports Iran's long-term development goals.

# **ENERGY SECURITY** ALIGNMENT WITH GLOBAL GOALS













Our focus on energy security not only strengthens our core objectives but also contributes to broader sustainability goals. Based on your matrix, the contributions are as follows:





SDG 1: : Improving quality of life by improving energy access



SDG 2: : Energy access supports food production and storage, helping reduce hunger.



SDG 8: Enabling economic opportunities through stable energy supply.



SDG 10: - Bridging energy access gaps across communities.



SDG 11: - Bolstering urban resilience with dependable energy systems.



SDG 13: - Promoting cleaner energy sources to mitigate climate impacts.



DIRECT



SDG 7: - Ensuring reliable access to clean energy sources.



SDG 9: - Enhancing infrastructure resilience and fostering innovative energy solutions.



## **OUR PLANS:** AIM 1 - ENERGY SECURITY

Pasargad Energy Development Company (PEDC) is committed to advancing energy security for Iran by pioneering a reliable, resilient, and sustainable energy future. Our strategic roadmap explores innovative solutions to address today's challenges while preparing for tomorrow's needs, infrastructure focusing on growth, technological advancements, cleaner energy integration, collaborative innovation, and adaptive resilience.

#### Investing in Energy Infrastructure & Technology



#### **Enhancing Access to Cleaner Energy Sources**

sustainable growth...

To bolster energy security and reduce reliance on volatile energy imports, PEDC is strategically prioritizing cleaner energy initiatives that ensure a stable, resilient, and domestically controlled energy supply. Our approach centers on integrating renewable energy and optimizing lower-carbon fuel sources to diversify our energy portfolio, enhance supply reliability, and support Iran's industrial and economic resilience. A key focus is expanding renewable energy capacity, through advanced techniques like bifacial panels, solar tracking and creating reflective surfaces we intend to enhance our solar power plants.













Through pilot projects and strategic initiatives, we aim to test new approaches and apply our insights to broader operations, ensuring a robust energy landscape. In the sections below, we outline the initiatives our subsidiaries are pursuing to shape this future. These efforts reflect our commitment to innovation, sustainability, and long-term value creation across the energy sector.

These efforts are aligned with national energy goals and are designed to reduce environmental impact while boosting economic resilience. PEDC remains focused on building a flexible energy framework capable of adapting to emerging challenges and evolving energy demands. By doing so, we aim to future-proof our operations against both domestic and international shifts in the energy landscape.

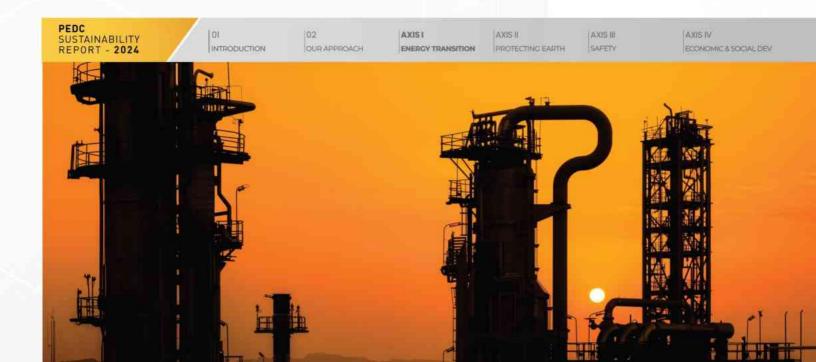
In our upstream and downstream operations, PEDC will pursue initiatives to expand production and refining capacities while incorporating technologies that enhance efficiency and reliability. These advancements will support greater energy self-sufficiency and contribute to long-term national development.

In power generation, we plan to enhance facility reliability by adopting monitoring and maintenance systems that improve operational oversight. We will also explore ways to integrate renewable energy into facility operations, helping to diversify our energy mix and reduce carbon intensity.



We are also exploring the use of natural gas as a reliable low carbon energy source particularly its use in gas generators. By piloting these initiatives, we aim to assess their impact on energy independence and scale successful strategies across our operations.

To embed cleaner energy across our value chain, we are assessing the introduction of contractual requirements for contractors to source a portion of their energy from solar panels. These efforts will be tested in select projects, with insights informing broader implementation across PEDC's subsidiaries.



# OUR PLANS: AIM 1 - ENERGY SECURITY (CONTINUED)













#### Driving Innovation Through Knowledge Based Solutions



PEDC is dedicated to securing Iran's energy future by fostering innovation through collaborative and knowledge-driven initiatives that enhance operational reliability and technological self-sufficiency. Our strategy is to cultivate a robust ecosystem of research and development, leveraging partnerships with academic and scientific communities to explore cutting-edge solutions that ensure a stable energy supply. By testing these innovations in targeted applications, we aim to refine them for broader implementation, strengthening our ability to meet energy demands sustainably and independently.

Central to this approach is deepening our collaboration with leading academic institutions to co-develop technologies that address energy security challenges. To further embed innovation across our operations, PEDC will explore predictive and data-driven technologies to improve equipment reliability and streamline processes. Through these efforts, we aim to build a foundation for continuous improvement, ensuring our innovations deliver long-term value for Iran's energy security.

#### **Building Resilience Against Climate Challenges**



PEDC is dedicated to ensuring Iran's energy security by fortifying our operations against climate-related disruptions, ensuring a reliable energy supply under increasingly unpredictable conditions. Our strategy focuses on developing adaptive infrastructure and systems that maintain operational continuity across our upstream, downstream, and power generation activities, even in the face of environmental challenges. Leveraging Environmental Impact Assessments (EIAs) as the cornerstone of our resilience strategy, we ensure that environmental risks are identified early and addressed throughout the project lifecycle.

Our approach centers on systematically assessing climate risks as part of our EIAs to identify vulnerabilities, develop targeted mitigation plans, and, where necessary, employ advanced modeling to prepare for events like floods, ensuring a stable energy supply across our upstream, downstream, and power generation activities. We are also exploring solutions that will insure stable operations even during climate-driven We are exploring energy storage fluctuations. technologies to maintain consistent power delivery, with findings to guide wider implementation.



# OUR PLANS: AIM 1 - ENERGY SECURITY (CONTINUED)













#### Advancing Efficiency and Scale



PEDC is committed to strengthening Iran's energy security by scaling distributed energy systems and optimizing operational synergies to ensure a reliable and accessible energy supply across diverse regions. Our strategy focuses on expanding decentralized energy solutions to enhance grid resilience and provide energy access in underserved areas, while fostering seamless coordination across our operations to stabilize the fuel supply chain. We will advance the deployment of distributed energy systems, such as microgrids and small-scale renewable installations, to reduce outage risks.

At the same time, we will enhance operational synergies between our subsidiaries to ensure a consistent energy supply chain. Through this dual approach, PEDC will create a scalable and resilient energy ecosystem capable of meeting Iran's needs with greater stability. This approach also positions PEDC to respond more effectively to future energy demands and environmental challenges, both domestically and regionally. By aligning innovation with infrastructure, we aim to drive sustainable growth and long-term energy independence.

# OUR ACTIONS: AIM 1 - ENERGY SECURITY













Pasargad Energy Development Company has implemented strategic initiatives to strengthen energy security, ensuring a reliable, resilient, and sustainable energy supply for Iran. Below, we detail key actions completed and executed by our subsidiaries and strategic divisions, to advance energy security.

These actions range from infrastructure upgrades and capacity expansion to the adoption of advanced technologies that optimize efficiency and reduce vulnerability. Through coordinated planning and investment, PEDC is reinforcing the national energy framework to withstand both current pressures and future uncertainties.

#### Investing in Energy Infrastructure & Technology



PEDC modernizes energy infrastructure across upstream, downstream, and power generation, leveraging advanced technologies and digitization to ensure reliable supply. In upstream, Pasargad Exploration and Production boosts Sepehr and Jofir fields to 64,000 barrels per day, using Mobile Oil Separators to conserve 19 million liters of oil and cut emissions. Petro Danial Kish installs Multi-Phase Flow Meters, reducing well testing time and saving 10% more gas by minimizing flaring. Pezhvak drills four wells and commissions facilities in Siahmakan, while preparing nine in South Pars. Petro Kariz Kish drills directionally in Rashadat and South Pars.

In downstream, Pars Behin Palayesh Naft Qeshm nears completion of the Pasargad Qeshm Oil Jetty to improve fuel logistics. Sina Chemical Industry Development builds the Chabahar Polyolefin Complex,

Soroush Energy Paydar the Hormozgan Polyolefin Complex, and Javid Energy Parto the Qeshm Gas Condensate Refinery, targeting 60,000 barrels per day. In power, the Shariati Combined-Cycle Plant uses real-time monitoring to reduce outages by 25%. Pasargad Qeshm runs 390 MW plants, while Niroo Gostar Sirjan operates 18.1 MW gas-fired units. Taban Energy Pasargad builds the Sorkheh and Mahdi Shahr Solar Plants, and Ctesiphon Green Energy plans a 1,500 MW solar project across 12 provinces. Taban also expands Rey Power Plant with two 248 MW turbines, boosting grid capacity. These projects enhance Iran's energy security and sustainability. PEDC's diverse portfolio reflects its long-term commitment to cleaner, more resilient energy and environmental responsibility.



# **OUR ACTIONS:** AIM 1 - ENERGY SECURITY (CONTINUED)













### Securing Access to Cleaner Energy Sources



PEDC enhances energy security by securing cleaner energy sources and ensuring a reliable, diversified supply for its operations. In Qeshm, Pars Behin Palayesh Naft Qeshm reconfigures facilities to supply stable feedstock, reducing external dependencies. The relocation of Javid Energy Parto's refinery from Siraf to Qeshm Island further enables Qeshm Behin to deliver this critical feedstock, directly supporting PEDC's needs and reducing reliance on outside sources. Qeshm Movalled powers PEDC's operations by generating steam and electricity, offering a cleaner alternative to traditional fuels.

To boost reliability, subsidiaries plan to integrate solar power. Petro Danial Kish equips its Kish base with solar panels, Pasargad Exploration and Production requires solar panels at Sepehr and Jofir field camps to power accommodations, and Sina Chemical Industry Development, Javid Energy Parto, and Soroush Energy Paydar explore solar for administrative buildings. These efforts diversify PEDC's energy mix, with natural gas and solar reducing emissions and enhancing sustainability.

By securing cleaner energy and feedstock, PEDC ensures operational continuity, supports Iran's energy security, and aligns with environmental goals, fostering a resilient energy framework.

#### Advancing Efficiency and Scale



Pasargad Energy Development Company is dedicated to strengthening Iran's energy security by scaling distributed energy systems and optimizing operational synergies for reliable, accessible energy across regions. PEDC advances decentralized solutions to boost grid resilience and improve access in underserved areas. Niroo Gostar Sirjan Company operates the Sirjan Power Plant, with 13 MTU gas generators of 2 MW each, totaling 26 MW. The plant uses CHP technology to provide localized electricity and heat, ensuring reliable energy for the Sirjan Special Economic Zone.

The CHP system in Sirjan acts as a pilot, offering insights into scaling distributed energy for other regions and ensuring consistent access for PEDC's operations and remote areas. Solar energy integration is targeted to meet 10-15% of electrical needs for operational administration buildings, planned across E&P. Sepehr Pasargad, Sina Chemical Industry Development, Javid Energy Parto, Soroush Energy Paydar, and Petro Danial Kish. This renewable, decentralized approach helps stabilize subsidiary energy needs. PEDC's expansion of distributed energy through pilots and scalable solutions will build a resilient ecosystem that ensures stable, accessible energy for operations.



# OUR ACTIONS: AIM 1 - ENERGY SECURITY (CONTINUED)













#### Driving Innovation Through Knowledge Based Solutions



Pasargad Energy Development Company is committed to securing Iran's energy future through advanced technologies and strategic partnerships with academic and scientific institutions. Predictive and data-driven technologies are central to PEDC's innovation strategy. In collaboration with Sepehr Pasargad, Pasargad Exploration and Production Company has established the Well Reservoir Facility Management Center to optimize output in the Sepehr and Jofir fields. Using real-time data and Al-driven analytics, WRFM boosts production efficiency, extends downhole pump lifespan, and reduces drilling downtime, ensuring steady resource supply.

The Power and Utility Division has implemented the Intelligent Power Plant Condition Monitoring system at the Shariati Combined-Cycle Plant, reducing outages by 25% through predictive maintenance and ensuring reliable electricity generation. Engineering Support & Technology Development Company has developed Retina MaintAssist, a maintenance management system with Risk-Based Inspection (RBI) modules and mobile integration, enabling real-time monitoring and reducing downtime at PEDC's facilities.

E&P has deployed Mobile Oil Separators, conserving resources equal to 19 million liters of oil. Petro Danial Kish has installed Multi-Phase Flow Meters at 15 wellheads in Sepehr and Jofir, improving well testing and production monitoring. E&P also partners with Sharif University to enhance reservoir simulation at the WRFM Center, improving recovery rates, and with Amirkabir University to stabilize production through hydraulic fracturing in tight reservoirs like the llam formation.

Taban Energy has implemented bifacial panels, solar tracking, and robotic cleaning at the Pasargad Damghan Solar Plant, boosting summer energy output by over 60% and saving 200 m<sup>3</sup> of water annually.

Petro Danial Kish also partners with Sharif University to deliver acidizing services, improving well productivity in fields such as Darkhoveyn, while Pejvak Energy has used geosteering in the Jofir-09 well to enhance resource extraction. Additionally, Petrokala has optimized drilling jar technology, minimizing downtime by freeing stuck equipment. By integrating advanced technologies, real-time data, and collaborative research, PEDC is building a resilient energy framework to ensure long-term security

#### **Building Resilience Against Climate Challenges**



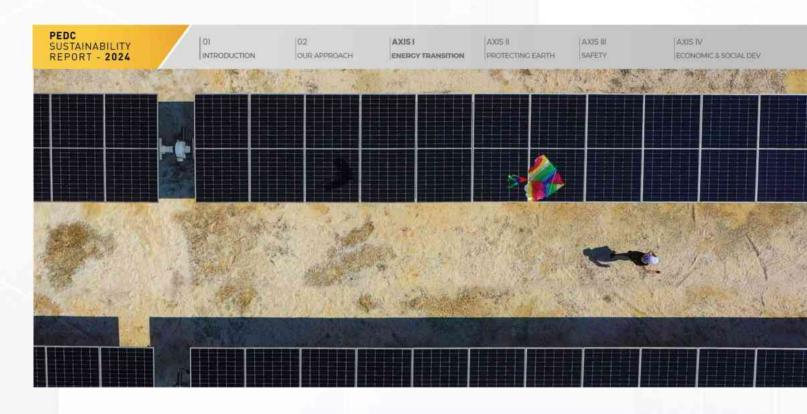
PEDC is committed to energy security amid climate challenges by strengthening operations against climate-related disruptions and ensuring reliable supply under unpredictable conditions. Our strategy focuses on adaptive infrastructure and systems, using Environmental Impact Assessments to identify vulnerabilities, mitigate risks, and maintain continuity across upstream, downstream, and power generation.

Pasargad Exploration and Production conducted hydrological and flood studies at Sepehr and Jofir fields to design flood-resistant facilities and determine well and camp elevations. Dust control practices—like water spraying and pausing high-risk tasks during dust events—have ensured field safety. E&P also collaborates with Amirkabir University to optimize cement quality in wells, improving integrity under climate stress.

At the Qeshm pier, we reinforced berths 1-2 by adding piles, upgraded anchors to withstand stronger sea flows, and installed lightning rods for storm protection. Mangrove planting helps prevent coastal erosion and ensures safe vessel access. Qeshm Movalled added flood-resistant infrastructure and nano-filters in turbines to reduce dust and protect performance.

In power generation, PEDC prioritizes supply stability. Shams Pasargad is testing energy storage at Shariati Combined-Cycle Power Plant to store excess energy for emergencies. Cooling tower airflow simulations further improve efficiency against rising temperatures.

By piloting and refining these adaptive measures, PEDC is building a more resilient energy system capable of sustaining operations under volatile climate conditions.



# **AIM 2 - ENERGY EFFICIENCY** OPTIMIZING IRAN'S ENERGY FUTURE













Energy efficiency is the cornerstone of sustainable energy systems, offering a pathway to reduce waste, lower costs, and minimize environmental impact while ensuring reliable access to energy. For Pasargad Energy Development Company, it is a strategic priority that drives our commitment to operational excellence, innovation, and long-term sustainability. As Iran's energy needs grow, so does the importance of using resources wisely. PEDC is at the forefront of this effort, integrating energy efficiency into every facet of our operations to power a resilient and prosperous future.

Iran's energy landscape, shaped by its vast hydrocarbon reserves and growing demand for electricity, faces unique challenges. Prolonged sanctions have limited access to cutting-edge technologies, while rising consumption pressures aging infrastructure. PEDC is addressing these hurdles by optimizing energy use across the value chain, reducing waste, and enhancing system performance. Our focus on efficiency not only strengthens Iran's energy independence but also positions us as a leader in sustainable energy practices, aligning with global.





PEDC embeds energy management into our core operations. Through advanced monitoring systems, we use real-time data to fine-tune processes, reduce inefficiencies, and prevent energy losses. Similarly, our production optimization ensures maximum value with minimal waste. These efforts reflect our belief that efficiency is a continuous journey of improvement.



#### DRIVING EFFICIENCY THROUGH TECHNOLOGY AND INNOVATION

Innovation powers our efficiency goals. invests cutting-edge technologies, such as Al-driven predictive maintenance, hybrid drilling tools, and solar tracking systems, to enhance performance and reduce energy use. Our partnerships with institutions like Sharif University fuel the development of solutions, redefining efficiency standards in Iran's energy sector.



#### PROMOTING ENERGY EFFICIENCY BEYOND OUR OPERATIONS

PEDC is committed to sharing its efficiency expertise with external partners, promoting broader energy savings across Iran's energy sector. Through operation and maintenance services, energy projects, and collaborations, we aim to boost efficiency in external oil, gas, and industrial operations. These efforts are grounded in our technical experience and partnerships academic and industry stakeholders.



# **A VISION** FOR AN EFFICIENT ENERGY FUTURE















PEDC's pursuit of energy efficiency is about building a legacy of sustainability. Our efforts lay the foundation for cleaner, smarter, and more equitable energy systems in Iran. By optimizing every kilowatt and barrel, we drive progress while protecting the planet. This commitment fosters innovation through advanced technologies, data-driven solutions, and best practices that reduce waste. We continuously upgrade systems with energy-efficient equipment, digital monitoring, and automation to enhance performance across upstream, downstream, and power sectors.

Our initiatives reduce costs and emissions while strengthening energy security and resilience amid climate and geopolitical challenges. Collaboration with local industries, international partners, and research institutions keeps us at the forefront of energy innovation, driving continuous improvement across our value chain. We aim to create long-term value for stakeholders and future generations. Through energy efficiency, we balance economic growth with environmental responsibility, ensuring resources are used wisely. This is how PEDC contributes to a resilient, sustainable energy future for Iran and beyond.

# **ENERGY EFFICIENCY** ALIGNMENT WITH GLOBAL GOALS









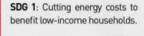


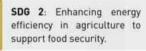


Our commitment to Energy Efficiency advances sustainability by optimizing resource use and reducing environmental impact, while also enhancing operational performance across sectors. Per your matrix, the contributions are outlined as follows:











SDG 8: Boosting productivity in energy-intensive sectors.



SDG 11: Promoting sustainable urban development through efficient energy systems.





SDG 7: Reducing energy waste to make clean energy more accessible.



SDG 9: Implementing cutting-edge technologies for efficient energy



SDG 13: Lowering greenhouse emissions through energy-saving measures.



SDG 17: Collaborating with stakeholders scale to efficiency initiatives.

These connections highlight how energy efficiency directly supports clean energy, innovation, climate action, and partnerships, while indirectly fostering poverty alleviation, food security, economic growth, and sustainable urbanization.



# **OUR PLANS:** AIM 2 - ENERGY EFFICIENCY

Pasargad Energy Development Company is advancing energy efficiency through a strategic roadmap that optimizes resource use and extends our expertise beyond operations. Our plans focus on three priorities: optimizing energy use across operations, leveraging innovation for smarter efficiency, and promoting efficiency in external industries.







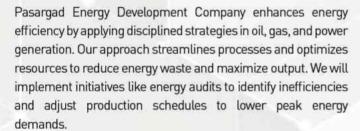






We will pilot innovative solutions in select projects and scale successful approaches across subsidiaries, sharing know-how with clients. These efforts align with global sustainability standards and Iran's national priorities, positioning PEDC as a leader in efficient and impactful energy systems, while continuously fostering collaboration and knowledge transfer across the sector.

#### Optimizing Energy Use Across Operations





For example, we plan to pilot energy management protocols in select upstream facilities to optimize production cycles and reduce flaring. Additionally, we will explore standardized frameworks, such as ISO 50001, to unify efficiency practices across subsidiaries. These efforts will be tested in targeted operational sites, with proven strategies scaled to other PEDC facilities to achieve consistent energy savings.

#### **Driving Efficiency Through Technology and Innovation**



Pasargad Energy Development Company is transforming energy efficiency by investing in advanced technologies that improve operations. Our strategy focuses on solutions like Al-driven maintenance, solar tracking, and carbon capture to cut energy use and emissions. We will collaborate with academic and industry partners to develop tools for Iran's energy challenges, strengthening innovation and sustainability across the sector.

For example, we plan to pilot Al-based maintenance in combined cycle plants to boost fuel efficiency and reduce downtime. Solar tracking, tested at renewable sites, will expand to more solar plants. These initiatives will be piloted in select projects, with successful technologies scaled across PEDC for sustained efficiency gains, broader operational impact, and enhanced long-term energy sustainability.



# OUR PLANS : AIM 2 - ENERGY EFFICIENCY (CONTINUED)



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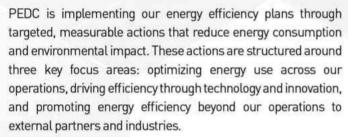


#### Promoting Energy Efficiency Beyond Our Operations



We will explore initiatives such as providing O&M services to enhance efficiency for oilfield operators and supplying clean energy, like solar power, to industrial zones. Additionally, we will strengthen partnerships with academic and industry stakeholders to co-develop scalable efficiency solutions. Proven strategies from these external partnerships will then be expanded to significantly advance Iran's national energy efficiency objectives.

# OUR ACTIONS : AIM 2 - ENERGY EFFICIENCY















strategic roadmap, we aim to enhance operational performance, advance sustainable practices, and contribute to Iran's energy sector. These efforts align with global sustainability goals and support national energy efficiency standards, such as the draft Section 19 of Iran's Building Code, reinforcing PEDC's leadership in efficient energy systems and fostering long-term environmental and economic benefits.

By executing specific projects and initiatives rooted in our

#### Optimizing Energy Use Across Operations



PEDC is advancing energy efficiency within our operations through targeted actions that optimize processes and standardize practices. At our subsidiary Pars Behin Qeshm (Qeshm Palayesh Behin), the ISO 50001 standard has been implemented to establish a robust energy management system, achieving full certification to guide efficiency practices. Pars Behin Qeshm conducts daily, weekly, and monthly energy audits, monitoring steam, electricity, and fuel gas consumption to identify opportunities for reducing energy use. In our upstream operations at the Sepehr and Jofir fields, we are deploying advanced technologies to enhance energy efficiency, including PetroKala Pasargad Kish's Jar technology to reduce energy-intensive drilling interventions, Pejvak Energy's Hybrid PDC drill bits for single-run 700-meter completions, Bi-Center bits to improve cementing quality and minimize energy waste,

and long-stroke belt-driven SRP to optimize production with lower energy consumption. E&P Pasargad's MOS units recover 10,000 barrels of crude oil per well test, reducing flaring-related energy waste. Additionally, MPFM and WRFM systems optimize production through real-time flow measurement and data analysis, minimizing operational energy inefficiencies. Petro Danial has initiated energy monitoring at its Kish, Ahvaz, and Tehran bases, identifying major energy consumers via Pareto analysis to guide optimization, with nine improvement projects underway. These actions are being implemented at our subsidiary companies within two years, with plans to replicate successful measures across PEDC subsidiaries to achieve consistent energy savings.



# OUR ACTIONS: AIM 2 - ENERGY EFFICIENCY (CONTINUED)













## **Driving Efficiency Through Technology and Innovation**



PEDC is enhancing energy efficiency through advanced technologies integrated across our operations. At Taban Energy, a solar plant in Damghan uses bifacial panels, solar tracking, and automated cleaning robots to improve energy output. Qeshm Movalled's 320 MW gas-based combined-cycle power plant outperforms traditional systems, with G13 cooling system upgrades reducing energy losses. Pejvak Energy uses flowmeters to track fuel use on rigs and vessels, improving upstream energy efficiency.

PEKA has optimized HVAC systems, adopted LED lighting, and promotes simple energy-saving behaviors. Petro Danial applies passive design at its Ahvaz base and plans PV panels and smart HVAC controls for improved climate resilience. Our R&D initiatives include Al-driven WRFM systems at Sepehr and Jofir and the IPCM system at Shariati power plant to optimize operations. These technologies are being deployed and scaled across PEDC subsidiaries to ensure lasting energy efficiency gains.

#### **Promoting Energy Efficiency Beyond Our Operations**



PEDC provides specialized well services and maintenance solutions to external clients, ensuring equipment operates at peak performance and correcting inefficiencies caused by wear. Taban Energy Pasargad offers operation and maintenance services for Gachsaran Petrochemical Company and Arvandan Oil and Gas Company's West Karoun Desalination Unit, reducing energy losses and attracting clients focused on sustainable, high-quality operations. Petro Danial Kish delivers industry-leading well services including directional drilling, gyro services, wireline logging, well testing, snubbing, and stimulation for multiple projects across Iran's energy sector.

Leveraging zero-flaring technologies such as the customized Green Burner and optimized three-phase separators, these services optimize well performance, reduce emissions, and reinforce PEDC's technical reputation. Through these services and community initiatives, PEDC advances energy efficiency beyond its operations, minimizes environmental impact, and supports its Energy Transition objectives. These approaches attract clients who prioritize sustainable solutions and reflect PEDC's commitment to innovation and industry collaboration. By integrating these efforts, the company strengthens its position as a leader in sustainable energy services in the region.

### AIM 3-LOW CARBON & RENEWABLE ENERGY ADVANCING IRAN'S CLEAN ENERGY TRANSITION













Global warming poses a critical challenge to sustainable development, demanding a rapid shift from fossil fuels to low-carbon and renewable energy sources to mitigate climate change while supporting economic growth. In Iran, abundant fossil fuel reserves and rising energy demands create a complex landscape for this transition, compounded by economic sanctions that limit access to advanced technologies. Pasargad Energy Development Company, a leading private energy group operating across oil, gas, and power generation, is committed to addressing these challenges by integrating renewable energy and low-carbon fuels into its operations. This approach positions PEDC to play a key role in advancing a cleaner, more resilient energy future for the country.

Through strategic investments in solar energy, natural gas optimization, and innovative technologies, PEDC is contributing to a sustainable energy future for Iran. As part of the Energy Transition axis, Aim 3 reflects PEDC's dedication to reducing carbon emissions and enhancing energy reliability, aligning with national development goals and global sustainability priorities. implementing cutting-edge solutions and continuously improving operational efficiency, PEDC ensures that energy resources are used responsibly. These efforts also foster innovation and knowledge sharing across the sector, strengthening Iran's overall energy ecosystem. They further position PEDC as a leader in driving the country's transition toward cleaner, more sustainable energy systems.

PEDC's primary focus is Advancing Iran's Clean Energy Transition, achieved through the following strategic approaches: This focus ensures that our initiatives are aligned with both national priorities and global sustainability standards.



#### EXPANDING RENEWABLE **ENERGY CAPACITY**

Leveraging Iran's abundant solar potential to diversify our energy portfolio, deploying advanced technologies like bifacial panels to reliability enhance and sustainability. This approach reduces reliance on fossil fuels while increasing clean energy generation. It also supports long-term energy security by providing a stable and resilient power supply. Additionally, these initiatives create opportunities for local innovation, skill development, and collaboration across the renewable energy sector.



#### DEPLOYING EFFICIENT NATURAL GAS SOLUTIONS

Capitalizing on Iran's vast gas reserves to provide a cleaner alternative to traditional fossil fuels, reducing emissions while ensuring energy security. Utilizing natural gas helps lower carbon intensity across power industrial generation and sectors. This strategy supports a smoother transition toward a more sustainable energy mix while maintaining reliable energy supply. It also encourages investment in infrastructure and technology that optimize gas utilization and efficiency.



### DRIVING INNOVATION THROUGH COLLABORATIVE PARTNERSHIPS

Fostering multistakeholder collaborations with universities. research institutions, and industry peers to develop cutting-edge low-carbon technologies, ensuring long-term sustainability. These partnerships accelerate innovation by combining expertise, resources, and practical insights. They also help bridge the gap between research and large-scale implementation, turning ideas into impactful solutions. Moreover, such collaborations cultivate talent and knowledge within Iran's energy sector, strengthening capacity for future sustainable development.

These approaches position PEDC to advance Iran's clean energy landscape, delivering reliable, sustainable energy solutions that support industrial and societal needs while mitigating environmental impacts. By integrating innovative technologies and efficiency measures, PEDC ensures long-term operational resilience and reduced carbon emissions. These initiatives also create opportunities for knowledge transfer and capacity building across the energy sector. Ultimately, PEDC's efforts contribute to a balanced energy transition that aligns economic growth with environmental stewardship.

# LOW-CARBON AND RENEWABLE ENERGY ALIGNMENT WITH GLOBAL GOALS













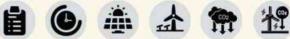
PEDC's efforts in low-carbon and renewable energy contribute to global sustainability goals, fostering a cleaner and more equitable energy future:





# **OUR PLANS:** AIM 3-LOW CARBON & RENEWABLE ENERGY













Pasargad Energy Development Company is committed to advancing Iran's clean energy transition through a strategic roadmap that scales renewable energy, optimizes natural gas utilization, and fosters innovation through collaborative partnerships. Within two years, PEDC aims to significantly expand its renewable energy capacity, modernize natural gas infrastructure, and drive technological advancements, aligning with Iran's energy transition goals and global sustainability priorities. By leveraging Iran's abundant solar potential and vast natural gas reserves, PEDC will deploy advanced technologies,

such as bifacial solar panels with tracking systems and CHP systems, to enhance efficiency and reduce carbon emissions. Strategic partnerships with universities, research institutions, and industry leaders will accelerate the development of low-carbon solutions, ensuring scalability and resilience. Pilot projects across our subsidiaries will test these initiatives, informing broader implementation to deliver reliable, sustainable energy across Iran's energy landscape.

#### **Expanding Renewable Energy Capacity**



PEDC is strategically prioritizing renewable energy to advance Iran's clean energy transition, complementing our policy of using natural gas as the main energy source for most operations. By diversifying our energy mix with renewables. PEDC aims to cut emissions and boost energy reliability. Through our subsidiary Ctesiphon Green Energy Production Company, founded in 2022, and Taban Energy, experienced in solar power plant construction, we are driving renewable expansion with a primary focus on solar power, while planning future projects in wind, geothermal, biomass, and other technologies. Our strategy focuses on integrating advanced solar technologies, including solar power plants for administrative buildings to reduce fossil fuel dependence.

For example, we are adopting bifacial solar panels with smart tracking to maximize energy capture and improve efficiency in various environmental conditions. We are also using reflective surface enhancement with a calcium carbonate and white cement mix to boost panel performance cost-effectively. PEDC is piloting robotic cleaning and smart control systems, refining them for broader deployment across facilities and ensuring optimal system performance. By partnering with local authorities and energy stakeholders, we aim to streamline grid integration and scale renewable infrastructure across the country. These efforts will reduce emissions, strengthen energy sustainability, and create jobs in tech and infrastructure, supporting Iran's renewable energy goals.

#### Deploying Efficient Natural Gas Solutions



PEDC is committed to optimizing natural gas utilization to support Iran's clean energy transition, reinforcing our policy of relying on natural gas as the primary energy source for most of our operations while minimizing environmental impact. By enhancing the efficiency of natural gas infrastructure and utilization, PEDC aims to reduce carbon emissions and strengthen the sustainability of Iran's energy mix. Our strategy focuses on deploying advanced technologies and infrastructure to improve energy efficiency across our operations. For example, through our subsidiaries, we are adopting CHP systems that capture waste heat to generate electricity and thermal energy, achieving significantly higher efficiency than traditional gas-powered systems.

Additionally, we have developed efficient pipeline infrastructure to support reliable gas delivery and export, ensuring energy reaches key domestic and regional markets. PEDC is also initiating pilot programs to test innovations like flare gas recovery systems, which capture and repurpose gas that would otherwise be flared, reducing emissions and maximizing resource use. By collaborating with industry partners and regulatory bodies, we aim to integrate these technologies into our natural gas operations and support national efforts to lower the carbon footprint of energy production. These ongoing efforts will improve energy efficiency, reduce emissions, and create new opportunities for technological advancement and knowledge transfer, contributing meaningfully to Iran's low-carbon energy goals.



# **OUR PLANS: AIM 3**

LOW CARBON & RENEWABLE ENERGY (CONTINUED)













#### **Driving Innovation Through Collaborative Partnerships**



PEDC is dedicated to advancing Iran's clean energy transition by prioritizing innovation through collaborative partnerships, reinforcing our policy of investing in research and development to drive low-carbon technologies. Bv fosterina knowledge-sharing with academic institutions and industry partners, PEDC aims to develop innovative solutions that enhance energy efficiency and reduce carbon emissions. Our strategy focuses on building robust R&D ecosystems to support the development and deployment of sustainable energy technologies, ensuring long-term impact and scalability. For example. through our subsidiaries. collaborating with leading universities to advance research in areas such as solar panel efficiency and natural gas recovery techniques, leveraging academic expertise to refine cutting-edge solutions and accelerate their real-world application. These collaborations not only generate new intellectual capital but also help build local capacity in energy research and technical innovation. further strengthening Iran's position in the global clean energy landscape. This integrated approach ensures that PEDC's innovations are both practical and scalable across the country's energy sector.

Additionally, we are investing in knowledge-based projects that explore novel approaches to energy production and utilization, such as enhanced gas recovery systems that minimize environmental impact while maximizing resource efficiency. PEDC is also initiating pilot programs to test these innovations under real operational conditions, ensuring their viability and adaptability across different segments of our value chain. We are further working to build innovation hubs within our subsidiaries to incubate new technologies and provide a platform for early-stage development. By partnering with industry stakeholders and regulatory bodies, we aim to create a collaborative framework that accelerates the adoption of low-carbon technologies and practices across Iran's energy sector. These efforts will foster technological advancement, enhance sustainability, and support knowledge-sharing, contributing meaningfully to Iran's low-carbon innovation goals and global sustainability ambitions, while positioning PEDC as a regional leader in clean energy innovation. This approach also strengthens our capacity to respond to emerging energy challenges with scalable, practical solutions.



# OUR ACTIONS: AIM 3-LOW CARBON & RENEWABLE ENERGY













Pasargad Energy Development Company is actively implementing our strategic plans to advance Iran's clean energy transition through targeted projects that scale renewable energy, optimize natural gas utilization, and drive innovation through partnerships with key stakeholders. Our actions focus on deploying specific initiatives that translate our commitment to low-carbon energy into tangible outcomes, aligning with national energy transition priorities and global sustainability goals. These efforts include not only infrastructure development but also capacity building, knowledge-sharing, and the adoption of advanced technologies that support long-term energy resilience and environmental stewardship.

Across our subsidiaries, we are executing major solar energy projects to expand renewable capacity, constructing advanced natural gas infrastructure to enhance efficiency and reduce emissions, and fostering research and development through collaborations with academic and industry partners. These projects leverage Iran's abundant solar potential and vast natural gas reserves, incorporating cutting-edge technologies to maximize energy efficiency and environmental benefits. By delivering reliable, sustainable energy and advancing innovative solutions, these efforts support Iran's clean energy goals, reduce carbon emissions, and create economic opportunities through job creation and technological advancement.

#### **Expanding Renewable Energy Capacity**



PEDC is expanding Iran's renewable energy capacity through targeted solar projects led by our subsidiaries. Ctesiphon Green Energy Production Company is executing a 1,500 MW solar tender across 24 sites in 12 provinces, including Tehran, Fars, and Kerman, with over one billion EUR in investment, under Taban Energy's supervision. This major initiative, the largest solar investment in Iran, uses bifacial panels and tracking systems to maximize energy capture and supply clean power to industrial and residential users

Through Taban Energy, we operate the Damghan solar plant, which generated 22.4 MWh in 1402 using bifacial panels and trackers, achieving 60% higher summer output than conventional systems. Taban Energy is also developing 24 MW in Semnan to boost local energy access. Our subsidiaries are exploring solar installations at administrative buildings to reduce fossil fuel use. By leveraging Iran's solar potential and coordinating with authorities, these projects deliver clean energy, cut emissions, create jobs, and support national renewable goals.

#### **Deploying Efficient Natural Gas Solutions**



PEDC designs all fossil fuel operations including power plants—like Sirjan CHP and Qeshm Movalled, petrochemical plants, and downstream facilities to use natural gas as fuel and feedstock, leveraging its lower carbon intensity to support Iran's low-carbon energy goals. We optimize natural gas use while reducing emissions through targeted projects. Our subsidiary Naftanir built the 600 km IGAT-6 pipeline with a 4,500 cubic meter/hour capacity, spanning five provinces from South Pars in Asaluyeh to the Shalamcheh and Naft Shahr borders for export to Iraq and domestic use.

The pipeline includes segments with various diameters and pressure-boosting stations, strengthening Iran's regional energy role. Through Niroo Gostar Sirjan, we deploy CHP systems achieving 80% efficiency by capturing waste heat to generate electricity and thermal energy, reducing fuel use and emissions. PEDC also implements flare gas recovery to capture and repurpose gas, minimizing methane emissions. Supported by industry and regulatory collaborations, these projects enhance natural gas efficiency, lower the carbon footprint, and create economic opportunities, advancing Iran's low-carbon energy goals.



# **OUR ACTIONS: AIM 3 LOW CARBON & RENEWABLE ENERGY (CONTINUED)**













## **Driving Innovation Through Collaborative Partnerships**



PEDC is advancing Iran's low-carbon energy goals through innovative R&D projects, spearheaded by our subsidiaries ESTD, Taban Energy Pasargad, and APETDC, alongside strategic partnerships with academic leaders. Collaborations with Sharif University and Amir Kabir University, supported by over 200 million USD in knowledge-based projects, drive technologies like smart systems, renewable energy solutions, and emissions reduction tools, training engineers to enhance Iran's technical capacity. The WRFM initiative, led by ESTD, optimizes natural gas extraction through advanced reservoir analytics, reducing methane emissions and improving efficiency. ESTD's Integrated Process Control and Monitoring system deploys smart automation to minimize energy waste and enhance reliability across gas and renewable facilities. Taban Energy Pasargad's Robotic Solar Panel Cleaning project develops automated systems to maintain solar farms, increasing energy yield while reducing water use, as piloted at the Damghan solar plant. ESTD's Retina MaintAssist leverages Al for predictive maintenance, preventing downtime in energy operations, and thereby supporting continuous, efficient production.

Taban's R&D in bifacial solar panels, solar tracking systems, and reflective surface technologies, deployed at Damghan's 10 MW plant, enhances solar scalability by optimizing energy capture. ESTD's Smart Energy Management Platform integrates Al-driven analytics to optimize renewable and gas operations, while Digital Twin Technology creates virtual models for real-time facility optimization. Taban's Energy Storage Solutions explore battery and thermal systems to support renewable integration, ensuring grid reliability. Arman Pasargad's Petrochemical Technology Licenses advance MTO processes, improving efficiency and reducing emissions in downstream operations. ESTD's Al-Driven Process Optimization develops algorithms to enhance energy processes, cutting emissions across refining, power, and renewables. Collaborative efforts include CCS pilots with university partners to reduce CO2 emissions, hydrogen production feasibility studies for blue and green hydrogen, and advanced robotics for energy applications with Amir Kabir University. Supported by local and international energy firms, these projects create economic opportunities through technology development jobs and position Iran as a leader in low-carbon energy innovation, contributing to national sustainability goals.



SNAPSHOT AXIS ONE / ENERGY TRANSITION



















PEDC



AXIS 1: SNAPSHOT





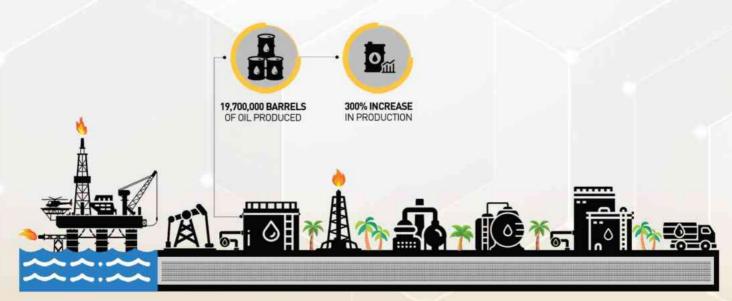




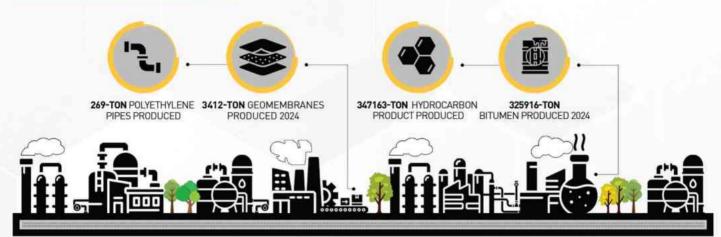




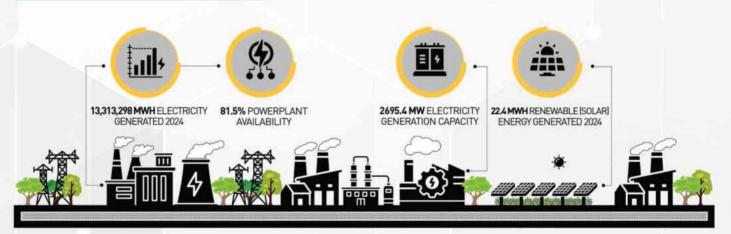
UPSTREAM







# **POWER & UTILIT**



# **TRADE & COMMERCE**





PEDC SUSTAINABILITY REPORT - 2024



# AIM 04 CIRCULAR ECONOMY

We enhance resource efficiency by integrating recycling, waste minimization, life cycle management, and asset integrity, supporting SDG 12 (Responsible Consumption and Production).

# AIM 05 WATER EFFICIENCY

We use water-saving technologies and recycling systems, including zero liquid discharge, to conserve water, advancing SDG 6 (Clean Water and Sanitation).

# AIM 06 GHG EMISSION MANAGEMENT

We cut greenhouse gas emissions via clean tech like CCS, flare gas recovery, Mobile Oil Separators, and renewable energy, aligned with SDG 13 (Climate Action).

# AIM 07 PROTECTING ECOSYSTEMS

We protect biodiversity and restore ecosystems near operations, such as mangrove planting on Qeshm island, supporting SDG 14 and SDG 15



# AXIS 2: PROTECTING EARTH

Environmental challenges, including climate change, biodiversity loss, and resource depletion, pose significant barriers to sustainable development globally and in Iran. For Pasargad Energy Development Company, addressing these challenges is a core commitment to ensuring a sustainable future while meeting Iran's energy and environmental needs. Below Water), and SDG 15 (Life on Land).

# **NAVIGATING** THE GLOBAL & REGIONAL CONTEXT

Global environmental issues, such as greenhouse gas emissions, deforestation, and water scarcity, stem from unsustainable resource use, particularly fossil fuels, and are exacerbated in Iran by growing energy demands and ecological pressures. PEDC recognizes the need to balance economic development with environmental stewardship, ensuring that our operations contribute to Iran's resilience while addressing global priorities.

# PEDC'S STRATEGIC ROLE IN ENVIRONMENTAL STEWARDSHIP

As a leader in Iran's private energy sector, PEDC is uniquely positioned to drive environmental progress through innovation, collaboration, and responsible operational and governance practices. Our investments in clean technologies, such as carbon capture and storage (CCS), and strategic partnerships with academic institutions, like Sharif and Amir Kabir Universities, align with SDG 13 by advancing impactful, science-driven climate action.













The Protecting Earth axis anchors our sustainability strategy, guiding our efforts to minimize ecological impacts, enhance resource efficiency, and restore ecosystems, aligning with the United Nations Sustainable Development Goals, including SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), SDG 14 (Life













By adopting circular economy practices, conserving reducing emissions, and protecting biodiversity, we support SDG 12 through responsible production and SDG 15 through ecosystem restoration. This approach strengthens our ability to operate sustainably in Iran's challenging environmental landscape, mitigating risks and enhancing long-term viability.













By optimizing resource use and minimizing environmental impacts across our value chain, we contribute to SDG 6 through water efficiency and SDG 14 by protecting marine ecosystems near our operations. Through stakeholder engagement with communities and policymakers, we foster shared responsibility for sustainability, aligning with Iran's environmental goals and ensuring our operations support a greener, more resilient future.



## OUR INTEGRATED APPROACH: FOUR CORE AIMS









PEDC's approach to protecting the environment is built on four interconnected aims that address critical ecological challenges:

## Aim 4-Circular Economy

We promote resource efficiency by integrating recycling and waste minimization into our operations, while improving equipment service life through life cycle and asset integrity management, contributing to SDG 12 (Responsible Consumption and Production).

#### Aim 6-GHG Emission Management

We reduce greenhouse gas emissions through clean technologies like CCS, flare gas recovery, Mobile Oil Separators, and renewable energy expansion, aligning with SDG 13 [Climate Action].

#### Aim 5-Water Efficiency

We deploy water-saving technologies and recycling systems across our facilities, including zero liquid discharge, to conserve water resources, and reducing our dependency on freshwater sources. supporting SDG 6 (Clean Water and Sanitation)

#### Aim 7-Protecting & Revitalizing the Ecosystems

We safeguard biodiversity and restore ecosystems around our operational sites, such as planting mangroves on Qeshm island coast, contributing to SDG 14 (Life Below Water) and SDG 15 (Life on Land).

The Protecting Earth axis encapsulates PEDC's vision for a sustainable and resilient environment. By addressing resource efficiency, water conservation, emissions reduction, and ecosystem restoration in an integrated manner, we are mitigating environmental challenges while seizing opportunities to lead Iran's transition to a greener future. Our efforts align with global development goals, ensuring that our strategies contribute to sustainable progress both nationally and internationally.

# PROTECTING & REVITALIZING THE ECOSYSTEMS ALIGNMENT WITH SUSTAINABLE DEVELOPMENT GOALS













Pasargad Energy Development Company (PEDC) aligns its Protecting Earth strategies with the United Nations Sustainable Development Goals (SDGs) to contribute to global sustainability while addressing Iran's environmental needs. Our four core aims directly support the following SDGs:









# AIM 4 - CIRCULAR ECONOMY PEDC'S COMMITMENT TO CIRCULAR ECONOMY













In Iran's resource-intensive energy sector, adopting circular economy principles is key to reducing environmental impacts and supporting sustainable development. PEDC, a leading private energy group, is committed to resource efficiency and environmental stewardship. By maximizing reuse, recycling, and lifecycle efficiency, PEDC cuts waste and resource use in line with national goals. Our strategy leverages advanced technologies, including Al, and strong waste and energy management programs.

Through design improvements, asset integrity management, and supply chain collaboration, we pursue "zero waste" and optimal energy use, tracked by result-oriented KPIs. This strategy enables PEDC to balance operational excellence with ecological responsibility, generating both economic and environmental benefits across upstream, downstream, and utility sectors. By harnessing innovation and subsidiary expertise, PEDC is building a framework that aligns growth with environmental responsibility.

# AIM 4 - CIRCULAR ECONOMY OUR STRATEGY FOR CIRCULAR ECONOMY













PEDC's circular economy vision is operationalized through targeted strategies across its subsidiaries, leveraging advanced technologies to drive sustainability:



#### LIFECYCLE MANAGEMENT

Extends asset life through Al-driven predictive maintenance at the IPCM Center and designs recyclable, reusable equipment to optimize resources.



#### **ENVIRONMENTALLY SOUND** CHEMICAL & WASTE MANAGEMENT

Mitigates risks from hazardous materials using advanced technologies and safer alternatives, ensuring responsible handling and disposal.



#### WASTE MANAGEMENT

Pursues "zero waste" by reducing, recycling, and repurposing byproducts, including equipment reuse and off-spec products as process feed to minimize waste.



# AIM 4 - CIRCULAR ECONOMY ALIGNMENT WITH GLOBAL GOALS







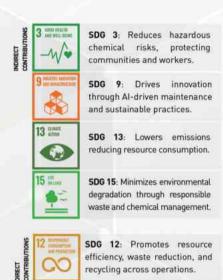






PEDC's circular economy initiatives promote resource efficiency and waste reduction, contributing to global sustainability goals by aligning with Sustainable Development Goals (SDGs) through targeted efforts across our operations:





# OUR PLANS: AIM 4 - CIRCULAR ECONOMY













PEDC implements a circular economy framework to optimize operations and cut waste across its energy portfolio. Our strategy centers on asset lifecycle optimization, waste reduction, and safe chemical management to achieve operational excellence. By applying targeted policies and innovative practices, PEDC promotes resource conservation and environmental protection.

Lifecycle management enhances asset durability, waste management lowers disposal needs, and chemical management ensures safe handling. Through coordinated subsidiary efforts, we enable scalable strategies that increase operational impact, delivering long-term value across upstream, downstream, and utility activities, while fostering continuous innovation.

# Lifecycle Management



PEDC is advancing lifecycle management to maximize asset longevity, enhance resource efficiency, and minimize environmental impacts across its energy operations. Our strategy focuses on developing policies and initiatives to ensure sustainable asset use through collaborative subsidiary efforts. We are implementing advanced maintenance systems, such as predictive maintenance using Al-driven diagnostics, exemplified by the IPCM Center, to extend equipment lifespans.

A key initiative is our equipment reuse program, which refurbishes and redeploys assets to reduce resource demand, as demonstrated by Petro Kala's drilling jar refurbishment. We are enhancing equipment longevity by using specialized consumables to minimize wear and corrosion, optimizing asset performance. Lifecycle assessments evaluate facilities from design to decommissioning, ensuring resource-efficient and sustainable operations. These practices, scaled across subsidiaries, strengthen Iran's energy sector sustainability.



# OUR PLANS : AIM 4 - CIRCULAR ECONOMY (CONTINUED)













### Waste Management



PEDC is committed to advancing waste management to minimize environmental impacts and achieve "zero waste" across its energy operations. Our strategy integrates strong policies and initiatives to reduce, recycle, and repurpose waste through collaborative subsidiary efforts. We prioritize waste reduction at the source, recycling byproducts, and repurposing materials to cut landfill use. Comprehensive programs identify, categorize, and treat waste for efficient recycling and disposal. These efforts also promote sustainable practices across our subsidiaries, supporting environmental stewardship and operational efficiency, while gradually embedding a culture of responsible resource management.

Equipment repurposing, like Shams Pasargad's reuse of power plant parts, extends material use and lowers waste. Recycling efforts, led by Javid Energy Parto and Soroush Energy Paydar's employee training, enhance resource recovery. Process optimization using technologies such as microplastic reduction minimizes waste generation. PEDC Through subsidiary-led actions, fosters environmental resilience across its operations, continually improving sustainability outcomes and setting industry standards, while encouraging a culture of environmental responsibility and continuous improvement throughout the organization.

### Environmentally Sound Chemical & Waste Management



PEDC is committed to environmentally sound chemical and waste management to minimize health and ecological risks across its energy operations. Our strategy integrates robust policies and initiatives to ensure sustainable chemical use and waste handling through collaborative subsidiary efforts. We are developing safer chemical alternatives to replace hazardous materials, reducing environmental impacts, as exemplified by Pejvak Energy's safer drilling fluids. Hazardous waste management protocols ensure safe handling, treatment, and disposal of waste,

Managing hazardous drilling waste through advanced containment and treatment processes enables safe disposal or reuse of materials. Chemical use optimization employs monitoring to minimize consumption and emissions. Technology integration, including data-driven systems, enhances chemical and waste tracking for efficiency. Training and compliance programs establish safe practices and regulatory adherence. Through cross-subsidiary adoption of these initiatives, PEDC enhances ecological safety and advances sustainable resource management across its operations.



# OUR ACTIONS : AIM 4 - CIRCULAR ECONOMY

Pasargad Energy Development Company (PEDC) turns circular economy plans into measurable results, achieving significant waste reductions and process efficiencies across its operations. By implementing targeted initiatives, we deliver practical outcomes through technology and coordinated subsidiary efforts. Lifecycle Management practices, including predictive maintenance and equipment reuse, extend asset longevity and reduce costs.













Waste Management efforts, such as recycling and repurposing programs, cut waste volumes and recover valuable materials. Chemical and Waste Management initiatives, like advanced drilling waste treatment and safer fluid use, reduce operational risks and environmental harm. By scaling these practices, PEDC achieves operational gains and environmental improvements, enhancing efficiency across its energy portfolio.

### Lifecycle Management



Pasargad Energy Development Company (PEDC) has completed targeted lifecycle management projects to extend asset and material longevity, achieve cost savings, and enhance performance across its energy operations. The Intelligent Power Plant Condition Monitoring Center (IPCM Center) deployed Al-driven diagnostics to monitor power plant equipment, reducing downtime by approximately 20% and lowering maintenance costs significantly. Petro Kala Pasargad refurbished drilling jars, restoring functionality for drilling operations, extending their operational life by several years and reducing costs compared to new equipment, conserving resources. Pezhvak Energy implemented tailored drilling fluids for drilling equipment, reducing wear and corrosion, thereby extending asset life and improving operational efficiency. Poly Ethylene Gostaran Alborz reprocesses offspec products into usable materials, preventing waste and extending the lifecycle of resources through productive reuse.

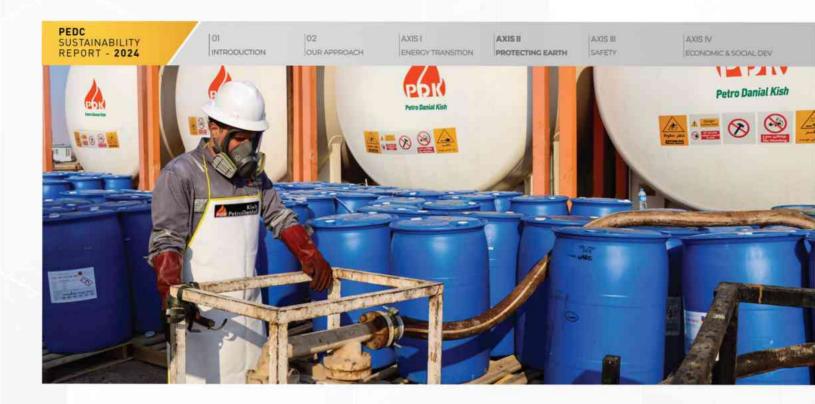
PEDC conducted lifecycle assessments on facilities, achieving 30% higher recyclability through modular designs, significantly reducing end-of-life waste. Asset integrity management involved regular equipment assessments and upgrades across sites, lowering failure rates and sustaining uptime. The WRFM Center deployed real-time monitoring for upstream assets, optimizing performance and reducing maintenance needs. Pezhvak Energy expanded use of its tailored drilling fluids to more operations, decreasing maintenance. Lifecycle assessment methods are being standardized, and asset integrity protocols adopted company-wide to enhance reliability. WRFM monitoring will expand to additional assets. These initiatives have delivered cost savings, conserved resources, and reduced environmental impact, reinforcing PEDC's circular economy commitment and enabling future scalability across subsidiaries.

#### **Environmentally Sound Chemical & Waste Management**



Pasargad Energy Development Company (PEDC) advances circular economy goals by responsibly managing hazardous waste and chemicals across subsidiaries, ensuring environmental safety and SDG 12 compliance. Pezhvak Energy sets a high standard in drilling waste management, achieving zero discharge to prevent pollution. By segregating wet/dry waste and metals, Pezhvak stabilizes 6,000 m³ of solid waste per well using cement and sodium silicate for safe landfill disposal. Treated wastewater is recycled into the drilling cycle to reduce resource use. Similarly, E&P manages drilling waste through fixation and dewatering, sending cuttings to certified landfills with seven-layer protection.

Recycling 60% of drilling mud water and using Mobile Oil Separators to recover 10,000 barrels of oil per well, E&P eliminates burn pit pollution and safeguards ecosystems. These efforts minimize environmental risks from hazardous drilling waste. PEDC integrates these practices group-wide, leveraging Pezhvak's zero-discharge model and E&P's oil recovery to set benchmarks. Facility-wide monitoring ensures Basel Convention compliance, and training programs promote safe chemical handling. These actions reduce disposal costs, mitigate liabilities, and reinforce PEDC's commitment to sustainable chemical and waste management, positioning it as a leader in responsible resource management and a safer energy future.



# **OUR PLANS:** AIM 4 - CIRCULAR ECONOMY (CONTINUED)













### **Waste Management**



Pasargad Energy Development Company (PEDC) champions a circular economy by transforming waste management across 15 subsidiaries, targeting "zero waste" and optimal resource use in alignment with SDG 12. Through innovative pollution prevention, resource recovery, and systemic efficiency, PEDC minimizes environmental impact while driving economic and operational benefits. Sepehr Pasargad leads by deploying mobile oil separators to recover oil, averting burn pit pollution-a critical step for cleaner air and soil. Managing 37,727 kg of solid waste and 3.4 million liters of wastewater, transferred to Azadegan South's treatment plant, Sepehr Pasargad ensures responsible disposal. Similarly, Petro Danial Kish safeguards ecosystems by segregating hazardous and non-hazardous waste, transferring oily waste to certified processing sites, reducing contamination risks. Hengam Qeshm complements this by reusing hydrocarbon waste via refinery transfer and segregating 60 kg/day of recyclable waste, preventing marine pollution. Pars Behin Palayesh Qeshm sets a benchmark, recycling or selling over 80% of its waste and reusing chemical containers, drastically cutting landfill use. Qeshm Movalled recycles 75% of refinery steam and repurposes scrap for turbine stands, boosting energy efficiency. Shams Pasargad reuses power plant components like turbine parts and implements recycling programs, diverting waste through optimized workflows, while fostering a culture of environmental accountability across operations.

Poly Ethylene Gostaran Alborz reprocesses offspec products and sells dry waste (bags, pallets) via auctions, ensuring materials return to productive use. Seavan Tadbir Tejarat recycles 1,200 kg/year of paper and containers, selling metal scraps, while managing 36 tons/year of ordinary waste responsibly. Naftanir's diversion of over 50% of IGAT6 project waste through recycling paper, plastics, and batteries, paired with supplier collaboration to reduce packaging, exemplifies scalable efficiency. Facility-wide recycling programs achieve a landfill reduction, recovering materials decommissioned assets for reuse. Sina Chemical Industry Development recycles plastic/metal waste, selling to Chabahar Municipality with a 5% reduction target, while Taban Energy segregates industrial waste, selling metals per Basel Convention standards. Petro Kala Pasargad Kish reuses drilling jars/stabilizers, managing 300 kg/month metal filings, and Soroush Energy Paydar segregates wet/dry waste, training employees to embed waste reduction in operations. The Well Reservoir Facilities Management (WRFM Center) optimizes upstream waste, while Petro Kariz Omid Kish generates minimal waste (<5 m3 over nine years) using oil/water separators. Javid Energy Parto achieves ~30% waste diversion through construction waste segregation and recycling, contributing to group-wide efforts. PEDC scales these initiatives, cutting costs, reducing environmental footprints, and reinforcing its commitment to a sustainable future.



# AIM 5: WATER EFFICIENCY PEDC'S COMMITMENT TO WATER EFFICIENCY













PEDC is committed to leading Iran's energy sector in water efficiency, addressing the acute water scarcity challenges facing the region. Iran's freshwater resources are under significant pressure from population growth, economic development, pollution, and climate change, resulting in severe water stress across much of the country. This stress manifests in depleted groundwater levels, dried wetlands and lakes, and insufficient water for agriculture. Recognizing water security as a critical barrier to sustainable development, Pasargad Energy prioritizes optimizing water consumption,

upgrading water infrastructure, treating wastewater, and enhancing operational processes to minimize water use. Our approach ensures no negative impact on local water resources and, where possible, delivers positive contributions through innovative technologies and stakeholder collaboration. By embedding stewardship into our operations, Pasargad Energy aligns with Iran's national environmental priorities and global sustainability goals, particularly Sustainable Development Goal (SDG) 6: Clean Water and Sanitation, fostering a resilient energy sector that balances growth with ecological responsibility.

# AIM 5 - WATER EFFICIENCY OUR STRATEGY FOR WATER EFFICIENCY













Pasargad Energy's water efficiency strategy focuses on reducing freshwater consumption and promoting sustainable water management across its operations. Key priorities include:



# OPTIMIZING CONSUMPTION

Implementing advanced technologies and process improvements to minimize water use in energy production and operational activities. These initiatives help conserve vital resources while supporting sustainable and efficient operations across all facilities.



# INFRASTRUCTURE ENHANCEMENT

Upgrading water supply and treatment systems reduce waste, improve reliability and resilience, and ensure efficient resource use. These enhancements support long-term sustainability and help the meet growing demand for water in our operations.



### WASTEWATER MANAGEMENT

Pursues "zero waste" by reducing, recycling, and repurposing byproducts, including equipment reuse and off-spec products as feed to minimize waste. This comprehensive approach only minimizes environmental impact but promotes resource efficiency and cost savings throughout operations.



### STAKEHOLDER ENGAGEMENT

Collaborating with communities, regulators, and partners to promote sustainable water use and address local water stress. These joint efforts foster shared responsibility and create long-term solutions that benefit both the environment and surrounding populations.

These strategies are driven by a strong commitment to innovation and a transformative cultural shift, fostering water-conscious practices across all levels of the organization—from leadership to frontline operations. By integrating advanced data-driven monitoring systems and implementing robust governance frameworks, Pasargad Energy ensures the development of scalable, replicable solutions that significantly enhance water efficiency while upholding the highest standards of operational excellence and sustainability.



# AIM 5 - WATER EFFICIENCY ALIGNMENT WITH GLOBAL GOALS













PEDC's water efficiency initiatives directly contribute to global sustainability goals by aligning with the United Nations Sustainable Development Goals through concerted efforts across our operations:



SDG 3: Safeguards water quality by managing wastewater responsibly, lowering community health risks.



SDG 9: Drives innovation by adopting water-saving technologies and sustainable infrastructure.



SDG 13: Reduces water-related energy use, helping lower greenhouse gas emissions.



SDG 15: Protects ecosystems by reducing water extraction and pollution.



SDG 6: Promotes sustainable water management by cutting consumption and improving wastewater treatment.



SDG 12: Optimizes water use in production to minimize waste and environmental impact.



By aligning with these SDGs, Pasargad Energy ensures its water efficiency efforts support both national and global sustainability priorities, fostering a sustainable future for Iran's energy sector and beyond.



### **OUR PLANS:** AIM 5 - WATER EFFICIENCY

Pasargad Energy is dedicated to advancing water efficiency as a cornerstone of sustainable operations in Iran's water-scarce environment. Our strategic plan for water efficiency is designed to address the pressing challenges of freshwater scarcity by optimizing water use, enhancing infrastructure, managing wastewater responsibly, fostering stakeholder and collaboration to drive long-term resource security, while minimizing environmental impact. We continuously seek innovative technologies and best practices to improve water management across all subsidiaries. Additionally, engaging with local communities and regulators helps ensure our efforts align with regional water needs and sustainability goals.













Through these focus areas, we aim to minimize environmental impacts, ensure compliance with national regulations, and contribute to regional water security. By leveraging innovative technologies and cross-subsidiary expertise, Pasargad Energy is developing scalable initiatives that will set a benchmark for water stewardship in the energy sector, with plans to pilot and expand successful practices across our operations to achieve lasting impact. We are committed to continuous improvement through regular monitoring and reporting of water performance metrics. Furthermore, collaborating with industry partners and stakeholders will help amplify our impact and foster collective action on water sustainability.

### **Optimizing Consumption**



Pasargad Energy is developing comprehensive strategies to minimize water use across its operations through advanced technologies and process improvements. Our plans include integrating water-efficient systems, such as advanced cooling, drilling technologies, and zero liquid discharge (ZLD) systems, to significantly reduce freshwater consumption while maintaining operational efficiency. We are prioritizing real-time monitoring tools to track usage and conducting periodic process audits to identify inefficiencies in water-intensive activities. These measures aim to not only conserve water but also lower operational costs over time. In parallel, employee training programs will reinforce water-conscious practices throughout our facilities.

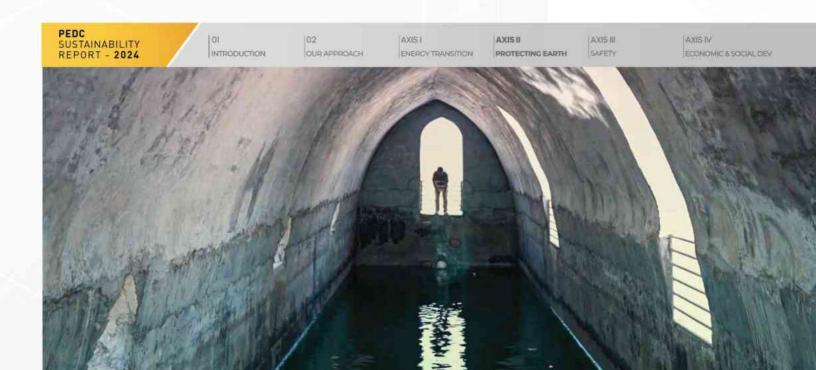
Additionally, we aim to establish water-saving operational protocols to foster a culture of conservation, alongside standardizing water-conscious practices through piloting innovative solutions and group-wide protocols. These initiatives are designed to enhance efficiency, mitigate risks associated with Iran's water scarcity, and reinforce Pasargad Energy's leadership in sustainable water management. By integrating data-driven monitoring and performance benchmarks, we ensure continuous improvement and accountability across all operations, positioning us to respond proactively to evolving water challenges and emerging needs. Our commitment extends beyond compliance, aiming to set new industry standards for responsible water stewardship.

# Infrastructure Enhancement (@)



Pasargad Energy is planning to bolster water efficiency through strategic upgrades to water supply and treatment infrastructure across its operations. Our initiatives include deploying energy-efficient water and waste treatment systems, incorporating zero liquid discharge (ZLD) technology, to minimize waste and enhance resource efficiency. We are also investing in water storage systems to optimize availability and centralized utility systems to streamline water and steam supply for integrated operations. These upgrades are designed to reduce operational risks linked to water shortages and improve overall process reliability. Additionally, we are evaluating digital monitoring solutions to track consumption and identify efficiency opportunities in real time.

These enhancements are designed to reduce operational impacts on local communities' access to fresh and clean water, particularly in Iran's water-scarce, underserved regions. Pilots in key facilities will inform the expansion of effective infrastructure solutions across operations, ensuring scalable, robust systems that support sustainable water management and mitigate the impacts of water scarcity on both our operations and surrounding communities, strengthening long-term water resilience. Continuous performance assessments will help refine these systems over time, ensuring they adapt to evolving regional challenges. Moreover, collaboration with local authorities will help align solutions with community needs and regulatory expectations.



# OUR PLANS : AIM 5 - WATER EFFICIENCY (CONTINUED)













### Wastewater Management



PEDC is prioritizing advanced wastewater management to reduce freshwater demand and support our policy to achieve a water-positive impact in the regions we operate. Our plans focus on recycling treated wastewater for non-critical processes, such as cooling or irrigation, to conserve freshwater resources. We are also implementing enhanced treatment processes, including zero liquid discharge systems, to minimize environmental discharge and maximize resource recovery, ensuring greater sustainability.

To ensure compliance with environmental standards and minimize waste. These initiatives will be piloted in select operations, with effective strategies rolled out across facilities to establish a closed-loop water system. By prioritizing water reuse, Pasargad Energy aims to net positive effect on local water supplies, enhancing sustainability and supporting water-stressed communities in Iran, fostering long-term resilience and operational excellence while adapting to future challenges.

### Stakeholder Engagement



Pasargad Energy is committed to engaging stakeholders to promote sustainable water use and address regional water stress. Our plans include conducting regular consultations to assess water quality, review community needs, and explore conservation solutions for water-stressed areas. We are fostering partnerships with local communities and regulators to align operational practices with regional water priorities, enhancing water stewardship. collaborations help build trust and ensure that water management strategies are both practical and locally appropriate. By integrating community feedback, we aim to implement solutions that deliver long-term benefits for both people and ecosystems.

Additionally, we are implementing education programs to promote water efficiency among employees and stakeholders. These initiatives will be piloted in key regions, with effective collaboration models expanded across operations to foster collective water management. By strengthening stakeholder relationships, Pasargad Energy aims to support community resilience and contribute to water security in Iran's water-scarce areas. These programs will also focus on raising awareness about water challenges and practical conservation practices. Over time, we expect these efforts to create a culture of shared responsibility for sustainable water use across all levels of our operations.



# **OUR ACTIONS:** AIM 5 - WATER EFFICIENCY

PEDC is driving water efficiency through bold, practical initiatives that transform our operations and support Iran's fight against water scarcity. By harnessing cutting-edge technologies, piloting innovative solutions, and forging strong stakeholder partnerships, we're reducing water demand while uplifting local communities, contributing to long-term regional sustainability. Our projects prioritize both operational efficiency and the responsible management of shared water resources. Continuous evaluation and collaboration will ensure that our solutions remain effective as water challenges evolve over time.













Across our subsidiaries, tailored projects in four key areas-optimizing consumption, enhancing infrastructure, managing wastewater, and engaging stakeholders-deliver measurable impact, aligning with environmental standards and sustainability goals. This section showcases the concrete steps Pasargad Energy is taking to lead the energy sector toward a water-secure future. We are committed to scaling successful initiatives and sharing best practices across our network. Ongoing collaboration with industry partners and regulatory bodies will help strengthen our collective response to Iran's water challenges.

### **Optimizing Consumption**



Our subsidiaries are pioneering innovative solutions to slash water use across diverse operations. Shams Pasargad leverages real-time monitoring systems to fine-tune water usage in power generation, with regular audits boosting efficiency. At Qeshm Island's refinery, Pars Behin Palayesh Naft Qeshm deploys advanced cooling systems that streamline refining processes, cutting water needs without compromising output. Similarly, Qeshm Movalled's water-efficient cooling systems enable reuse in power production, maximizing savings. Pezhvak Energy is revolutionizing drilling at the Sepehr and Jofir oil fields by integrating a suite of water-saving innovations: its Well Reservoir Facility Management (WRFM) Center reduces water-intensive interventions by 10% (approximately 500 cubic meters in 1402), water-based drilling fluids in the Siahmakan project save 1,000 cubic meters per well across six wells.

LPM additives in the South Pars Infill project curb water loss by 5% (roughly 200 cubic meters per well), and optimized calcium bromide-based completion fluids enhance efficiency in well completion. In a parallel effort, Petro Danial Kish's MPFM in Sepehr-Jafir fields trim intervention-related water use by 8% (about 400 cubic meters). Taban Energy, meanwhile, combines rigorous water needs assessments with a groundbreaking automated solar panel cleaning robot at its Damghan plant, saving 200 cubic meters annually and boosting efficiency by 60%. Sina Chemical's plan to cooperate with Chabahar's industrial in piloting ZLD systems in the industrial zone will lead to promising results in minimizing water waste. Supported by group-wide training, these initiatives embed water-conscious practices across our workforce, reinforcing Pasargad Energy's leadership in sustainable resource management.

#### Infrastructure Enhancement



Pasargad Energy is fortifying water infrastructure to ensure efficient, sustainable operations. Qeshm Movalled's centralized water treatment plant on Qeshm Island delivers reliable water treatment for industrial processes, while Shams Pasargad's water storage systems optimize availability during peak demand. Pars Behin Palayesh Naft Qeshm's advanced treatment systems at its Qeshm refinery enhance water quality, reducing reliance on freshwater. Building on this, Petro Danial Kish's water treatment unit in Ahvaz enables preliminary recycling, strengthening operational sustainability.

Pezhvak Energy's water management infrastructure at Sepehr and Jofir optimizes drilling supply, minimizing waste. Sina Chemical's collaboration with Chabahar's industrial park supports ZLD systems, streamlining water use in chemical production. These upgrades, part of a group-wide push to modernize water facilities, balance operational needs with local water availability, cementing our commitment to resilient infrastructure in Iran's water-scarce regions. Ongoing performance monitoring will ensure these systems remain efficient and adaptable to changing water conditions.



# **OUR ACTIONS:** AIM 5 - WATER EFFICIENCY (CONTINUED)













### Wastewater Management



To minimize environmental impact, PEDC is transforming wastewater management across its operations. Sina Chemical champions ZLD systems in Chabahar's industrial park, eliminating wastewater in chemical production. Pars Behin Palayesh Naft Qeshm recycles refinery wastewater at Qeshm Island for irrigation and operational reuse. Pezhvak Energy tackles drilling wastewater at Sepehr and Jofir with specialized treatment processes, enhancing sustainability throughout its drilling operations.

Enhanced by collaboration with Amirkabir University's fracturing lab to cut water use by 15% (around 300 cubic meters per operation) and improve cement quality to prevent water migration. Shams Pasargad's treatment systems at power facilities ensure water quality meets stringent standards. Unified by a group-wide focus on recycling and treatment, these efforts reduce discharge and strengthen environmental stewardship in water-stressed Iran, promoting sustainable growth.

### Stakeholder Engagement



Pasargad Energy is forging partnerships to promote sustainable water use and strengthen community resilience. Qeshm Movalled delivers 5,000 cubic meters of potable water daily to Hormozgan Water Company, empowering water-scarce Qeshm communities while engaging closely with local distributors to ensure equitable access. Sina Chemical collaborates with Chabahar's industrial park on ZLD initiatives, sharing best practices in industry forums. Pars Behin Palayesh Naft Qeshm maintains transparency through regular water efficiency reports to regulators, while Pezhvak Energy works with environmental agencies to align Sepehr and Jofir wastewater management with national standards

Shams Pasargad's water conservation awareness programs inspire employees and nearby communities to adopt responsible practices. Bolstered by group-wide partnerships engagement sessions, these actions foster collaboration, meet regulatory requirements, and drive sustainable water management across Iran's challenging landscape.

By executing these dynamic initiatives, Pasargad Energy not only meets environmental regulations but also sets a benchmark for water efficiency, delivering measurable benefits to operations and communities alike while advancing Sustainable Development.



# AIM 6: GHGS EMISSIONS MANAGEMENT PEDC'S COMMITMENT TO REDUCE EMISSIONS













Pasargad Energy Development Company [PEDC] recognizes climate change as the foremost global challenge, driven by unsustainable development and global warming, posing a significant threat to humanity and ecosystems. As a leading energy company in Iran, we hold ourselves accountable for contributing to global efforts to reduce greenhouse gas (GHG) emissions and achieve emissions. Our approach focuses systematically reducing emissions across our value chain from supply and operations to sales through innovative technologies and sustainable practices. We align our business policies with sustainable development principles,

aiming to limit global warming to below 2°C. PEDC is committed to allocating both technological and human resources to this goal, fostering effective collaboration with stakeholders, and ensuring that all investments and business activities prioritize emissions reduction and net-zero alignment. By embedding these principles into our operations, we strive to lead Iran's energy sector toward a sustainable, low-carbon future. We continuously review our strategies to incorporate emerging technologies and best practices. Furthermore, we engage regularly with the community and industry experts to promote transparency and shared progress toward climate goals.

# AIM 6: GHGS EMISSIONS MANAGEMENT **OUR STRATEGY FOR GHG EMISSIONS MANAGEMENT**













PEDC's GHG emissions management strategy is structured around three focus areas that guide our efforts to achieve sustainable energy production:



### **EMISSIONS REDUCTION**

Lowering direct emissions by technologies and intelligent systems, ensuring measurable reductions across our value chain. We are adopting automation and digital monitoring tools to optimize energy use and minimize waste. technologies enable These real-time tracking of emissions, supporting faster and more effective decision-making.



### OPERATIONAL OPTIMIZATION AND INNOVATION

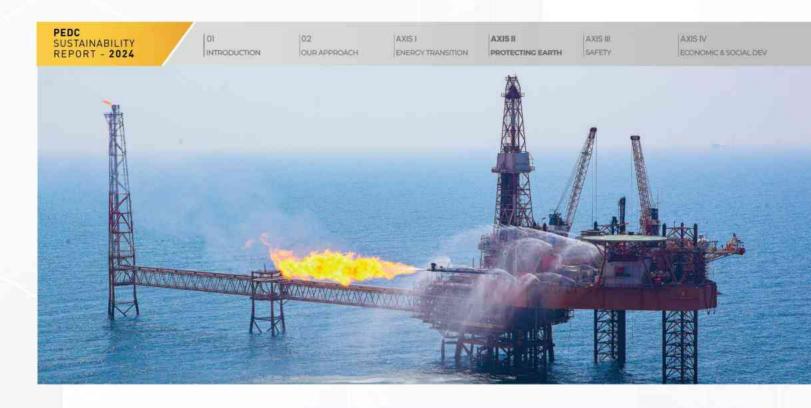
Reducing energy waste emissions by improving operational performance through research and enhanced processes. We are investing in advanced analytics and process optimization technologies to identify inefficiencies. Collaboration academic and industry partners further supports continuous innovation in reducing our environmental footprint.



### **EMISSION MITIGATION** STRATEGIES

Mitigating our emissions intensity by using renewable energy, redesigning buildings sustainably, and planting trees to achieve long-term environmental benefits. Our renewable energy projects focus on expanding solar and wind power capacity across key facilities. In addition, sustainable building initiatives emphasize resource efficiency and reduced energy consumption.

These focus areas, supported by cross-subsidiary collaboration and stakeholder engagement, ensure PEDC's initiatives are scalable and aligned with Iran's climate priorities. This integrated approach strengthens our ability to deliver impactful and lasting environmental benefits.



# AIM 6: GHGS EMISSIONS MANAGEMENT ALIGNMENT WITH GLOBAL GOALS













PEDC's GHG emissions reduction initiatives align with the United Nations Sustainable Development Goals (SDGs), delivering direct and indirect contributions to global sustainability: These efforts not only reduce environmental impact but also promote social and economic benefits within the communities we serve.





through targeted initiatives, mitigating climate change impacts.

By embedding these focus areas into our operations, PEDC supports national and global sustainability priorities, fostering resilience and leadership in Iran's energy sector.



# OUR PLANS: AIM 6 - GHGS EMISSIONS MANAGEMENT













PEDC is committed to reducing greenhouse gas emissions through operational optimization and global sustainability goals. Our strategy focuses on emissions reduction, operational efficiency, and mitigation strategies, driving a roadmap to net-zero emissions.

We prioritize Scope 1 reductions by 1404 [2025–2026], extend to Scope 2 by 1405 [2026–2027], and expand to Scope 3 by 1406 [2027–2028]. Sustaining Scope 1 efforts and collaborating with subsidiaries ensures a scalable, low-carbon future, fostering continuous progress.

### **Emissions Reduction**



PEDC is advancing Scope 1 emissions reduction by minimizing flaring and optimizing operational processes, with a structured plan established, starting from 2025. We are planning to complete lifecycle studies to assess emissions across our operational lifecycle starting with one company as a pilot and expanding to include other companies. Focusing first on Scope 1 emissions initially, with Scope 2 and Scope 3 to follow. Our strategy targets emissions throughout our operations like in well testing, oil extraction, refining, and processing,

incorporating technologies like flare gas recovery systems and zero-flaring to reduce emissions These initiatives are scalable, enabling group-wide adoption. Through stakeholder collaboration and alignment with global sustainability standards, we drive greener operations and reduce emissions. By embedding these efforts into a cohesive Scope 1 framework, PEDC enhances operational efficiency and leadership in low emission operations, ensuring sustained environmental impact through innovative measures supporting long-term climate objectives.

### Operational Optimization & Innovation



PEDC enhances operational efficiency and innovation to support emissions reduction. We prioritize optimizing energy use from the outset of designing our facilities using energy pinching techniques. We also integrate advanced technologies to streamline processes across operations, including extraction, refining, and processing. By leveraging digital solutions like real-time emissions monitoring and adopting energy-efficient systems, we reduce Scope 1 emissions. Pilot programs with subsidiaries test innovations to ensure scalability.

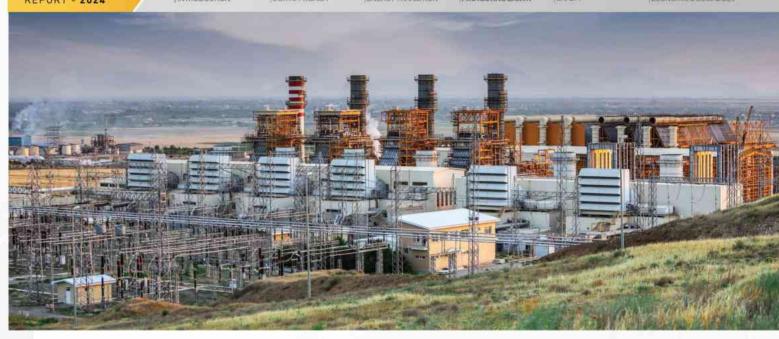
For example energy audits based on ISO 50001 standard have been piloted in our subsidiary to identify energy waste in our systems. Collaboration with stakeholders drives continuous improvement, aligning with global sustainability benchmarks. This approach minimizes waste, boosts resource efficiency, and strengthens our net-zero roadmap. By embedding these efforts into our framework, Pasargad Energy fosters innovation, delivering measurable environmental impact and reinforcing our commitment to sustainable operations.

### **Emission Mitigation Strategies**



PEDC advances emissions mitigation through innovative, scalable initiatives to achieve a sustainable future. We are studying the use of CCS technologies to effectively manage emissions across operations. Solar Power Integration, with rooftop installations and a target of 10–15% solar energy for subsidiary administrative buildings, reduces grid dependency. Planting Trees offsets carbon while enhancing biodiversity through community engagement.

CHP and gas generators provide access to cleaner energy for off-grid sites, reinforcing mitigation strategies. Pilot programs test these initiatives, enabling adoption across relevant operations in the holding. Our strategies align with global sustainability standards, strengthening our net-zero roadmap. By embedding these efforts into our operational framework, Pasargad Energy drives sustainable operations, delivering long-term climate resilience and environmental stewardship through forward-thinking measures.



### **OUR ACTIONS:** AIM 6 - GHGS EMISSIONS MANAGEMENT













Pasargad Energy Development Company has implemented robust actions to manage greenhouse gas (GHG) emissions, aligning with its net-zero ambitions and global sustainability goals. Through innovative technologies, renewable energy adoption, and operational efficiencies, PEDC's subsidiaries have made significant strides in reducing Scope 1, 2, and 3 emissions. These efforts include zero-flaring initiatives,

advanced emission controls, and climate-resilient designs, integrating renewable energy within our energy portfolio, and planting trees to mitigate our emissions, reflecting a commitment to environmental stewardship. The following focus areas—emission reduction, operational optimization and innovation, and emission mitigation actions-highlight PEDC's comprehensive approach to mitigating climate impact.

#### **Emissions Reduction**



PEDC group leads in reducing greenhouse gas (GHG) emissions through advanced technologies and intelligent systems. PDK designs Green Burners, achieving 99.84% combustion efficiency for smokeless operations, cutting CO2 and methane emissions while enhancing offshore safety by preventing sea contamination. E&P Pasargad and Pezhvak Energy use Green Burners to eliminate oil burning, reducing emissions in onshore and offshore fields, with Pezhvak exceeding a 50% reduction target by redirecting crude to production units. E&P Pasargad, with Sepehr Pasargad, achieved Zero Flaring in the Sepehr and Jofin fields, saving 120,000 barrels of oil and cutting 61,368 tons of CO2eq in 2024 using Mobile Oil Separators and storage tanks, boosting field efficiency. Sepehr Pasargad maintained 97.3% production uptime, and PDK's Multi-Phase Flow Meters reduce flaring with real-time data, improving control.

Shams Pasargad's Selective Catalytic Reduction and Flue Gas Desulfurization systems cut NOx, SOx, and particulates, phasing out ozone-depleting refrigerants. Qeshm Movalled's PREMIX burners recorded NOx at 74.4 ppm and zero SOx in December 2024. Seavan Tadbir Tejarat and Pars Behin Palayesh Qeshm minimize CO2 with natural gas combustion. Soroush Energy Paydar reuses gases and catalysts for zero flaring. Javid Energy Parto and EPC subsidiaries ensure vehicle exhaust compliance, minimizing emissions through rigorous monitoring. PEDC's WRFM Center, launched in 2024, monitors emissions in real time across fields. PEDC will also start lifecycle studies first focusing on cradle to gate, starting with upstream operations, to strategically identify reduction opportunities. We will be expanding these studies to our other operations and after that extending them to include cradle to grave analysis. These actions reinforce PEDC's sustainability commitment.



# OUR ACTIONS : AIM 6 - GHGS EMISSIONS MANAGEMENT (CONTINUED)













### **Operational Efficiency and Innovation**



The Pasargad Energy Development Company (PEDC) group enhances operational efficiency and innovation to reduce greenhouse gas (GHG) emissions. Shams Pasargad piloted the IPCM Center at Shariati Mashhad Combined Cycle Power Plant in 2024, using real-time monitoring to minimize downtime, streamline operations, and cut emissions, with expansion planned for facilities like Niroo Gostar Sirjan. Al-based Shams Pasargad's maintenance Condition-Based Monitoring systems optimize fuel use, while researching smart grid solutions to improve energy flow. In designing Pars Behin Palayesh Qeshm, energy pinching techniques maximally use energy generated in the process. Pars Behin also conducts periodical energy audits based on ISO 50001:2018 to identify waste, boost efficiency, and reduce energy waste. PEDC designs all process facilities for maximum efficiency, leveraging energy pinching to minimize emissions from the outset.

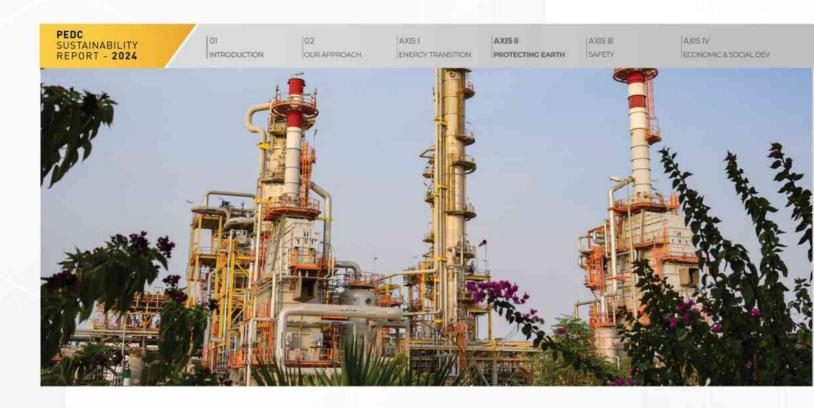
Arman Pasargad Energy Technologies partners with process licensors to optimize processes and upgrade equipment, implementing energy efficiency programs that lower emissions significantly. Tafahom Company's RETINA MaintAssist and dashboards enhance data-driven efficiency subsidiaries. Arman Energy Pasargad consults on converting waste gases and hydrocarbons into valuable products, reducing waste. PEDC's R&D partnerships with universities, including AmirKabir, optimize fracturing fluid designs for upstream efficiency. Pasargad's WRFM Center, launched in 2024, improves well performance, minimizing energy use with real-time data. PEDC has also conducted research in collaboration with Iran's university in digital twin technology to minimize energy use with predictive data, further enhancing operational foresight. These efforts reflect PEDC's commitment to sustainable operations and emission reduction through innovation.

#### **Emission Mitigation Strategies**



Pasargad Energy Development Company advances greenhouse gas mitigation through innovative strategies. Petro Danial Kish has started redesigning their administration buildings on operation sites using Energy+, Rhino, and Ladybug/Grasshopper software to optimize passive cooling via strategic orientation and shading. These incorporate airtight HVAC systems with dust filters, photovoltaic panels, subsoil drip irrigation, alternative structures, and elevated foundations to counter floods. We have planned to use renewable energy to power 10-15% of administration buildings energy needs across subsidiary sites, reducing fossil fuel reliance and mitigating scope 2 emissions. Plans are also being explored to integrate battery storage systems for managing intermittent solar supply. Further, training programs on sustainable building practices are being implemented to build internal capacity. PEDC is researching carbon capture in collaboration with Iran's universities. Tree planting across our subsidiaries spans 20.5 hectares, 7% of land use, aiming for 10%, using local species to sequester hundreds of tons of carbon annually without stressing water reserves. Our Qeshm subsidiaries in collaboration with local communities have planted over 7,000 mangroves at our Qeshm oil pier,

leveraging blue carbon to sequester three times more carbon than trees while bolstering coastal resilience. Shams Pasargad has installed solar panels at Shariati Mashhad powerplant, powering auxiliary systems to cut GHG emissions, with plans to expand capacity in 2025. Qeshm Movalled's waste heat recovery systems capture excess heat from industrial processes for preheating or power generation, reducing Scope 1 emissions at Qeshm facilities. Niroo Gostar Sirjan deploys combined heat and power systems and also gas-powered generators as its core business, enhancing efficiency by reusing waste heat, further curbing emissions using cleaner fossil fuels. Poly Ethelyne Gostaran Alborz is assessing the use of gas generators for off-grid auxiliary power, minimizing grid reliance. Feasibility studies are also underway to explore integrating renewable energy sources across off-grid sites. Additionally, a pilot project on hydrogen blending for industrial heating is being considered to diversify low-carbon solutions. Lifecycle assessments (cradle to gate), will be launched in 2025, analyzing upstream operations to identify improvement opportunities, expanding to cradle-to-grave studies. These initiatives underscore sustainable mitigation in 2024.t



# AIM 7: PROTECTING & REVITALIZING ECOSYSTEMS PEDC'S DEDICATATION TO PRESERVE BIODIVERSITY













Pasargad Energy Development Company is dedicated to preserving biodiversity and safeguarding ecosystems, recognizing their essential role as the foundation of life on Earth. Our operations address this crisis through a zero-deforestation policy and a commitment to restoring degraded habitats, ensuring alignment with Iran's environmental goals and international conservation standards. We view biodiversity protection as a collective responsibility, integral to sustainable development.

To minimize ecological impact, the company conducts thorough environmental impact assessments EIAs for all projects, evaluating effects on local ecosystems and implementing mitigation measures. We strictly avoid exploration or development in UNESCO World Heritage sites or nationally and internationally protected habitats, preserving critical biodiversity areas. By preventing pollution, resource overuse, and irreversible environmental changes, our practices aim to maintain ecosystem health across operational regions.

# AIM 7: OUR STRATEGY FOR ECOSYSTEM PROTECTION & REVITALIZATION













The company conducts environmental impact assessments (EIAs) for all projects and avoids development in UNESCO World Heritage and protected sites to preserve biodiversity. Its practices prevent pollution, resource overuse, and irreversible changes, maintaining ecosystem health across operations.



#### **ECOSYSTEM RESTORATION**

Restoring degraded habitats through reforestation and soil remediation to enhance biodiversity and support ecosystem resilience.



### BIODIVERSITY IMPACT MANAGEMENT

Conducting environmental impact assessments (EIAs) to identify biodiversity risks and track mitigation, minimizing ecosystem disruption.



### **POLLUTION PREVENTION**

Mitigating direct drivers of biodiversity loss, such as oil spills, flaring, and waste/chemical impacts, to protect terrestrial and marine ecosystems.



# AIM 7: PROTECTING & REVITALIZING ECOSYSTEMS ALIGNMENT WITH GLOBAL GOALS













PEDC's ecosystem protection initiatives directly contribute to the United Nations Sustainable Development Goals, advancing global biodiversity and sustainability objectives:



**SDG 14:** We support marine ecosystem health by preventing pollution, oil spills and wastewater discharges quality, ensuring clean and resilient aquatic environments.



**SDG 15**: Our commitment to zero deforestation and habitat restoration, protects terrestrial ecosystems, fostering sustainable land use and species conservation.



By integrating these efforts into our operations, we promoting ecosystem resilience and a more sustainable environment.

# OUR PLANS : AIM 7















PEDC is committed to addressing the global biodiversity crisis by embedding ecosystem protection and restoration into its operational framework. Recognizing the severe threats to ecosystems critical for biodiversity, climate stability, and community well-being, PEDC aligns its strategies with Iran's environmental priorities and international conservation standards.

Through collaboration with subsidiaries and local communities, the company ensures scalable, impactful initiatives. The following plans outline how PEDC will implement its three focus areas—Biodiversity Impact Management, Ecosystem Restoration, and Pollution Prevention—to halt biodiversity loss, enhance ecosystem health, and foster sustainable development across its operations.

#### **Biodiversity Impact Management**



Pasargad Energy Development Company will implement a robust policy to use environmental impact assessments to identify and manage environmental impacts for each project, tailored to its unique variables such as ecosystem type and project scope, ensuring early-stage risk identification and more effective mitigation planning. Conducted in compliance with Iran's Department of Environment regulations, EIAs will assess biodiversity risks, develop targeted mitigation measures, and incorporate input from subsidiaries and local communities to ensure alignment with national environmental priorities.

PEDC will conduct periodic monitoring and annual follow-up assessments to monitor the effectiveness of mitigation measures, tracking biodiversity outcomes through regular reporting and adaptive management. This approach enables the company to address potential ecological disruptions proactively, ensuring regulatory compliance and ecosystem health across operational regions. By embedding these strategies within its operations and through proactive risk management, PEDC strengthens regulatory compliance and aligns itself with national and international conservation standards, fostering biodiversity protection in Iran's energy sector.



# OUR PLANS : AIM 7

PROTECTING & REVITALIZING ECOSYSTEMS PLANS (CONTINUED)













### Ecosystem Restoration



Through its biodiversity restoration policy, PEDC will select project sites to minimize environmental disruption, adhering to its zero-deforestation commitment and avoiding UNESCO World Heritage or protected habitats, ensuring critical ecosystems remain undisturbed, local biodiversity is preserved, and ecosystem services are maintained. To mitigate and offset impacts, PEDC will scale restoration by selecting native, water-efficient species for reforestation, and restoring contaminated soils impacted by operations.

These efforts, targeting zones impacted by operations and guided by collaboration with subsidiaries and local communities, align with Iran's standards for soil protection, land degradation mitigation, and water conservation. Annual monitoring will assess ecosystem health, vegetation survival, and soil quality, refining strategies with evidence-based insights. By embedding this policy into project planning, and through restoration efforts, PEDC enhances habitat recovery and community engagement. Supporting global conservation standards and environmental standards of the Iran's Department of Environment.

#### Pollution Prevention



PEDC will implement a comprehensive policy to mitigate direct drivers of biodiversity loss, including oil spills, flaring, and waste/chemical impacts, protecting terrestrial and marine ecosystems, while strengthening environmental safeguards. Our company will deploy impermeable liners for spill containment and waste isolation, treat and control wastewater quality before discharge, and use flare gas recovery systems to reduce emissions. Operational protocols, including audits and containment measures, will ensure safe waste and chemical management, building on environmental impact assessment outcomes.

These efforts, targeting operational zones and guided by collaboration with subsidiaries and regulators, align with Iran's standards on pollution control. PEDC will conduct periodical assessments to monitor prevention effectiveness, refining strategies with data-informed insights. Through operational pollution control, our company safeguards marine and terrestrial ecosystems, aligning with Iran's environmental regulations. We are committed to integrating cutting-edge monitoring technologies to promptly identify and address pollution risks. Furthermore, ongoing staff training ensures strict adherence to environmental protocols across all operations.



### **OUR ACTIONS: AIM 7** PROTECTING & REVITALIZING ECOSYSTEMS PLANS













Pasargad Energy Development Company (PEDC) has implemented robust actions in 2024 to protect and revitalize ecosystems, aligning with Iran's environmental priorities and SDGs 14 and 15. Through subsidiaries, PEDC conducted environmental impact assessments, restored habitats via mangrove planting and soil remediation,

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### Biodiversity Impact Management



Community consultations integrated local perspectives, informing mitigation measures aligned with national biodiversity goals and preventing impacts on protected areas to minimize ecological disruption. PEDC regularly assessed mitigation effectiveness, using detailed reports to adjust operations and maintain compliance across subsidiaries. Collaboration with regulators and communities strengthened EIA processes, enabling approvals and sustained construction while safeguarding ecosystems. Post-construction, EIA reports for active facilities like refineries and power plants ensure ongoing regulatory compliance and environmental monitoring. These efforts reflect PEDC's commitment to sustainable project execution through comprehensive environmental management, stakeholder engagement, and adherence to Iran's standards, protecting biodiversity across operations.

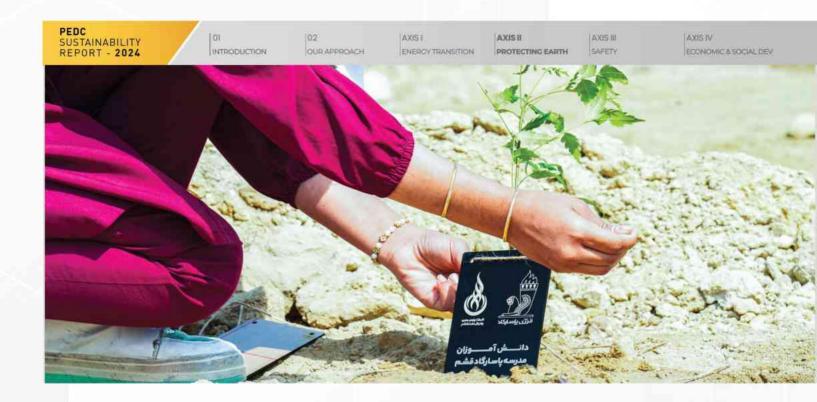
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#### **Ecosystem Restoration**



As a policy, PEDC avoids operations near Iran's Department of Environment's protected areas-national parks, natural monuments, wildlife refuges, and protected regions-or significant cultural and heritage sites. In line with this policy, planting trees near its operational sites is PEDC's main initiative for ecosystem recovery, planting trees and saplings across 20.5 hectares in 2024. These native, water-efficient trees, selected with Iran's Department of Environment and sourced from approved providers, are tagged for health monitoring and identification purposes. Planting trees and saplings covers about 7% of subsidiary land, with plans to reach 10% to boost biodiversity. Hengam Qeshm Industrial Mobilization and Development Company planted 7,000 mangroves at Qeshm oil pier, planning to add 1,000 more annually Our company has collaborated closely with Zainabi village near our operational sites in Qeshm Island, training residents and workers on mangroves' ecological and cultural value.

These mangroves enhance marine biodiversity, improve coastal water quality and hold cultural significance for Qeshm communities, fostering local stewardship. Studies show mangroves sequester on average three times more carbon than terrestrial trees as blue carbon in sediment, trunks, and detritus dissolving in surrounding water. Our terrestrial planted trees sequester 60-100 tons of CO2 annually while controlling soil erosion, providing habitats, and improving air quality. Poly Ethylene Gostaran Alborz (PEGA) plans to study geomembranes for soil remediation and pollution prevention, exploring innovative restoration techniques to strengthen PEDC's ecosystem restoration efforts. Building on these efforts, Pars Behin Palayesh Naft Qeshm remediated hydrocarbon-contaminated soils, using geomembranes enabling soil recovery. Community partnerships with seed and sapling providers and quarterly health assessments sustain these efforts, aligning with Iran's conservation priorities.



**OUR ACTIONS: AIM 7** PROTECTING & REVITALIZING ECOSYSTEMS PLANS (CONTINUED)











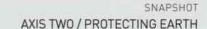


### **Pollution Prevention**



PEDC is advancing pollution prevention through innovative technologies across its subsidiaries, actively safeguarding ecosystems and promoting sustainable practices. Poly Ethylene Gostaran Alborz (PEGA) has produced over 1,221,000 geomembranes cumulatively, which are sold to various sectors including oil, gas, mining, and municipal industries for landfill lining and spill containment applications. Subsidiaries such as Pezhvak Energy, Pars Behin Palayesh Naft Qeshm, and Javid Energy Parto have effectively used these geomembranes at sites like Qezeltepe Well and Qeshm to isolate drilling waste and prevent hydrocarbon spills. Additionally, customers like Janja Copper and Shahrud municipalities have employed geomembranes to block leachate and heavy metal contamination—for example, at Chador Malu's evaporation basins in Yazd and Shahrud's urban systems—thereby ensuring the protection of groundwater resources. Complementing these containment efforts, E&P Pasargad's Mobile Oil Separators (M.O.S.) have prevented the burning of 120,000 barrels of oil in the Sepehr and Jofir fields, leading to a reduction of 61,368 tons of CO2 equivalent and significant decreases in SO2 and H<sub>2</sub>S emissions. These measures protect air, soil, and water quality, while improving the health and environment of nearby communities.

In parallel, Petro Danial Kish utilized Multi-Phase Flow Meters (MPFM) to significantly reduce flaring and emissions by accurately measuring multi-phase flow at wellheads, thereby optimizing wellhead operations for improved energy conservation and efficiency. Further protecting marine ecosystems, Qeshm subsidiaries treated 5,763.06 cubic meters of wastewater using advanced reverse osmosis technology to meet and exceed Iran's stringent discharge standards, effectively safeguarding the biodiversity of the Persian Gulf. Similarly, Pasargad E&P processed 36.148 tons of drilling waste in the Sepehr field through a combination of shaker separation, dewatering, and stabilization using cement and sodium silicate, subsequently transferring the stabilized waste to a landfill engineered with seven protective layers, including geomembranes, in accordance with environmental permits, ensuring zero groundwater contamination. To ensure these environmental measures consistently met regulatory requirements, regular audits were conducted to verify strict compliance with all containment and safety protocols. Collectively, these integrated efforts-utilizing geomembranes, Mobile Oil Separators (M.O.S.), and MPFM-demonstrate and strengthen PEDC's unwavering commitment to preventing pollution and protecting air, soil, and water ecosystems across all operational areas.





**PASARGAD ENERGY** 

DEVELOPMENT CO.















PEDC SUSTAINABILITY REPORT - 2024



# AXIS 2: SNAPSHOT





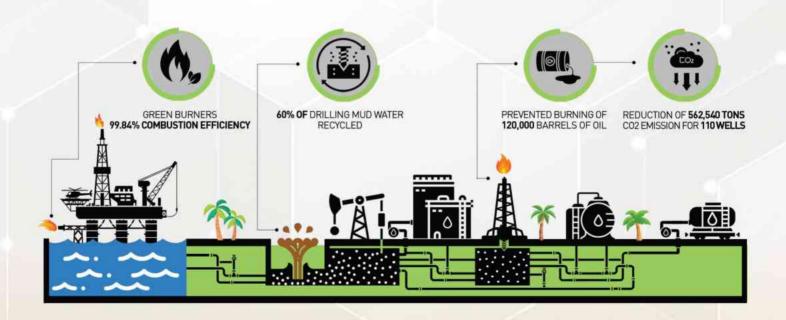




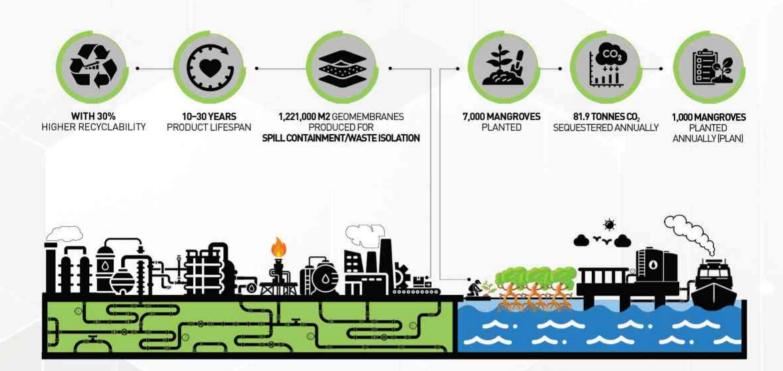




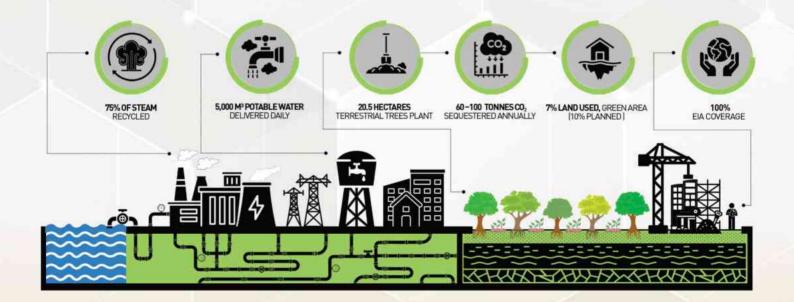




# **DOWNSTREAM**



# POWER & UTILITY / GROUP WIDE





PEDC SUSTAINABILITY REPORT - 2024



# AIM 08 OCCUPATIONAL HEALTH AND SAFETY

We strive for zero fatalities and minimal incidents by fostering a generative safety culture, implementing comprehensive HSE systems, and ensuring employee and contractor well-being. Initiatives like mandatory

# PROCESS SAFETY

We prevent major process incidents through risk-based process safety management, inherently safe design, and advanced emergency response systems. Actions like conducting HAZOP and SIL studies align with SDG 9 [Industry, Innovation and Infrastructure].



### AXIS 3: SAFETY

Safety is the foundation of sustainable operations at Pasargad Energy Development Company (PEDC), ensuring the protection of our people, assets, and communities across Iran's dynamic energy landscape. Axis 3: Safety embodies our commitment to fostering a generative safety culture and operational excellence, addressing the unique risks of our diverse operations-from upstream oil and gas to power generation.

# NAVIGATING THE GLOBAL & REGIONAL CONTEXT

The energy industry has historically been marked by major global catastrophes, such as the Deepwater Horizon oil spill and the Piper Alpha disaster, which underscore the critical need for robust safety systems to prevent human, economic, and environmental losses. In Iran, PEDC operates across a broad spectrum of high-risk activities, including upstream exploration and production, midstream pipelines, downstream refineries and petrochemical plants, and power utilities encompassing thermal and solar generation.

# PEDC'S STRATEGIC ROLE IN SAFETY LEADERSHIP

As a leading private energy company in Iran, PEDC sets a high standard for safety through rigorous governance, data-driven performance evaluations, and a commitment to continuous improvement. Our operations, spanning high-risk environments like offshore platforms and the Qeshm Island industrial complex, require tailored safety strategies. We have established independent Health, Safety, and Environment (HSE) units across our subsidiaries, ensuring autonomy in operational and production companies to enforce stringent safety protocols.













This axis is built on two core pillars: Occupational Health and Safety and Process Safety, which align with the United Nations Sustainable Development Goals (SDGs), specifically SDG 3 (Good Health and Well-Being), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation and Infrastructure). These pillars drive continuous improvement in workplace safety standards and risk management practices.













With Iran's rising energy demands amidst infrastructural and ecological challenges, PEDC is committed to balancing energy production with safe, sustainable systems to ensure operational continuity and community trust. By embedding a generative safety culture-where every employee takes ownership of safety-and implementing risk-based management systems, we contribute to SDG 3 by safeguarding health, SDG 8 by promoting safe and decent workplaces, and SDG 9 by fostering resilient infrastructure.













Our comprehensive HSE Management System, aligned with ISO 45001 and the International Association of Oil and Gas Producers (IOGP) Operating Management System (OMS), integrates safety across project phases. Annual assessments of subsidiary HSE performance, using a five-star evaluation model inspired by the British Safety Council, drive accountability and improvement across our group. These efforts align with Iran's national safety priorities and global sustainability standards, positioning PEDC as a recognized safety leader.



# OUR INTEGRATED APPROACH: TWO CORE AIMS





PEDC's safety strategy is anchored in two interconnected aims that address the unique risks of our operations:

### Aim 8 - Occupational Health and Safety

We strive for zero fatalities and minimal incidents by fostering a generative safety culture, implementing comprehensive HSE systems, and ensuring employee and contractor well-being. Initiatives like mandatory health screenings, risk assessments, and tailored training programs support SDG 3 (Good Health and Well-Being) and SDG 8 (Decent Work and Economic Growth).

# AXIS 3 - COMMITMENT TO A SAFE AND SUSTAINABLE FUTURE

The Safety axis reflects PEDC's dedication to protecting its workforce, contractors, and communities while ensuring operational reliability in Iran's energy sector. By integrating occupational and process safety, we mitigate risks, reduce downtimes, and enhance environmental protection through initiatives such as flare gas recovery and emergency response.

# AXIS 3 - ALIGNMENT WITH SUSTAINABLE DEVELOPMENT GOALS

PEDC's safety initiatives protect human capital and ensure resilient energy operations in Iran, advancing key United Nations Sustainable Development Goals through occupational health and process safety:



**SDG 3**: Through rigorous occupational health programs, including 100% coverage of employee health screenings and mental health monitoring, we ensure a healthy workforce.



**SDG 9**: Our process safety initiatives, including inherently safe design and advanced risk assessments, promote resilient and innovative infrastructure.



**SDG 8**: Our focus on safe workplaces, contractor safety management, and employee training fosters decent work and sustainable growth

### Aim 9 - Process Safety

We prevent major process incidents through risk-based process safety management, inherently safe design, and advanced emergency response systems. Actions like conducting HAZOP and SIL studies and establishing a centralized emergency response center on Qeshm Island align with SDG 9 (Industry, Innovation and Infrastructure).













PEDC's goal of achieving "zero fatalities" and minimizing incidents drives continuous improvement, supported by HSE assessments and stakeholder collaboration. This axis positions the company to advance a safer, more sustainable energy future, aligned with national and global goals, with progress under Aims 8 and 9 detailed below.





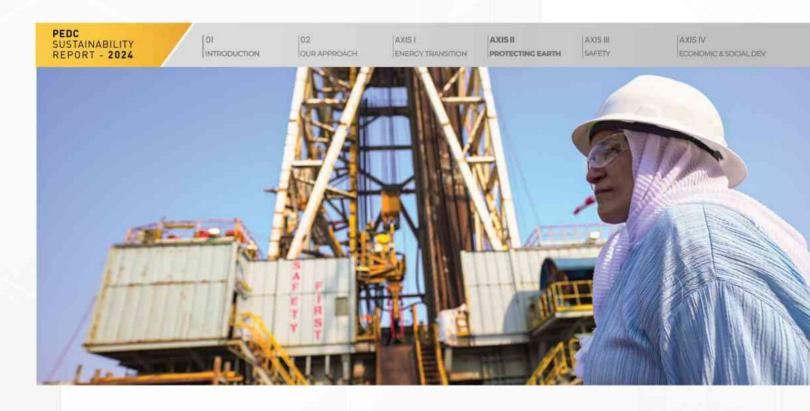












# AIM 8: OCCUPATIONAL HEALTH & SAFETY PEDC COMMITMENT TO OCCUPATIONAL HEALTH & SAFETY













Pasargad Energy Development Company is committed to protecting the health and well-being of its employees and contractors, viewing occupational health and safety as essential to sustainable energy development in Iran. The company promotes a proactive safety culture, encouraging individuals to identify and mitigate risks to achieve zero fatalities and minimal incidents. This is supported by health monitoring, mandatory screenings, mental health programs, targeted training, and strict contractor safety oversight.

Our subsidiaries address occupational hazards to ensure safe, resilient workplaces through regular risk assessments and stakeholder collaboration, boosting productivity and trust. These efforts align with Iran's regulations and global sustainability standards. By prioritizing engagement and ongoing safety improvements, Pasargad Energy Development Company positions itself as a leader in human capital protection and safety advancement in the energy sector.

# AIM 8- OCCUPATIONAL HEALTH & SAFETY OUR STRATEGY













Pasargad Energy Development Company's occupational health and safety strategy focuses on employee and contractor well-being to achieve zero fatalities and sustainable operations. Targeted initiatives embed safety across its energy portfolio, aligned with Iran's regulations and global standards. Five focus areas, shaped by subsidiary collaboration, drive improved safety outcomes.



#### GENERATIVE SAFETY CULTURE

Empower employees to report incidents and share safety responsibility through HSE assessments.



#### **HEALTH MONITORING** & WELL-BEING

Implement health screenings and mental health programs workforce to ensure resilience.



#### RISK ASSESSMENT & HAZARD IDENTIFICATION

Conduct regular assessments to mitigate hazards, ensuring safe workplaces and continuous improvement.



#### CONTRACTOR MANAGEMENT

Ensure contractor compliance through oversight, aligning with safety protocols.



#### SAFETY TRAINING

Deliver tailored programs to enhance employee skills mitigating in occupational hazards.



# AIM 8- OCCUPATIONAL HEALTH & SAFETY ALIGNMENT WITH GLOBAL GOALS













Pasargad Energy Development Company's occupational health and safety initiatives advance global sustainability by protecting human capital and fostering resilient workplaces in Iran's energy sector. These efforts contribute to key United Nations Sustainable Development Goals:



**SDG 3**: Comprehensive health screenings, mental health programs, and electronic health records reduce occupational health risks, ensuring a healthy, productive workforce.



**SDG 8**: Tailored safety training and contractor oversight promote safe workplaces, supporting decent work conditions and sustainable employment practices.



These contributions align with global sustainability objectives, reinforcing PEDC's leadership in occupational health and safety.

# OUR PLANS: AIM 8- OCCUPATIONAL HEALTH & SAFETY













PEDC is committed to advancing occupational health and safety through strategic initiatives that prioritize employee and contractor well-being, regardless of contract type. By embedding safety into every facet of its energy portfolio, the company aims to achieve zero fatalities and foster resilient workplaces. Our plans focus on five key areas: cultivating a generative safety culture, implementing robust health monitoring,

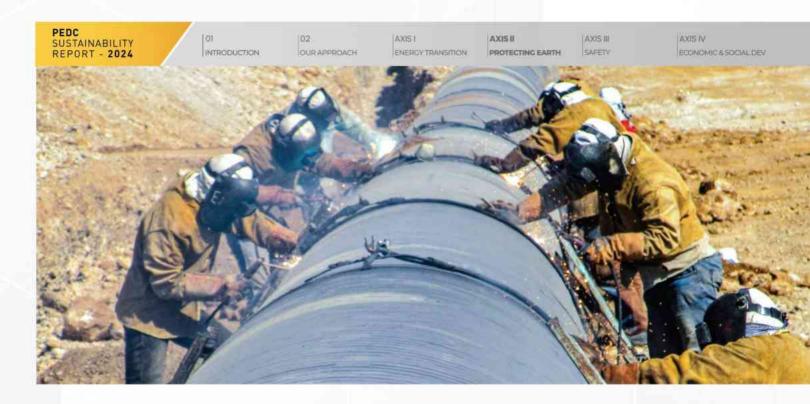
delivering tailored safety training, ensuring contractor compliance, and conducting regular risk assessments. These initiatives, developed in collaboration with subsidiaries and aligned with Iran's safety regulations, drive continuous improvement and scalability. By integrating these strategies, Pasargad Energy Development Company strengthens its leadership in sustainable safety practices, supporting workforce productivity and community trust.

#### **Generative Safety Culture**



PEDC is dedicated to cultivating a generative safety culture that empowers every employee and contractor to take ownership of safety, ensuring zero fatalities across its operations. The company plans to implement comprehensive employee engagement programs, including workshops and leadership training, to foster proactive risk identification and incident reporting. By establishing robust incident reporting systems, our subsidiaries will encourage open communication and continuous learning.

Regular HSE assessments, aligned with Iran's safety regulations, will benchmark cultural progress and identify improvement areas. These initiatives, scalable across all facilities, aim to embed safety as a core value, enhancing workforce trust and resilience. Through collaboration with stakeholders, Pasargad Energy Development Company will drive a culture where safety is a shared responsibility, positioning the company as a leader in sustainable occupational health and safety practices.



### **OUR PLANS:** AIM 8- OCCUPATIONAL HEALTH & SAFETY (CONTINUED)













### Health Monitoring & Well-Being



To advance workforce well-being, Pasargad Energy Development Company plans to transform health monitoring into an analytical framework, leveraging data from ongoing annual health checks and clinic-based care. The company will enhance electronic health records to analyze and correlate data, identifying health trends and occupational risks to enable proactive risk mitigation for all employees and contractors under our purview, regardless of contract type. Clinics at most sites, with headquarters providing specialized Gynecology, echocardiography, Cardiology with Orthopedics, Gastroenterology, Physiotherapy, and Nutrition counseling, will support this data-driven approach.

We plan to add mental health programs to our comprehensive health programs. These initiatives, including counseling and stress management, will foster resilience and engagement. Aligned with Iran's health regulations, these scalable programs standardize analytical systems subsidiaries through healthcare collaboration. Pasargad Energy Development Company's integrated strategy strengthens sustainable occupational health and safety, promoting a productive workforce. By embedding mental health support into existing frameworks, we aim to enhance both safety and overall workforce well-being.

### Safety Training



To enhance workplace safety, Pasargad Energy Development Company plans to strengthen its headquarters' training matrix, tailored to non-operational job descriptions, ensuring employee preparedness. Subsidiaries in upstream, downstream, and power generation will maintain HSE training matrices for operational roles, standardizing safety skills across sectors. Contractors are contractually required to provide HSE training, with the company delivering pre-operation briefings addressing site-specific hazards for high-risk tasks, reinforcing a shared safety culture.

Ensuring all workers are equipped and have necessary details on the hazards and risks of jobs. Regular updates, informed by risk assessments, will align training with Iran's regulations and evolving standards. Standardized and enhanced through collaboration with subsidiaries and contractor management, these programs include evaluations to track compliance and proficiency, supporting continuous improvement. Pasargad Energy Development Company's training strategy fosters a skilled workforce, reinforcing sustainable occupational health and safety.



### **OUR ACTIONS:** AIM 8- OCCUPATIONAL HEALTH & SAFETY













Our company has implemented actions to advance occupational health and safety, enhancing workforce protection and operational resilience. Through initiatives in safety culture, health monitoring, training, contractor management, and risk assessment, we have strengthened safety practices and ensured compliance with Iran's regulations.

These efforts, supported by subsidiary collaboration and advanced systems like our HSE software platform, prioritize employee and contractor well-being. The following subsections detail specific steps, outcomes, and achievements, demonstrating our unwavering commitment to sustainable safety excellence.

### Generative Safety Culture



Our company fosters a generative safety culture, promoting proactive safety behaviors across all subsidiaries through an operational management system (OMS) aligned with IOGP Report 510 and ISO 45001 standards, integrating occupational health, process safety, environmental responsibility, and quality management. In 2024, our safety observation system, using QR codes to gather input from employees and visitors, recorded 347 observations, a fourfold increase from 92 in 2022, with plans to expand to operational sites and integrate with our HSE software's incident management module in 2025. Leadership workshops empower management to drive accountability, while our HSE manual, based on IOGP 511, ensures uniform safety procedures. The HSE software supports structured data collection and communication, with modules for event management, indicators, occupational health records, and remedial work plans nearing completion, reducing manual reporting to streamline processes.

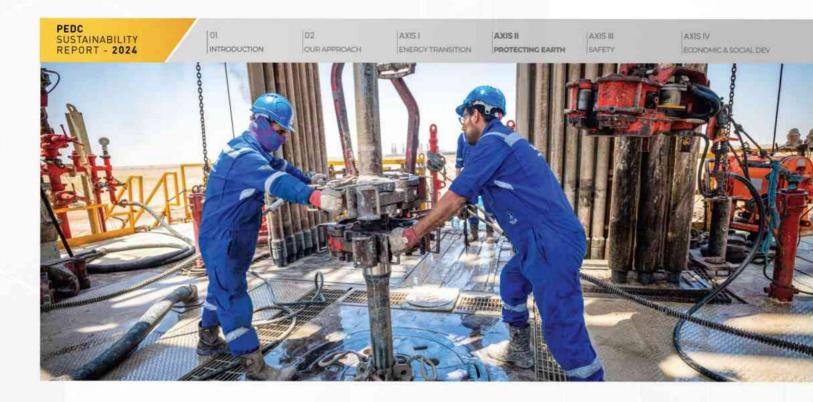
Five-star HSE assessments, using an 11-element model, show safety performance rising to 50.1% in 2024 from 43.5% in 2023, with 11 of 18 subsidiaries achieving a one-star rating. Monthly HSE reports track Grade 4 and 5 incidents, requiring root cause analysis with headquarters involvement. Safety briefings reinforce engagement, supporting a frequency rate of 4.12 per million hours worked, typical for Iran's oil and gas sector but slightly behind global standards, with actions closing these gaps. Annual workplace hazard assessments ensure risk control across sites. Our HSE management system, built on leadership, risk management, continuous improvement, and implementation, includes ten elements like commitment and stakeholder engagement. Employee participation mechanisms foster ownership, while OMS standards unify practices. Enhanced metrics, analyzed with Power BI, and 95% ISO 45001 certification among subsidiaries reinforce our commitment to continuous safety advancements and a zero-fatality goal.

### Health Monitoring & Well-Being



Our company prioritizes health monitoring and well-being, fostering a thriving workforce through comprehensive initiatives across all subsidiaries. We conduct mandatory pre-employment and annual health screenings for all employees, achieving nearly 100% compliance, with screenings in Tehran facilitated through the Nasim Salamat Center. These examinations exceed legal requirements, covering extensive health parameters. Onsite clinics at company sites and headquarters offer accessible care with specialists like cardiologists, gynecologists, physiotherapists, and nutrition counselors, supported by an online booking system. This integrated approach ensures timely and personalized healthcare, enhancing overall employee wellness and productivity.

Health programs include hepatitis screenings, vaccinations, musculoskeletal support, cholesterol and liver monitoring with dietary plans, optional HIV testing, and nutrition oversight improving company meals. We are finalizing an electronic health record system within our HSE software to track medical histories and assessments. Annual workplace hazard assessments tailored to site risks ensure safety for subsidiaries and contractors. Comprehensive insurance and retirement plans safeguard employees. The HSE software monitors incidents and integrates medical files and appointments to enhance health tracking. Process quality assessments uphold excellence in check-ups, and our zero-fatality policy reinforces health safeguards. These efforts foster a proactive health culture aligned with our commitment to employee well-being.



# **OUR ACTIONS:**

AIM 8- OCCUPATIONAL HEALTH & SAFETY (CONTINUED)













### Safety Training



Our company excels in safety training, fostering a vigilant workforce across subsidiaries by equipping employees with critical skills to support our zero-fatality goal. In 2024, we delivered 453 training sessions, a 3.4-fold increase from 132 in 2022, with 332 [73%] led by internal experts, up from 105, and 121 by external specialists, up from 27, reflecting our focus on in-house expertise while maintaining quality. Training includes tailored programs by job role and hazards, such as on-the-job training, toolbox sessions, expert-led courses, seminars, and conferences. A structured HSE training matrix ensures all personnel receive targeted instruction to manage hazards, increasing per-capita training hours. High-risk operations get customized training, and regular company-wide sessions reinforce safety protocols.

We conducted a culture assessment with consultant support to identify strengths and weaknesses, guiding our training strategy. Culture-building initiatives-safety-themed events, competitions, and environmental ads-boost engagement. Our HSE software lets employees, contractors, and visitors submit and track safety observations and suggestions, ensuring effective follow-up. Technical working groups leverage group-wide expertise to develop specialized safety and environmental programs, prioritizing internal capabilities. The HSE software tracks training hours, and a general training effectiveness indicator ensures high standards, supporting continuous improvement. These initiatives embed practical safety knowledge, minimize risks, and align with our commitment to employee protection and operational excellence.

### **Contractor Management**



Our company has advanced contractor management, fully integrating contractors into our HSE framework across subsidiaries, including small contractors without an HSE system. Aligned with HSE manual standards, we provide onboarding safety training. For example, Pasargad E&P's structured programs ensure contractors meet strict safety requirements. Group-wide joint safety briefings for high-risk activities foster collaboration. Monthly HSE indicators track contractor-related incidents, with Qeshm Movalled promoting accountability through this system.

The HSE software monitors all incidents, including contractor cases, enabling swift corrective actions. Enhanced software in 2025 will streamline reporting. Contractors must implement an HSE system verified through quality assessments to meet requirements. Risk-based quality controls and a performance monitoring system evaluate contractor compliance. Regular audits ensure adherence and improvements. These practices cultivate a proactive safety culture among contractors, aligning with our commitment to safety excellence.



# AIM 8- OCCUPATIONAL HEALTH & SAFETY (CONTINUED)













### **Risk Assessment & Hazard Identification**



Our company excels in risk assessment and hazard identification, proactively safeguarding operations across all subsidiaries. Guided by the Corporate HSE manual and company policy, we conduct structured studies and methodologies for hazard identification and risk assessment to address occupational, process, environmental, and social hazards. In 2024, all 18 subsidiaries completed these studies tailored to project lifecycles, ensuring a clear foundation for effective safety programs. These studies enable tailored risk management, as demonstrated by Pasargad E&P's assessments in high-risk drilling zones, ensuring safer operations, and Qeshm Movalled's hazard reporting system, with monthly reviews, enabling swift corrective actions. These efforts extend to specialized operations, such as Sepehr Pasargad's focus on operating oil rigs, ensuring robust safety measures for high-risk activities like rig maintenance. Insights from these assessments are incorporated into ongoing training, strengthening employee preparedness, while lessons learned are shared across subsidiaries to reinforce best practices.

Our seven-stage risk management process, aligned with ISO 31000 and including communication, scoping, assessment, analysis, evaluation, treatment, and monitoring, ensures consistency. Regular audits and training empower employees to recognize hazards, fostering a risk-aware culture. Existing platforms within subsidiaries identify and track risks, with an HSE software risk module planned for future integration. Risk-based change management integrates with operational procedures and emergency plans, supported by adequate resources. No high-risk operations are permitted beyond acceptable thresholds, holding CEOs accountable. These efforts inform training, asset integrity, and stakeholder engagement, addressing local community impacts, and support our zero fatalities goal, reinforcing a proactive safety culture and operational excellence across subsidiaries. Continuous monitoring and feedback loops ensure emerging risks are addressed promptly, while cross-subsidiary knowledge sharing strengthens preventive measures and operational resilience.

# AIM 9: PROCESS SAFETY PEDC COMMITMENT TO PROCESS SAFETY













At PEDC, process safety is a cornerstone of our mission to deliver sustainable energy solutions across Iran's dynamic energy landscape. Far beyond occupational health and safety, our commitment to process safety encompasses the technical and operational integrity of our processes, ensuring the protection of our people, assets, communities, and the environment. By prioritizing the prevention of major process incidents, we safeguard operational continuity, minimize unplanned downtimes, and reduce environmental impacts, such as major releases or industrial fires. This approach is reinforced through continuous monitoring, rigorous risk assessments, and the implementation of best-in-class safety standards. Additionally, collaboration across subsidiaries and ongoing employee training ensures a consistent, proactive safety culture throughout all operations.

Our approach embeds process safety from the design phase through the entire project lifecycle, fostering inherently safe systems that align with global standards and Iran's regulatory framework. Through a risk-based process safety management program, integrated within our comprehensive HSE Management System, we strive for zero Tier 1 process safety incidents and a significant reduction in process safety events across our subsidiaries. This unwavering dedication drives operational excellence, enhances stakeholder trust, and positions PEDC as a leader in sustainable energy development, contributing to a safer and more resilient future for Iran's energy sector. Continuous evaluation of safety performance and lessons learned from past incidents further strengthen our preventive measures. Moreover, engaging employees at all levels ensures a proactive culture where safety is a shared responsibility and core value.



### AIM 9: PROCESS SAFETY **OUR STRATEGY**













PEDC advances process safety with a strategy that protects operations, assets, and communities across Iran's energy sector. By integrating safety from project inception to operations, we align with global standards and national regulations to prevent major incidents. Our approach, developed with subsidiaries, focuses on three key areas to enhance safety and resilience:



### **ASSET INTEGRITY AND** SAFE DESIGN

We integrate safety from requirements through design and operations, using HAZOP and PSSR to eliminate hazards early, and IPCM and WRFM systems to ensure reliability and minimize risks.



#### RISK-BASED PROCESS SAFETY MANAGEMENT

We run a robust PSM program using the CCPS RBPS model to mitigate risks, with contractor training and oversight fostering a proactive, consistent safety culture across all operations.



#### **EMERGENCY PREPAREDNESS** AND RESPONSE

We develop advanced infrastructure, including Qeshm's centralized emergency center, and hold regular drills to ensure swift, effective responses, protecting people and the environment.

These strategies advance PEDC's commitment to process safety, reducing incidents and fostering trust for safer, more sustainable operations.

# AIM 9: PROCESS SAFETY ALIGNMENT WITH GLOBAL GOALS

PEDC's process safety initiatives advance sustainability by protecting operations and communities in Iran's energy sector. Using risk management and safety systems, we contribute to UN Sustainable Development Goals, promoting resilient infrastructure and safe workplaces.





SDG 9: By implementing advanced process safety management, including HAZOP studies and Al-driven monitoring like IPCM, we promote resilient infrastructure and innovative safety solutions.



SDG 3: By minimizing incidents and downtime through robust safety practices, we support safe workplaces and sustainable economic growth, enhancing workforce productivity and stability.

















### **OUR PLANS:** AIM 9: PROCESS SAFETY













Pasargad Energy Development Company is dedicated to advancing process safety through strategic plans that strengthen our operations across Iran's energy sector. Our initiatives prioritize preventing major incidents, ensuring asset reliability, and protecting communities by embedding safety from design to operation. Collaborating with our subsidiaries, we will implement scalable programs aligned with global best practices and Iran's regulations, targeting zero Tier 1 process safety incidents.

We will drive these efforts with innovative policies and risk-based systems focused on Asset Integrity and Safe Design, Risk-Based Process Safety Management, and Emergency Preparedness and Response. By fostering a proactive safety culture and leveraging advanced technologies, we aim to enhance operational resilience, minimize environmental risks, and build stakeholder trust for sustainable energy production. These actions align with our long-term vision of zero harm and continuous performance improvement across all operations.

### Asset Integrity and Safe Design



PEDC will strengthen operational safety by embedding robust practices across the asset lifecycle, from requirement definition to operational excellence, to prevent incidents and support sustainable operations in Iran's energy sector. We will implement HAZOP studies during the design phase to eliminate risks and ensure inherently safe systems across projects, while Arman Pasargad oversees contractor compliance with stringent engineering standards and standardized safe design through management contractor oversight.

We will conduct Pre-Start-Up Safety Reviews before commissioning to ensure safe operations. For operational reliability, we will scale advanced monitoring systems like IPCM at Shams Pasargad's Shariati Power Plant and WRFM used by Sepehr Pasargad, leveraging Al-driven failure detection to minimize risks. Preventive maintenance programs and asset integrity frameworks will enhance resilience, reduce environmental risks, and build stakeholder trust.

### Risk-Based Process Safety Management



PEDC will elevate process safety by implementing a risk-based management system to proactively identify and mitigate risks across operations in Iran's energy sector. We will adopt the CCPS model to establish policies for hazard identification, risk assessment, and control measures aligned with global standards. Contractor safety will be integrated through structured training and oversight to foster a proactive safety culture.

We will develop standardized procedures for risk management, including regular audits and performance evaluations, to maintain operational integrity and prevent incidents. By leveraging data-driven insights and continuous improvement frameworks, we aim to reduce process safety events, enhance workforce confidence, and foster stakeholder trust, contributing to sustainable and resilient energy production.

### Plan for Emergency Preparedness and Response



PEDC will strengthen operational resilience by establishing advanced emergency preparedness and response systems to protect people, assets, and communities across Iran's energy sector. We plan to develop centralized emergency response infrastructure for coordinated and effective incident management. Our approach includes comprehensive response plans for various incidents, from equipment failures to environmental hazards, supported by regular simulation-based drills to ensure personnel readiness.

Incident command systems with advanced communications will coordination, clarify roles, and decision-making for a unified response. We will coordinate with stakeholders to improve community safety and implement tailored training programs to build crisis management capabilities. Post-incident analyses will refine protocols and foster continuous improvement. These strategies aim to minimize incident impacts, protect the environment, reduce risks, and strengthen stakeholder confidence for sustainable energy production.



# **OUR ACTIONS:** AIM 9: PROCESS SAFETY

Pasargad Energy Development Company has made significant strides in enhancing process safety across its operations, reflecting our unwavering commitment to protecting people, assets, and the environment. Through targeted actions in asset integrity, risk management, and emergency preparedness, we have strengthened safety frameworks and fostered a proactive safety culture













Leveraging advanced technologies and data-driven insights, we have reduced risks, minimized process safety events, and built resilience across our subsidiaries. These efforts have safeguarded operations and reinforced stakeholder trust, contributing to a safer and more sustainable energy future. The following subsections detail specific actions and achievements, showcasing our dedication to process safety excellence.

#### Asset Integrity and Safe Design



PEDC has pioneered innovative safety practices protecting operations and communities across Iran's energy sector. Sepehr Pasargad's WRFM system revolutionized asset management at the Sepehr-Jofir field with real-time monitoring and predictive maintenance, reducing downtime and delivering alerts to enhance efficiency; this system will integrate with CMMS to optimize asset management and preventive maintenance. Similarly, Shams Pasargad deployed the IPCM system at Shariati Power Plant, using AI to monitor turbines and generators and prevent failures with analytical dashboards for rapid decision-making. These advanced systems set new standards for operational reliability and sustainable energy production. Our safety commitment starts at design with rigorous HAZOP and HAZID studies for key projects. Pars Behin Palayesh Qeshm's HAZOP studies for refinery processes, including consequence modeling for fires and chemical leaks, implemented engineering controls to mitigate risks and strengthen safety, while Sepehr Pasargad's studies identified process risks, enhancing drilling safety.

To ensure design integrity, dedicated management contractor companies from our subsidiaries oversee subcontractor compliance with engineering standards during design, construction, and installation, standardizing safe design protocols. Arman Pasargad oversees downstream engineering licensors, ensuring compliance and collaborating to improve designs, reinforcing safety protocols that elevate project quality. PSSR are mandatory; Pars Behin Palayesh Qeshm lists and corrects punch items before refinery startups to ensure safety. Robust maintenance programs further solidify asset integrity: Petro Danial Kish manages safety-critical equipment with tailored maintenance plans; Hengam Qeshm conducts periodic inspections; Qeshm Movalled's CMMS digitizes corrective maintenance and optimizes preventive checks; Taban Energy Pasargad insures critical equipment at Damghan, safeguarding continuity. These unified efforts enhance equipment reliability, embed safety from design to operation, and ensure uninterrupted, efficient energy delivery.



### **OUR ACTIONS:** AIM 9: PROCESS SAFETY(CONTINUED)













### Risk-Based Process Safety Management



PEDC has transformed process safety by embedding a risk-based process in its PSM program, proactively safeguarding operations and communities across Iran's energy sector. Guided by the CCPS Risk-Based Process Safety model, we crafted comprehensive policies for hazard identification, risk assessment, and control, leveraging methods like HAZOP, HAZID, SIL studies, and LOPA to align with global standards. Comprehensive risk assessments across facilities pinpointed vulnerabilities, enabling robust safeguards to elevate safety. To foster awareness, educational workshops engaged everyone from leadership to field workers, embedding a PSM mindset. Building on this foundation, Shams Pasargad implemented PSM procedures for power generation, with audits on high-pressure system to identify gaps, swiftly correcting any uncovered issues to enhance reliability. Similarly, Pars Behin Palayesh Qeshm's HAZOP, HAZID, and LOPA studies for refinery processes, paired with consequence modeling for fires and chemical leaks, introduced engineering controls, while Management of Change reviews and audits resolved safety gaps.

At Sepehr-Jofir, Sepehr Pasargad's HAZOP and HAZID studies, alongside Pasargad E&P's framework of robust design and operating practices, mitigated drilling and oil production risks. Petro Danial Kish fortified drilling operations with risk management and audits, ensuring compliance. Hengam Qeshm's HAZOP-supported risk framework and Qeshm Movalled's PSM procedures targeted high-risk turbines and generators. Naftanir reduced their risks during operations to ALARP levels, while Taban Energy prioritized high-risk activities through a risk-based strategy. Soroush Energy laid groundwork for PSM in operational phases. Contractor safety was seamlessly woven in through rigorous oversight and collaboration, alongside group-wide NEBOSH PSM training planned for 2025, cultivating a proactive safety culture. Standardized procedures, regular audits, and performance evaluations across subsidiaries identified and addressed safety protocol gaps, boosting reliability. Quarterly reviews of incidents, near-misses, and audit findings drive continuous improvement, ensuring these proactive measures reduce risks, nurture a robust safety culture, and deliver dependable, hazard-free operations.

#### **Emergency Preparedness and Response**



Pasargad Energy Development Company (PEDC) has fortified operational resilience through a dynamic emergency preparedness system, ensuring swift incident management to protect people, assets, and communities across Iran's energy sector. Central to this effort is the Qeshm emergency response center, 90% complete with a hospital, fire station, command room, and emergency airfield, enabling rapid coordination, as exemplified by our teams' support during a Qeshm market fire. In 2022, PEDC conducted 44 drills across upstream (32), downstream (5), and power & utility (7) sectors, addressing fires and spills, rising to 181 in 2024, an over fourfold increase, significantly enhancing response capabilities. Petro Danial Kish's 30 upstream drills in 2024, Javid Energy Pasargad's 11 downstream drills for safety planning, and Qeshm Movalled's nine power & utility drills for power generation exemplified sector-specific readiness, reflecting contributions from all subsidiaries.

Comprehensive response plans tackle equipment failures, fires, and spills, with Javid Energy Pasargad crafting 12 detailed Pre-Incident Plans. Sepehr Pasargad tailored plans for Sepehr-Jofir drilling risks, while Shams Pasargad implemented robust protocols for power generation, ensuring continuity and reducing emergency downtime. Incident command systems with advanced communications streamline decision-making, paired with crisis communication plans for proactive stakeholder engagement. Collaborative drills with Qeshm authorities reinforced community safety, reflecting PEDC's inclusive and coordinated approach. Post-incident evaluations continuously refine protocols, driving operational excellence and promoting a culture of preparedness. These integrated efforts, equipping personnel across subsidiaries with practical crisis management skills, ensure rapid, confident responses, safeguard communities, and reinforce operational readiness.













**PEDC** SUSTAINABILITY REPORT - 2024



# AXIS 3: SNAPSHOT







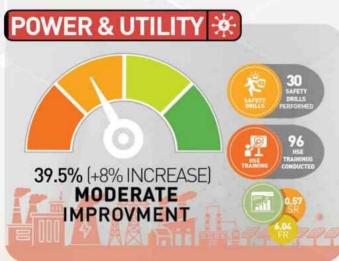
















PEDC SUSTAINABILITY REPORT - 2024



#### AIM 10 HEALTH AND WELFARE

We prioritize the physical, mental, and social well-being of all employees and their families through inclusive benefits, recognizing that a healthy workforce drives sustainable performance and supports SDG 3 and SDG 8.

## AIM 11 LOCAL COMMUNITY STEWARDSHIP

We engage with communities to address needs, respect local cultures, and support infrastructure and environmental initiatives—building trust and contributing to SDG 1 and SDG 16.

# AIM 12 CREATING VALUE LOCALLY/DOMESTICALLY

PEDC drives economic resilience by prioritizing local employment and domestic suppliers. By sourcing labor and materials locally, we support SDG 8 and promote sustainable economic growth in Iran.

# AIM 13 QUALITY TRAINING /EDUCATION

We support education and training in underserved areas, empowering communities and employees while contributing to SDG 4.



## **AXIS 4: ECONOMIC & SOCIAL DEVELOPMENT**













At PEDC, Economic and Social Development is a cornerstone of our mission to foster sustainable operations and promote prosperity across Iran. This axis underscores our commitment to integrating social responsibility into our business practices, ensuring that our role as a leading private energy company contributes to equitable progress for our people, local communities, and the nation's broader society. Our strategy is guided by four interconnected aims: Health and Welfare, Local Community Stewardship, Value Locally/Domestically, and Training/Education. These priorities align directly with key United Nations Sustainable Development Goals, including SDG 1 (No Poverty), SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 16 (Peace, Justice and Strong Institutions), and SDG 17 (Partnerships for the Goals). Through these efforts, we aim to create long-lasting positive impact that extends well beyond our operational footprint.

## NAVIGATING THE GLOBAL & REGIONAL CONTEXT

The global energy sector is tasked with advancing economic and social development, as outlined in the United Nations Sustainable Development Goals, while addressing challenges like energy transition in regions like Iran, where economic sanctions, an energy deficit, and reliance on fossil fuels a profitable driver of the national economy shape the operating landscape for companies like Pasargad Energy Development Company. These dynamics necessitate workforce retraining and support, ensuring sustainable employment in our operations across upstream exploration, midstream pipelines, downstream refineries, petrochemical plants, and power generation.

Our operations in Iran's energy sector have significant impacts, both directly and indirectly, on local communities and the national economy. This commitment manifests through initiatives such as supporting local workforce employment and fostering community well-being through health and welfare programs for employees, contractors, and their families. We engage with local communities to address their needs, promote equitable access to quality education—particularly in underserved areas—and drive economic growth by prioritizing local suppliers and fostering a competitive domestic supply chain. We also invest in infrastructure and community development projects that create long-term benefits beyond our operational footprint. These actions help strengthen local capacity and resilience. These efforts ensure that our operations not only fuel Iran's energy needs but also empower communities, enhance social equity, and contribute to sustainable economic progress.













Equally critical is our responsibility to serve communities in underprivileged regions near our sites, such as Qeshm Island and Chabahar, where expectations for improved quality of life through jobs, infrastructure, education, and healthcare are high. proactive engagement, Through stakeholder expectations and align our initiatives, like gainful employment, cultural and educational programs, improving community infrastructure which foster socials equity and economic progress, contributing to Iran's sustainable development in harmony with global goals.



### PEDC'S STRATEGIC ROLE IN ECONOMIC AND SOCIAL DEVELOPMENT













As a leading private energy company in Iran, PEDC drives economic and social development by integrating social responsibility into our operations, fostering sustainable prosperity for our workforce, local communities, and the nation. Our strategic approach is anchored in robust governance and a commitment to impactful initiatives across our operations, from upstream exploration to power generation. We prioritize employee well-being through comprehensive remuneration, benefits, and training programs, including supplementary medical insurance, annual health screenings, housing support, and workforce training to adapt to sustainable practices, ensuring a healthy, skilled, and motivated workforce that supports SDG 3 (Good Health and Well-Being) and SDG 8 (Decent Work and Economic Growth) while aligning with the global demand for a just energy transition. To empower local communities, particularly in underprivileged regions like Qeshm Island and Chabahar,

we engage proactively, allocating one percent of our consolidated operational income to cultural and educational programs and supporting local infrastructure, such as equipping schools and libraries. Our commitment to creating local value is evident in our policy to source 100 percent of general and service jobs from local workforces when possible and prioritize domestic suppliers, fostering economic resilience and aligning with SDG 8. Additionally, we advance quality education through partnerships with institutions like Sharif University of Technology and Amirkabir University, offering internships, site visits, and technological collaborations, contributing to SDG 4 (Quality Education). By embedding these initiatives into our operations and maintaining rigorous oversight through our Health, Safety, and Environment units, PEDC sets a high standard for sustainable development, strengthening Iran's socio-economic landscape while aligning with global sustainability goals.

## **OUR INTEGRATED APPROACH:** FOUR CORE AIMS









PEDC pursues economic and social development through four interconnected aims that embed social responsibility into our operations, fostering sustainable prosperity across Iran's energy sector. These aims address the needs of our workforce, local communities, and the national economy, aligning with global sustainability goals.

#### Aim 10 - Health and Welfare

We prioritize the physical, mental, and social well-being of our employees, and their families, regardless of contract type, recognizing that a healthy workforce drives sustainable performance. Through comprehensive benefits, we ensure a motivated and skilled workforce, contributing to SDG 3 [Good Health and Well-Being) and SDG 8 (Decent Work and Economic Growth).

#### Aim 12 - Creating Value Locally/Domestically

PEDC drives economic resilience by prioritizing local employment and domestic suppliers. Our policy to source general and service jobs from local workforces and procure materials from nearby markets we contribute to SDG 8 (Decent Work and Economic Growth), fostering sustainable economic progress in Iran.

### Aim 11 - Local Community Stewardship

We are committed to being a responsible neighbor, engaging proactively to address community needs and respect local cultures. By supporting infrastructure projects, and addressing environmental and health concerns, we enhance community well-being and foster trust, aligning with SDG 1 (No Poverty) and SDG 16 (Peace, Justice and Strong Institutions).

## Aim 13 - Quality Training/Education

We advance equitable access to education and training, particularly in underserved areas, by building schools and supporting educational infrastructure. These efforts empower both communities and our workforce to contribute to Iran's socio-economic progress and align with SDG 4 (Quality Education).



## **AXIS 4 - ALIGNMENT WITH** SUSTAINABLE DEVELOPMENT GOALS













Pasargad Energy Development Company strengthens Iran's socio-economic landscape through initiatives that align with the United Nations Sustainable Development Goals, fostering sustainable prosperity for our workforce, local communities, and the nation. We prioritize impactful, measurable actions that address local needs while promoting long-term national development. By integrating SDGs into our strategic planning, we ensure that our operations contribute to inclusive and resilient growth. Our efforts directly support the following SDGs:



SDG 1: Through local jobs and community projects like building schools in underserved areas, we help reduce poverty and promote inclusion.



SDG 3: Our comprehensive employee benefits, alongside community health initiatives, ensure the well-being of our workforce and their families.



SDG 4: By building schools near our operations and offering staff training, we enhance access to education and skills development.



SDG 8: Our policies prioritizing local workforce employment and domestic suppliers foster sustainable economic growth and decent work opportunities.



SDG 16: Proactive community engagement and respect for local cultures promote social cohesion and trust in the regions were we operate.



SDG 17: Collaborations with local communities and institutions to support educational and cultural programs strengthen partnerships for sustainable development.













#### AIM 10: HEALTH AND WELFARE

At PEDC, the health and welfare of our workforce, their families, and our valued colleagues, regardless of contract type, are central to our mission of fostering sustainable prosperity in Iran's energy sector. Aim 10 champions a healthy, empowered workforce, ensuring physical, mental, and social well-being drives operational excellence and societal progress.













Through a comprehensive welfare package, including medical insurance, health screenings, family support, and flexible work arrangements, we enhance performance and work-life balance. By upholding these standards across all contracts, we boost productivity and position PEDC as a leader in responsible energy production aligned with global sustainability goals.

## AIM 10: HEALTH AND WELFARE OUR STRATEGY FOR HEALTH AND WELFARE













Embracing a vision of sustainable prosperity, PEDC drives health and welfare through strategies that uplift our workforce and their families across Iran's energy sector. Our approach centers on two focus areas: Health Initiatives and Family Welfare, providing robust programs and comprehensive benefits to support employees and their families. These efforts empower our people, strengthen societal bonds, and advance our mission to transform energy and empower futures.



#### **HEALTH INITIATIVES**

PEDC promotes employee and family well-being with medical insurance, health screenings, and onsite specialist care regardless of contract type. This approach supports a healthier, more secure workforce across all levels of the organization.



#### **FAMILY WELFARE**

PEDC supports family's welfare with a comprehensive package of benefits including childcare subsidies, flexible work arrangements, and retirement benefits. These initiatives foster work-life balance and enhance family resilience.

## AIM 10: HEALTH AND WELFARE ALIGNMENT WITH GLOBAL GOALS

By championing health and welfare, PEDC contributes to a sustainable future, aligning with the United Nations Sustainable Development Goals to foster well-being and equity in Iran's energy sector. Through targeted health programs and family benefits, we ensure our workforce and their families thrive. Our efforts align with these key global objectives:

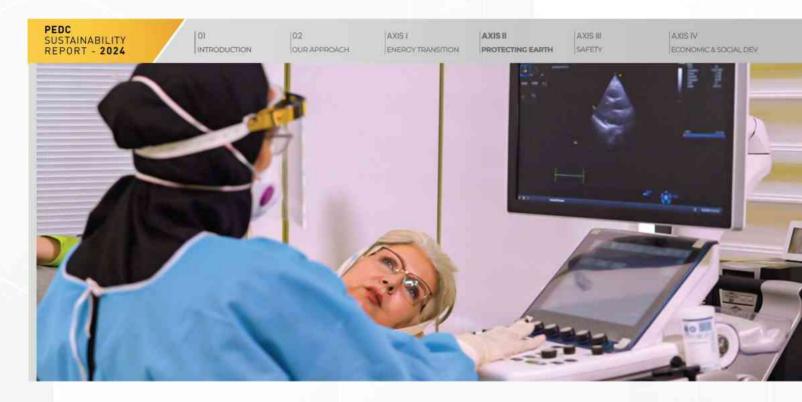


**SDG 3**: PEDC's medical insurance, annual health screenings, and onsite specialist care promote employee and family health. Family health initiatives, like screenings and vaccinations, reduce absenteeism and enhance societal well-being.

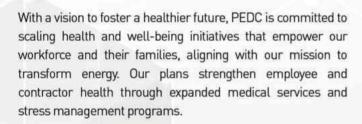


SDG 5: Flexible work arrangements and childcare subsidies support work-life balance, empowering women in our workforce. Inclusive policies and diverse leadership roles foster equitable opportunities, advancing gender equality.





### **OUR PLANS:** AIM 10: HEALTH AND WELFARE















We aim to support family welfare by expanding access to childcare and flexible work arrangements. These initiatives build on our existing programs to ensure comprehensive support for well-being. By investing in health and well-being, PEDC enhances resilience and productivity across our operations, supporting Iran's sustainable development.

#### Health Initiatives



PEDC is committed to advancing health initiatives to ensure comprehensive well-being, offering reassurance and peace of mind to employees across all contract types, including access for consultants based on engagement level. We plan to expand medical services across our operations, building on existing programs to enhance physical health group-wide.

Comprehensive health assessments will be provided to maintain workforce health, encompassing a range of diagnostic evaluations to support early detection and prevention. Company policy to supplement the national insurance scheme will provide robust coverage for medical services, ensuring access for employees and their families.

## Family Welfare



PEDC is dedicated to enhancing family welfare through comprehensive initiatives that provide reassurance for employees across all contract types, including select consultants. Our plans include expanded childcare assistance and flexible time-off policies, particularly supporting female employees with children. Financial stability will be reinforced through programs like housing and emergency loans, as well as Tamin Atieh fund shares with annual dividends.

Vacation programs using company accommodations in Nashtarud and Qeshm, along with hotel partnerships, will support meaningful family time. Wellness will be promoted through gym memberships, football tournaments, and nutritional support, complemented by personal allowances for clothing and holiday gifts. These efforts foster a healthy, resilient workforce and support PEDC's commitment to sustainability and employee retention.



#### **OUR ACTIONS:** AIM 10: HEALTH AND WELFARE

We've taken bold steps to boost the health and welfare of our workforce and their families, building a stronger, more motivated team across Iran's energy sector. Under Health Initiatives, we've expanded medical services, launched a digital health system for easier access to care, and empowered employees to take greater control of their well-being.













In Family Welfare, we offer childcare support, flexible time-off, financial assistance, and wellness perks to encourage balance. Shaped by employee feedback, these efforts have enhanced well-being and strengthened workplace unity. Empowering employees boosts retention, fosters belonging, and builds a motivated workforce essential to our sustainability.

#### **Health Initiatives**



Our people are central to PEDC's vision to transform energy and empower futures. In 2024, we deepened our commitment to their well-being through comprehensive health initiatives. At Nasim Salamat Center, our Golden Package assessments included complete blood tests, electrocardiograms for men, and women-specific care like mammograms and reproductive health support for those over 45. These screenings, paired with physician consultations and initial assessments like BMI, weight, and blood pressure, enabled early detection and personalized care.

Access to care became seamless with onsite specialists at Hamila and Pasargad headquarters cardiologists, orthopedists, gynecologists, dentists, psychologists, and more all available via an online booking system. Family members such as spouses and children could also visit these specialists directly or bring lab results on behalf of loved ones for medical advice.

Our digital health platform, with electronic records and a self-care system, streamlined healthcare and tracked vital metrics. Medications were delivered within 24 hours.

Mental health support grew through counseling and stress management workshops, fostering resilience. Group-wide occupational health screenings ensured workplace safety, while nutritionists developed tailored plans for cholesterol and liver health. Our supplementary medical insurance covered 90 percent of costs for hospitalization, surgeries, medications, preventive care, and vision including eyeglasses. Dental coverage was family-based and proportional to household size, usable collectively for examinations and treatments. Numerous medical claims were processed in 2024, alongside life, accident, and retirement coverage. Rooted in employee feedback, these efforts promote belonging and strengthen retention.

#### Family Welfare



At PEDC, we believe supporting family welfare is essential to building a resilient and dedicated workforce. Our benefits help employees balance professional and personal responsibilities, while ensuring long-term well-being for their families. To support working mothers, we offer monthly childcare allowances for children under six, easing parenting demands and enabling greater focus at work. Full-time employees and contractors benefit from flexible time-off policies, including 2.5 days of leave per month, up to 15 days transferable to the next year, and an extra week of vacation annually. In family emergencies, managers expedite leave approvals to protect work-life balance. Financial stability is supported through emergency, essential, and housing loans tailored to family needs. Employees receive Tamin Atieh shares via Pasargad Human Capital Investment Company, with PEDC covering 50% of the cost yielding dividends equal to 144% of monthly salaries.

In addition to the national pension system, we offer a supplementary retirement plan, term life and accident insurance, and a secondary life insurance policy-extendable to spouses, children, and parents at a subsidized rate. Each year, about 300 families stay at our vacation facilities in Nashtarud, and 55 families use our Qeshm accommodations. Hotel partnerships in Mashhad, Yazd, and Shiraz offer discounted vacation options. Wellness is supported through family-friendly activities like paintball and karting, while a sports stipend encourages family recreation.

Company meals are reviewed by nutritionists to ensure balanced diets. Seasonal offerings like Ramadan bonuses, Yalda gifts, and school supplies for employees' children foster connection at home. These initiatives have cultivated a positive, engaged workplace, as reflected in 76% organizational commitment and 78% employee satisfaction. By championing family welfare, PEDC enhances retention, builds loyalty, and supports sustainable growth.



## AIM 11 -LOCAL COMMUNITY STEWARDSHIP













At PEDC, we champion local community stewardship as a cornerstone of our mission to foster sustainable development for Iran's communities. Our sustainability approach prioritizes respect for cultural diversity, continuous engagement to meet local needs, support for organizations like the Autism NGO of Iran, promotion of educational access in underserved areas, and mitigation of environmental and health impacts. Operating throughout Iran in regions such as Qeshm, Chabahar, and Khuzestan, and supporting initiatives in areas like Ardabil and Qazvin, we view communities as vital partners, delivering solutions that foster resilience and equity.

Our commitment has earned Golden Social Responsibility Awards in 2023 and 2024, alongside recognition from the University of Tehran and the Society of Petroleum Engineers. By celebrating local traditions and supporting community programs and infrastructure, PEDC strengthens social cohesion, contributes to Iran's socio-economic landscape, and sets a standard for responsible stewardship, creating lasting positive legacies nationwide. These efforts also foster trust with local communities and stakeholders, reinforcing PEDC's role as a values-driven leader in the energy sector.

## AIM 11 -LOCAL COMMUNITY STEWARDSHIP STRATEGY













PEDC's strategy for community stewardship fosters sustainable development by addressing diverse needs across Iran. Through ongoing engagement, we deliver tailored solutions that boost resilience, equity, and vibrant local environments in regions like Qeshm, Chabahar, Khuzestan, and underserved areas like Ardabil and Qazvin, using environmental assessments and green spaces to enrich ecosystems.



#### COMMUNITY INFRASTRUCTURE

We enhance essential services and educational access in underserved areas, for example, through our school-building initiatives.



#### LOCAL EMPLOYMENT

We promote economic resilience, for example, through job creation and training, including agriculture and fishery projects, in operational regions.



#### SOCIAL-CULTURAL ENGAGEMENT

We foster social inclusion and cultural connection, for example, by working with NGOs and collaborating on community celebrations.



### AIM 11 - LOCAL COMMUNITY STEWARDSHIP ALIGNMENT WITH GLOBAL GOALS













PEDC's community stewardship initiatives advance United Nations Sustainable Development Goals, fostering sustainable development in Iran. Through local engagement, we empower communities in regions like Qeshm and Ardabil, driving resilience and equity. These efforts strengthen societal bonds and global sustainability priorities. By promoting renewable energy, environmental education, and inclusive economic opportunities, we help create long-term impact at the grassroots level. Our partnerships with local stakeholders ensure culturally relevant solutions that respect community traditions. Ultimately, PEDC aims to serve as a model for responsible development that aligns with both local needs and international sustainability frameworks.



SDG 1: Addressed through Local Employment, and creating sustainable jobs.



SDG 8: Supported by creating stable and reliable job opportunities for the local community.



SDG 16: Advancing equity through cultural engagement and support for underserved communities.



SDG 17: Advancing equity through cultural engagement and support for underserved communities.





SDG 2: Supported through Local Employment, where job creation enhances income and food security.



SDG 3: Backed by environmental assessments to mitigate and offset community impact.



SDG 4: Advanced by Community Infrastructure, for example, building schools in underserved areas.



SDG 5: Promoted through creating educational opportunities for both genders.



SDG 6: Supported by community infrastructure, such as providing clean water in Qeshm.



SDG 7: Indirectly supported via renewable energy and electricity generation using cleaner gas.



SDG 10: Indirectly supported via renewable energy and electricity generation using cleaner gas.



SDG 12: Supported by community interactions fostering responsible production in our operations.





## **OUR PLANS:** AIM 11 - LOCAL COMMUNITY STEWARDSHIP













PEDC is dedicated to fostering vibrant, resilient communities throughout our operations through strategic initiatives that empower local stakeholders. Our plans for local community stewardship build on our commitment to sustainable development, prioritizing meaningful engagement, cultural respect, and equitable growth, while continuously adapting to the evolving needs of each region.

By focusing on local community engagement, local employment, and community infrastructure, we aim to enhance well-being, reduce inequalities, and create lasting positive impacts. Through collaboration with subsidiaries and local partners, PEDC will implement scalable, community-driven solutions that align with PEDC's socio-economic goals and global sustainability standards, ensuring thriving communities for generations to come.

#### Local Community Engagement



PEDC is committed to fostering resilient, inclusive, and culturally rich communities through continuous and structured engagement with local stakeholders. Our engagement process with communities includes annual surveys, ongoing consultations, in-person meetings, questionnaires, and field studies. We also engage students through workshops and internships to support broader community alignment. These tools help us understand local perspectives and monitor how community feedback is reflected in our initiatives. Engagements are tracked through our stakeholder management and responsibility assignment matrices, ensuring that our initiatives remain aligned with both business objectives and community expectations. Through this engagement process, communities consistently express expectations around four key themes:

- Improving local living standards
- Investing in infrastructure that reflects our social responsibility
- Creating job opportunities for local populations
- Reducing negative environmental impacts in line with our 2nd axis

Many of these expectations are addressed in our sustainability planning, including infrastructure, employment, and environmental responsibility. PEDC plans to scale initiatives that support cultural heritage, such as local and religious ceremonies in Qeshm and Khuzestan, strengthening community ties. We proudly support the Autism NGO of Iran and continue contributing to inclusive programs that empower vulnerable groups. By integrating stakeholder feedback, PEDC ensures its social and cultural initiatives remain relevant, culturally sensitive, and aligned with sustainability goals.



## OUR PLANS: AIM 11-LOCAL COMMUNITY STEWARDSHIP (CONTINUED)













## **Local Employment**



PEDC is dedicated to fostering vibrant, resilient communities by prioritizing local employment across our operations. Our policy emphasizes sourcing workers from nearby communities wherever possible, promoting economic empowerment and social equity. When specialized expertise is not available locally, we recruit strategically from other regions to ensure project effectiveness while maintaining community cohesion. Building on established practices across our subsidiaries, we intend to expand localized hiring efforts to maximize job opportunities in operational areas. As part of our plan, we will develop and scale comprehensive training programs to enhance local skills and long-term employability, supporting sustainable livelihoods and reducing dependency on external labor, while also contributing to broader regional development.

We are also exploring opportunities to link our downstream capabilities with community-based job creation, particularly in sectors aligned with regional development needs. Sectors like aquaculture that drive regional growth.

Through continuous engagement with community stakeholders, PEDC will tailor employment strategies to local contexts, ensuring cultural sensitivity, respect for local traditions, and alignment with community priorities.

Ongoing assessment and community-driven feedback mechanisms will help us refine our approach over time, reinforcing PEDC's commitment to building thriving, self-sustaining communities through inclusive and impactful employment initiatives that reflect our broader socio-economic objectives and sustainability standards.

#### Community Infrastructure



PEDC is committed to supporting resilient and thriving communities in the regions where we operate. Our infrastructure planning is informed by EIAs, through which we identify, mitigate, and offset potential negative impacts on local populations. Our approach emphasizes enhancing access to essential services such as clean water, reliable energy, and education, especially in underserved areas. Electricity from our facilities supports national grid stability, and water initiatives improve local distribution systems. We promote inclusive infrastructure that supports long-term community development.

In select locations, green spaces are integrated into our project footprints to support ecosystem health and enhance local quality of life. PEDC's downstream capabilities inform our planning for sustainable infrastructure, including the potential use of products like geomembranes in community-level initiatives. These may support municipal water management and local job creation in sectors such as aquaculture, aligning industrial outputs with broader socio-economic and environmental goals. By engaging with communities throughout planning and implementation, PEDC ensures infrastructure efforts reflect local priorities.

## **OUR ACTIONS:** AIM 11 - LOCAL COMMUNITY STEWARDSHIP







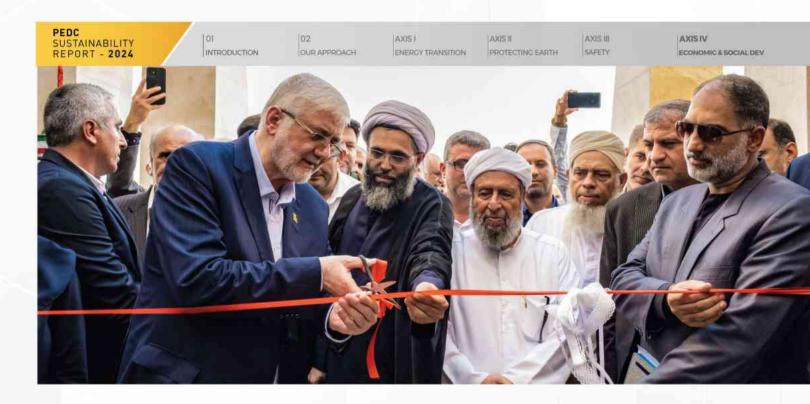






PEDC's commitment to community stewardship drives actions that empower communities across Iran. Through our subsidiaries, we provide engagement, employment, and infrastructure, turning strategic goals into measurable outcomes. In 2024, we reached nearly 6,000 stakeholders, expanding access to clean water, improving schools, and supporting inclusion programs for vulnerable groups.

Our group-wide policy prioritizes local hiring, reinforcing our role as a trusted community partner. In recognition of our sustained efforts, PEDC received the Gold Level MSR Award from the Iran Management Association in both 2023 and 2024. These initiatives reflect our dedication to collaboration, innovation, and inclusive development, creating lasting value for the regions we serve.



## OUR ACTIONS: AIM 11 -LOCAL COMMUNITY STEWARDSHIP (CONTINUED)













#### **Local Community Engagement**



PEDC's unwavering commitment to local community engagement drives inclusive, sustainable progress across Iran, empowering stakeholders through education, cultural respect, and transformative initiatives. In 2023, our Qeshm teacher training program equipped 15 educators with modern pedagogical tools, indirectly enhancing learning for 400 students and achieving a 90% satisfaction rate, strengthening educational foundations in underserved regions. In 2024, we engaged 90 students through facility visits, igniting curiosity and fostering collaboration to advance Aim 13's quality education objectives and build ties between youth and industry. Our enduring partnership with the Autism NGO of Iran continues to create profound impact. In 2023, we supported 150 individuals through financial aid, equipment, and the Windows Celebration, an autism awareness event where children's paintings were exhibited to showcase their talents and promote inclusion. In 2024, we directly aided 200 individuals and indirectly benefited 600 more through ongoing financial support, assistive technologies, and inclusive community events. We further strengthened this collaboration by purchasing Nowruz and Ramadan postcards from the NGO in 2023, extending their outreach and impact, while encouraging staff participation in awareness efforts. Our charitable contributions in 2024 reached 880 individuals, supporting organizations like Kahrizak, Mahak, Behesht Imam Reza, and Emad House, alongside charitable programs at Jamkaran Grand Mosque, addressing urgent social needs with compassion.

Support for Imam Reza Hospital improved access to critical healthcare services, enhancing local well-being and easing the burden on underserved families.

PEDC's environmental stewardship engaged communities through our 2024 "No Plastic Bottle" campaign, promoting sustainable behavior, and our group-wide bottle cap and battery recycling initiative with Nikan Charity, advancing recycling nationwide. Javid Energy Parto's blood donation drives supported local health needs, while Petro Danial Kish's tree planting, beach cleanups, and computer donations to underprivileged students combined ecological action with educational empowerment. Soroush Energy's procurement of gift bags from women-led households bolstered local economic resilience, creating income-generating opportunities in traditionally underrepresented sectors.

Through bi-monthly meetings with local leaders, periodic satisfaction surveys, and active participation in cultural events like Yalda celebrations and religious ceremonies, PEDC honors local traditions, building trust and cohesion. These initiatives, recognized by the Iran Management Association with Gold Level Management Social Responsibility Awards in 2023 and 2024, reflect PEDC's dedication to fostering vibrant, inclusive communities across Iran's diverse regions and setting a benchmark for private sector engagement in social development.



## OUR ACTIONS: AIM 11 - LOCAL COMMUNITY STEWARDSHIP (CONTINUED)













#### Local Employment



PEDC's steadfast commitment to local employment drives economic empowerment and sustainable progress across Iran, aligning with our strategic vision to uplift communities in the regions we serve. Our group-wide policy prioritizes hiring from local communities whenever possible, resulting in at least 70% of workers at our project sites being local. For example, in 2023 and 2024, Pars Behin Palayesh Qeshm employed 70% local workers for South Pars Phases 13 and 22-24, Javid Energy hired 80% locally, and Naftanir achieved 100% local staffing for South Pars Phase 19. These efforts provided stable livelihoods, fostering financial independence and strengthening community resilience, delivering on our goal to prioritize local economic inclusion.

Our group-wide policy of providing training to local employees fosters a skilled, self-reliant workforce, enhancing technical and professional capabilities across our operations. For example, in 2023 and 2024, Pars Behin Palayesh Qeshm and Javid Energy delivered training initiatives, equipping local talent to excel in complex energy projects.

These programs empower workers to contribute to regional development, supporting our strategic aim of fostering long-term economic prosperity through capacity building.

PEDC further strengthens local economies by engaging regional supply chains, stimulating small and medium enterprises. Pars Behin Palayesh Qeshm prioritized local procurement for South Pars operations, creating opportunities for local businesses to thrive. In 2024, Soroush Energy's sourcing of gift bags from women-led households empowered artisans, advancing economic inclusion and gender equity. By integrating local suppliers, we generate ripple effects that bolster community economies, aligning with our commitment to sustainable development.

Through local hiring, robust training, and regional sourcing, PEDC transforms communities by creating opportunities that resonate with our strategic goals. These actions cement our role as a catalyst for inclusive, prosperous economies across Iran's diverse regions, ensuring lasting impact where we operate.

#### Community Infrastructure



As a leading private energy company in Iran, PEDC drives transformative energy infrastructure projects, including solar power plants, conventional power facilities, combined heat and power systems for industrial zones, the IGAT6 pipeline, and upstream and downstream oil and gas operations. In parallel with these national-scale developments, PEDC also invests strategically in community infrastructure across underserved regions, advancing our vision of sustainable, resilient communities through improved education, healthcare, water access, and urban development.

In 2023 and 2024, we supported educational infrastructure by constructing and supporting, Zainabi School in Qeshm and Hoveizeh School in in Khuzestan, enhancing learning environments for local youth. We are also constructing Dar al-Funun Schools in Ardabil and Qazvin, as well as Sepehr and Jofir Schools, promoting equitable access to quality education in less advantaged areas. PEDC's Qeshm Movalled utility company, which produces electricity, steam, and clean water, played a vital role in improving water access in Qeshm Island, an area with low access to clean drinking water.

In 2023 and 2024, the company supplied freshwater to public water distributors, ensuring fair distribution to nearby villages and addressing critical water needs in the region. In Shahroud and Kalateh, PEDC advanced sustainable urban development using geomembrane-lined ponds, produced by our subsidiary Poly Ethylene Gostaran Alborz (PEGA). In Shahroud, these ponds supported a public park project by conserving limited water resources and preventing contamination from urban and hospital waste leachate from contaminating soil and groundwater, promoting green spaces. Similarly, in Kalateh, PEGA's geomembranes enabled effective water and waste management, contributing to sustainable city development. We continue to explore broader environmental applications for PEGA's products to enhance environmental stewardship. In healthcare, our 2023 and 2024 support for Imam Reza Hospital, including financial aid and medical equipment, improved access to vital medical services, improving community health outcomes. These community-focused initiatives, targeting underserved regions, lay the groundwork for long-term well-being and prosperity, reflecting PEDC's enduring commitment to inclusive, sustainable community progress.



## AIM 12 -CREATING VALUE LOCALLY/DOMESTICALLY













PEDC is committed to fostering sustainable prosperity by creating value locally and domestically through operations in Iran. Under Aim 12, we focus on building a strong economic ecosystem that empowers communities and reinforces national industries, complementing Aim 11's emphasis on local employment. This includes prioritizing local procurement and supply chains to support homegrown businesses and boost regional resilience.

By prioritizing local procurement and supporting knowledge-based companies to develop domestic alternatives to foreign equipment, PEDC addresses sanctions and ensures long-term sustainability. We aim to source 100% of general consumables locally, fostering innovation and self-reliance. These efforts build a competitive domestic supply chain, encouraging broader investment in Iran's potential and promoting lasting economic resilience.

## AIM 12 -OUR STRATEGY FOR CREATING VALUE













PEDC is dedicated to fostering a self-sustaining economic ecosystem that empowers local communities and strengthens Iran's domestic industries, building on the local employment foundation established in Aim 11, Local Community Stewardship. Our strategy for Aim 12, Creating Value Locally/Domestically, harnesses local procurement and innovative manufacturing to drive economic resilience and address sanctions, ensuring long-term sustainability. Our approach is guided by two key focus areas:



#### PROCURING FROM LOCAL PROVIDERS

PEDC prioritizes sourcing 100% of general consumable materials and services from local markets, stimulating small, medium enterprises, and local contractors, ensuring sustainable partnerships that boost regional economies.



#### SUPPORTING EQUIPMENT MANUFACTURERS AND DOMESTIC SERVICES/PRODUCTS

PEDC prioritizes sourcing 100% of general consumable materials and services from local markets, stimulating small, medium enterprises, and local contractors, ensuring sustainable partnerships that boost regional economies.

Through these focus areas, PEDC drives economic progress, empowering communities and setting a benchmark for sustainable development in Iran.



### AIM 12 - CREATING VALUE LOCALLY/DOMESTICALLY ALIGNMENT WITH GLOBAL GOALS













PEDC aligns its efforts to create value locally and domestically with the United Nations Sustainable Development Goals, fostering economic resilience and equitable progress across Iran. By prioritizing local procurement and supporting domestic industries, PEDC drives sustainable development that empowers communities and strengthens national capacity.





SDG 8: Local sourcing of materials and services boosts economic activity and regional growth.



SDG 16: Building a competitive domestic supply chain promotes inclusive economies and strengthens social trust.



SDG 17: Supporting domestic innovation and partnerships strengthens national tech and economic capacity.



SDG 1: Local procurement creates opportunities and helps reduce poverty in operational regions.



SDG 2: Local procurement boosts local economies reducing hunger in operational regions.



SDG 10: Prioritizing local suppliers drives equitable growth, especially in underserved areas.



SDG 11: Localized sourcing boosts regional economies and supports sustainable communities.

Through these contributions, PEDC advances sustainable economic progress, building a resilient, self-reliant future for Iran.

## **OUR PLANS:** AIM 12 - CREATING VALUE LOCALLY/DOMESTICALLY







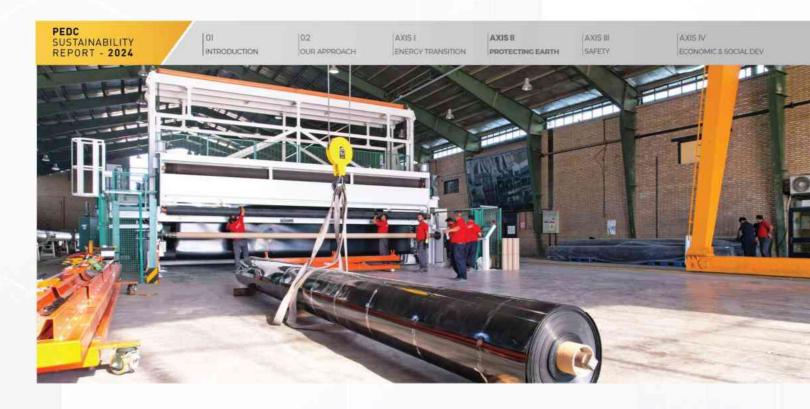






PEDC is committed to fostering a resilient economic ecosystem through strategic plans prioritizing local procurement and domestic industry support, building on efforts in Aim 11. Our vision for Aim 12, Creating Value Locally/Domestically, is to scale initiatives that empower communities and strengthen Iran's industrial capacity, addressing sanctions through sustainable, self-reliant solutions. PEDC aims to enhance supplier networks by sourcing 100% of general consumable materials from local communities.

simultaneously stimulating local economies and reducing greenhouse gas emissions from transporting goods. We will further invest in knowledge-based industries, supporting the development of domestic alternatives to foreign equipment through research and partnerships. By fostering innovation in areas like energy technologies and manufacturing, PEDC aims to drive economic growth, inspire national investment, and create lasting opportunities across Iran, aligning with our mission to deliver sustainable prosperity.



## OUR PLANS:(CONTINUED) AIM 12 - CREATING VALUE LOCALLY/DOMESTICALLY













#### Local Procurement



PEDC is dedicated to scaling its local procurement initiatives to foster vibrant, self-sustaining economies across Iran, reinforcing our commitment to Aim 12, Creating Value Locally/Domestically. Our group-wide policy, which prioritizes supporting small businesses, ensures 100% of general consumable materials and services are sourced locally. We plan to enhance supplier engagement by publishing targeted procurement advertisements to attract local providers, seeking quotes from them first, and expanding the search only if local options are insufficient, ensuring communities benefit economically. To empower small and medium enterprises,

we'll hold meetings and provide resources to enhance local suppliers' capabilities to meet our operational standards, fostering sustainable partnerships. This approach, coupled with partnerships for sourcing operational goods like construction materials and services from local contractors, empowers small and medium enterprises. These efforts stimulate local economies while reducing GHG emissions from transporting goods, addressing sanctions through reduced import reliance. By fostering long-term supplier relationships, PEDC aims to drive economic resilience and inspire broader adoption of local sourcing, creating a ripple effect of prosperity and sustainability nationwide.

#### Domestic Industry Development



PEDC is committed to advancing Iran's industrial landscape through strategic initiatives that promote innovation, self-reliance, and local value creation. Our approach focuses on three key areas: software development, efficiency improvement, and equipment manufacturing. In software development, we aim to design digital solutions that optimize industrial processes, enhance automation, and boost operational efficiency. This will be achieved through collaborations with Iranian universities and our in-house software subsidiary, strengthening national technological capabilities. To improve efficiency, PEDC is integrating innovative technologies to enhance asset performance and resource utilization.

Efforts grounded in targeted research and practical application contribute to process optimization and support the shift toward more sustainable, resilient industrial operations. Building on this, we are advancing equipment manufacturing by producing essential industrial components domestically. By supporting local manufacturers and research partnerships, we aim to reduce import reliance, mitigate the impact of sanctions, and build a resilient supply chain. These efforts drive economic growth, empower knowledge-based industries, and ensure long-term sustainability, positioning PEDC as a leader in shaping a competitive, environmentally responsible industrial future for Iran.



## OUR ACTIONS: AIM 12 - CREATING VALUE LOCALLY/DOMESTICALLY













PEDC has created value locally and domestically, through impactful initiatives empowering Iranian communities. Complementing Aim 11's employment focus, we prioritize sourcing materials and services, like operational supplies and contractor support, from local providers, boosting regional economies and reducing greenhouse gas emissions. We've engaged small enterprises through supplier development efforts, fostering resilient partnerships.

In domestic industry development, PEDC has advanced knowledge-based sectors, creating innovative technologies and import-replacing components via university collaborations. These actions mitigate sanctions, drive sustainable innovation, and strengthen economic resilience, establishing PEDC as a national model for local value creation. By bridging academic research and industrial application, PEDC accelerates the commercialization of homegrown solutions.

#### Local Procurement



PEDC has implemented a robust local procurement strategy to empower Iranian communities and strengthen economic resilience. Under our group-wide policy, 100% of general materials and services, including office supplies, construction materials, waste management, and contractor support, are first sourced from local markets across all operational regions. Our subsidiaries actively contribute to this commitment. For example, Pars Behin Palayesh Qeshm procures its office supplies, construction materials, and contractor services from local suppliers, reinforcing community ties and boosting the regional economy. Pezhvak Energy Pasargad engages local vendors for essential services like waste management, supporting sustainability. Naftanir focuses on small business engagement by sourcing materials and services from nearby markets, developing a competitive domestic supply chain.

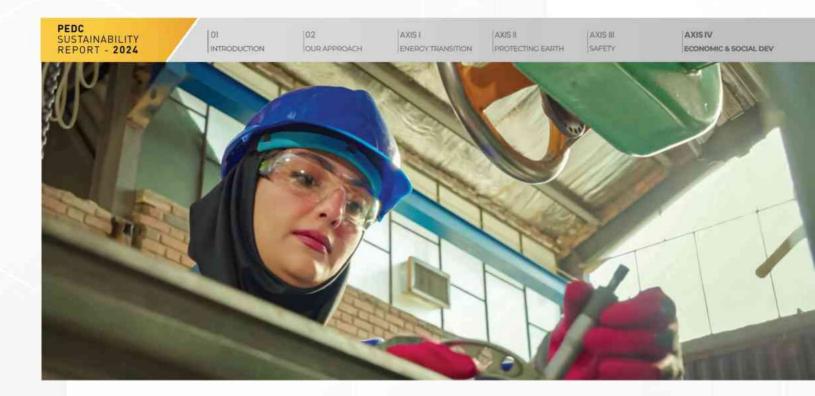
Seavan Tadbir Tejarat prioritizes local sourcing to reduce costs and enhance sustainability, while Shams Pasargad organizes training sessions and provides technical assistance to local suppliers to meet PEDC's standards. To support small and medium-sized enterprises (SMEs), PEDC has launched targeted procurement campaigns and prioritizes local quotes over external providers. We also conduct workshops to enhance suppliers' capabilities, ensuring they deliver high-quality services. These initiatives yield environmental and economic benefits. Local sourcing reduces transport-related greenhouse gas emissions. Economically, we stimulate local markets, create jobs, and drive regional growth. Additionally, this approach mitigates sanctions by minimizing imports, fostering a self-reliant supply chain. Through these efforts, PEDC contributes to regional development, sustainability, and value creation.

#### **Domestic Industry Development**



PEDC is advancing Iran's independence from foreign technologies and services through strategic progress in software, efficiency, and equipment manufacturing—complementing Aim 11's broader community initiatives. With unwavering confidence in Iranian ingenuity, we have developed transformative solutions that foster sustainability, resilience, and industrial progress. In software development, Retina MaintAssist, created by Engineering Support & Technology Development (ESTD), leverages Al-powered local technology for predictive maintenance, significantly reducing downtime in refining facilities. The Well Reservoir Facility Management (WRFM) system, developed with Sharif University, enhances natural gas recovery while replacing imported analytics platforms. The Intelligent Power Plant Condition Monitoring (IPCM) system, PEDC is advancing Iran's independence from foreign technologies and services through strategic progress in software,

Co-developed with Shams Pasargad and Sharif, ensures reliable operation at the Shariati Combined Cycle Power Plant using fully domestic infrastructure. The RETINA Black Oil Simulator, developed with Shiraz and Tehran Universities, optimizes reservoir performance at the Mansouri field, strengthening national modeling capacity and supporting long-term innovation. In efficiency improvement, automated solar panel cleaning robots, developed by Taban Energy Pasargad, enhance energy output at the Damghan solar plant, saving over 200 cubic meters of water annually. Taban's bifacial panel bases replace imported reflective coatings with a local calcium carbonate formula, achieving a 60% reflection coefficient at only 35 cents per square meter. These collaborative innovations not only reduce costs and water usage but also showcase the growing sophistication of Iran's domestic energy technology ecosystem.



## OUR ACTIONS:(CONTINUED) AIM 12 - CREATING VALUE LOCALLY/DOMESTICALLY













#### Domestic Industry Development(CONTINUED)



Taban has also deployed solar tracking systems that increase energy yield by more than 40%. In Sepehr-Jofeir, Pezhvak's corrosion-resistant material strategy and Amirkabir University's advanced hydraulic fracturing techniques replace foreign services, enhancing well productivity, lowering emissions, and supporting sustainable growth. In equipment manufacturing, despite an initial \$10 million cost burden due to early-stage failures, two Iranian firms successfully developed 10,000 PSI within-well completion equipment, replacing imported tools, flanges, and HIPPS systems Sepehr-Jofeir—a milestone in domestic engineering.

## AIM 13 -QUALITY TRAINING & EDUCATION

PEDC recognizes quality education as a cornerstone of sustainable development, empowering individuals and communities to thrive in a rapidly changing world. By equipping our workforce with advanced skills, we enhance PEDC's resilience and support employees' personal growth, enabling them to navigate global energy market volatility as we continuously enhance our training programs to meet global benchmarks of excellence. Our commitment includes supporting local communities, particularly in underserved areas near our projects, by expanding access to meaningful educational opportunities.

Petro Kala's drilling jars now replace foreign equivalents, increasing drilling efficiency. Pezhvak's completion fluid, developed in collaboration with the Research Institute of Petroleum Industry (RIPI), reduces costs by 50%, while logging and completion tools developed by Pezhvak and DEMICO fully substitute imported technologies. Together, these initiatives reduce reliance on foreign supply chains, mitigate sanctions, and reinforce Iran's industrial self-reliance and economic resilience. These advancements also stimulate domestic innovation, creating new opportunities for knowledge-based companies and skilled labor within the country.













We nurture the aspirations of young students, many of whom, in regions like Qeshm, are pursuing STEM education to uplift their families' livelihoods, fostering a culture of community pride and national progress that strengthens society and PEDC's sustainability. Through partnerships with leading universities, PEDC aligns academic learning with energy sector needs, investing in a robust pipeline of skilled professionals for Iran's energy future. These efforts advance economic resilience, promote sustainable development, and reinforce PEDC's role as a force for an inclusive, forward-looking future across Iran.



## AIM 13 - QUALITY TRAINING & EDUCATION OUR STRATEGY













PEDC is committed to advancing quality education as a foundation for sustainable development, fostering a resilient, inclusive future for Iran's communities and energy sector. Our approach empowers the workforce, uplifts underprivileged regions, and bridges academia with industry needs, ensuring long-term economic and social progress.

In underserved areas like Qeshm, we invest in transformative educational infrastructure and teacher training, nurturing students' ambitions to pursue STEM fields and improve family livelihoods, thereby strengthening local cultures and societal vitality. This strategy is underpinned by three focus areas:



## PERSONNEL TRAINING AND DEVELOPMENT

Equipping employees with advanced skills to enhance resilience and meet global energy sector benchmarks.



### LOCAL SCHOOL INFRASTRUCTURE AND TEACHER TRAINING

Building and enhancing educational facilities and teacher capabilities in underserved communities to empower future generations.



#### UNIVERSITY COOPERATION AND STUDENT DEVELOPMENT

Fostering industry-academia synergy to align education with energy needs and nurture future leaders.

These pillars drive PEDC's vision of a knowledge-driven, sustainable Iran, promoting economic vitality and global competitiveness.

## AIM 13 - QUALITY TRAINING & EDUCATION ALIGNMENT WITH GLOBAL GOALS













PEDC's pursuit of quality education through Aim 13 aligns with the United Nations Sustainable Development Goals, driving inclusive growth and resilience across Iran. By empowering our workforce and strengthening education in underserved communities, we create lasting societal and environmental impact.







**SDG 4:** PEDC delivers inclusive education through advanced employee training, modern school facilities in regions like Qeshm, and university collaborations that prepare future energy leaders.



**SDG 1**: By nurturing STEM aspirations and job-ready skills in underserved areas, PEDC enhances livelihoods, reducing economic disparities



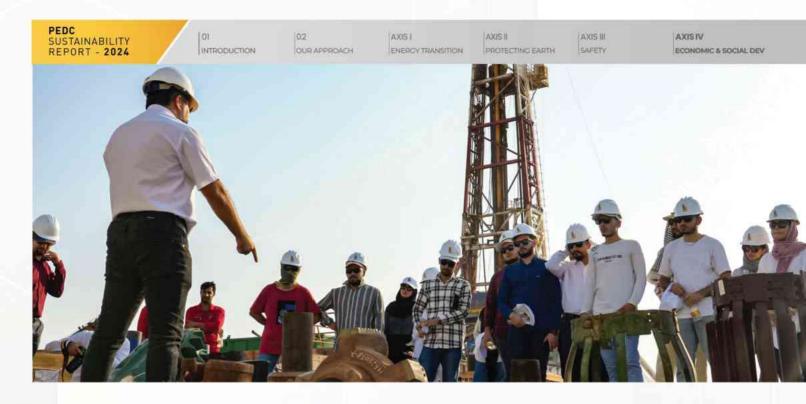
**SDG 2**: Education initiatives improve access to stable employment, supporting food security through enhanced community prosperity.



**SDG 12**: Workforce training promotes sustainable energy practices, fostering efficient resource use across operations.



**SDG 13:** University partnerships and awareness programs cultivate climate-conscious innovation, equipping communities for a sustainable future.



## **OUR PLANS:** AIM 13 - QUALITY TRAINING & EDUCATION













PEDC's plans for advancing quality education reflect our dedication to sustainable development, empowering communities and strengthening Iran's energy sector. We aim to scale workforce training programs to align with international benchmarks, ensuring employees thrive in dynamic global markets. In underserved regions like Qeshm, we will enhance educational infrastructure and support teacher training to foster equitable access to transformative learning, inspiring students toward STEM fields and better livelihoods.

Through deepened university collaborations, we plan to align academic curricula with industry needs, cultivating a skilled, innovative talent pipeline for sustainable energy solutions. These efforts drive economic resilience, promote sustainable development awareness, and establish PEDC as a leader in educational equity and excellence, both nationally and within the energy sector. In the following sections, we will outline our strategies, policies, and plans to achieve these transformative goals.

#### **Personnel Training and Development**



Personnel training and development is a core strategic focus at PEDC, driven by a unified approach that advances both organizational excellence and individual growth. In the face of a rapidly evolving energy sector, we are building a future-ready workforce through a balanced approach that integrates core training, emerging skills, and structured career progression.

Our group-wide system is anchored in position-based training matrices that define essential competencies while remaining adaptable to new skills aligned with technological change. This consistent structure across subsidiaries supports coordinated learning efforts that scale to meet global benchmarks and close capability gaps. Training is closely linked to performance assessment and career planning. By identifying individual strengths, gaps, and goals, we design learning paths that help employees progress toward new roles and leadership positions.

This supports both internal mobility and working viability within PEDC and the broader labor market. Our approach blends structured instruction with virtual workshops, seminars, and digital learning tools to increase access and engagement. These are reinforced by experiential learning, mentoring, and coaching, promoting deeper understanding, peer learning, and continuous improvement. Future-focused areas such as artificial intelligence, data literacy, and digital operations are being integrated into our programs. Pilot initiatives are launched selectively and scaled based on measurable impact and employee feedback. This evolving framework reflects PEDC's commitment to workforce empowerment. By aligning learning with performance and creating clear pathways for growth, we are preparing our employees to lead in a knowledge-driven, sustainable energy future.



## OUR PLANS : (CONTINUED) AIM 13 - QUALITY TRAINING & EDUCATION













#### **Local School Infrastructure and Teacher Training**



PEDC's strategic plans aim to empower underserved communities by enhancing access to quality education through strengthened school infrastructure and teacher development. We are committed to developing modern, well-equipped educational facilities in regions such as Qeshm, prioritizing sustainable construction and digital integration to foster inclusive and future-ready learning environments. To ensure effectiveness and alignment across initiatives, we will establish group-wide standards that promote consistency, scalability, and responsiveness to community needs. Alongside infrastructure, we are investing in teacher capacity through comprehensive professional development programs that emphasize STEM education, instructional innovation, and long-term career growth. These programs, supported by targeted workshops, mentoring, and digital learning tools, are designed to improve teaching quality and build resilient, high-impact educators. By empowering teachers, we ensure that investments in infrastructure translate into meaningful, lasting improvements in student outcomes.

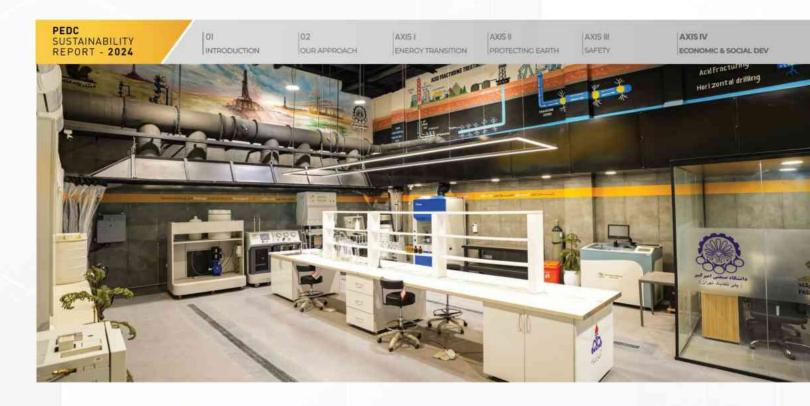
We recognize that strong teachers are central to student success, and our approach integrates both pedagogical training and continuous support to sustain their effectiveness over time. Our efforts are grounded in close collaboration with local education authorities, enabling us to tailor programs to the specific needs of each community and measure success through impact assessments and feedback mechanisms. In parallel, we will explore opportunities to connect school initiatives with broader workforce development goals, helping students bridge the gap between education and meaningful employment. With these initiatives, PEDC will become a positive catalyst for the upward mobility of less advantaged communities that we operate near too. This commitment not only uplifts individuals but also fosters long-term socioeconomic development across regions. By aligning educational outcomes with industry needs, we lay the foundation for a more inclusive and resilient national workforce.

#### **University Cooperation and Student Development**



PEDC's strategic efforts in university cooperation and student development are designed to bridge academic potential with industry needs, cultivating talent and strengthening the future of Iran's energy sector. One of our core priorities is investing in university laboratories that align with our operational focus areas including advanced drilling, Al-driven solutions, and digital innovation, and sustainable energy technologies. These labs will serve as hubs for collaboration, enabling universities to conduct relevant research while enhancing PEDC's own technological and process capabilities. At the same time, they will enrich the academic experience by giving students access to modern equipment, helping them build the skills and mindset needed for innovation in the energy industry. This initiative also fosters knowledge exchange between academia and industry experts, accelerating problem-solving and applied learning. Ultimately, it lays the foundation for a self-reliant, future-ready energy ecosystem rooted in local expertise and innovation. In parallel, we are expanding internship programs and on-site learning opportunities across our operations.

Through structured visits to production facilities, renewable energy sites, and technical centers, students will gain direct exposure to real-world processes and challenges. These experiences aim to deepen interest in the sector, provide valuable hands-on learning, and help identify promising talent for future employment across the PEDC group. Mentorship, student forums, and continuous engagement will further support career development and strengthen the connection between education and workforce readiness. By building strong, practical links between universities and industry, PEDC is helping shape a new generation of skilled professionals empowered to lead in a dynamic and sustainable energy future. These initiatives also promote early professional confidence, encouraging students to pursue impactful careers in the energy sector. Over time, this approach will create a resilient, innovation-driven talent ecosystem that meets evolving national and global energy demands. while reinforcing PEDC's long-term competitiveness.



## **OUR ACTIONS:** AIM 13 - QUALITY TRAINING & EDUCATION













PEDC's actions transform our strategic vision for quality training and education into concrete, measurable outcomes, empowering employees, communities, and students to thrive in a sustainable energy future. By implementing targeted initiatives, we will enhance workforce skills, strengthen educational infrastructure, and deepen university partnerships, driving working viability across underserved regions, while fostering long-term national capacity.

These efforts, guided by data-driven assessments and stakeholder collaboration, will deliver impactful results, from advanced training programs to modernized schools and industry-aligned student opportunities. Our commitment to quality education reinforces PEDC's leadership in fostering equitable access and sustainable progress. In the following, we will describe our actions that we aspire to achieve our aims, ensuring a knowledge-driven energy sector.

#### Personnel Training and Development



PEDC is dedicated to strengthening workforce capabilities to lead the sustainable energy transition. We've increased annual training to 38 hours per employee, approaching global benchmarks of 40-50 hours, through a standardized skill-based model across subsidiaries. This model defines job roles, identifies competencies, conducts gap assessments, and creates a training matrix for personalized development plans. Competency-based performance reviews, fully implemented at headquarters, are expanding to subsidiaries, enhancing performance, career mobility, and alignment with strategic goals. Experiential learning, mentoring, and coaching programs foster succession planning and leadership growth, preparing future leaders to navigate evolving industry challenges. Successful initiatives, like Pezhvak's 6,000 specialized training hours and Arman Pasargad's quarterly evaluations, are scaled group-wide to boost workforce readiness, while promoting a culture of continuous learning.

To align with global standards, PEDC leverages online platforms for high-quality, accessible training. Five specialized virtual workshops have been conducted to build expertise in emerging energy technologies:

- •Smart Well Monitoring for Asphaltene Management: Led by Dr. Vahid Taghikhani, this session introduced proactive monitoring technologies and smart well solutions for managing asphaltene formation.
- ·Digital Rock Technology: Dr. Mohammad Sharifi discussed digital rock analysis, Al applications in reservoir characterization, and associated technical challenges.
- Engineering Applications of Artificial Intelligence: Dr. Shahab Mohaghegh explored Al-driven modeling of physical systems, engineering problem-solving, and Al-focused training frameworks.



## OUR ACTIONS: AIM 13-QUALITY TRAINING & EDUCATION (CONTINUED)













#### Personnel Training and Development (CONTINUED)



- •Electrification of Global Industry: Professor Jamal Chaouki from Polytechnique Montréal addressed industrial decarbonization strategies and hydrodynamic modeling for rotary fixed bed reactors.
- •Digital Twins in the Oil and Gas Industry: Dr. Hooman Fotoohi presented the concept of digital twins, shared implementation challenges and benefits, and illustrated insights through a case study.

Virtual AI and machine learning courses teach fundamentals, large language models, and tools like PyTorch, Scikit-learn, and BERT for practical applications. The weekly Top Management Forum, a 4-hour expert-led roundtable, sharpens strategic leadership.

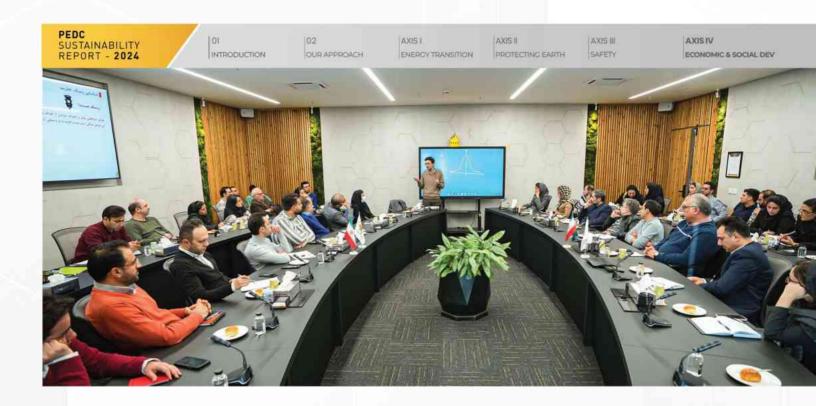
Leadership development includes a sustainability training for senior leaders and CEOs, covering global trends, case studies, and decision-making frameworks. A two-day training for Sustainability Liaisons across subsidiaries embeds responsible practices. All programs are evaluated through feedback, performance metrics, and needs assessments, ensuring continuous improvement. PEDC's initiatives empower our workforce to drive innovation, resilience, and sustainability, solidifying our leadership in the energy sector. These trainings also cultivate a shared sustainability mindset across all organizational levels, aligning daily operations with long-term strategic goals. As a result, PEDC is building a culture where environmental and social responsibility are integral to business success.

#### Local School Infrastructure and Teacher Development



PEDC empowers underserved communities through quality education. In areas like Qeshm, we invest in modern school infrastructure and teacher development, aligning with local needs to foster inclusive learning and resilient educators for equitable opportunities across Iran. Our commitment is evident in key infrastructure projects. In Qeshm, the Zeinabi School, completed in five months, serves 420 students with smart classrooms and modern facilities. In 2023, we added a facility building; in 2024, we equipped the library and upgraded the playroom with educational materials to support early learning. Nationwide, the Daralfonoon Ardabil School, completed in under 10 months, offers 30 classrooms, sports facilities, and labs on a 10,000-square-meter campus for 200 students. In Qazvin, a Daralfonoon school is under construction on a 6,000-square-meter site with 18 classrooms and similar amenities. In Hoveizeh, PEDC and Bank Pasargad completed the Pasargad Smart School in 2023, serving 120 students with smart boards and computer labs. We also donated school supplies and school equipment for 500 students across operational regions in 2022.

Teacher empowerment is central to our approach. In 2022, we launched a training program in Qeshm with Rahyar Academy for Zeinabi's elementary teachers. Expanded island-wide, it served 70 teachers, administrators, and staff across six cycles from 2022 to 2023, focusing on Farsi, Science, Math, classroom management, and inquiry-based learning, with over 90% satisfaction. Relaunched in 2024, the program plans further expansion. PEDC's university interns have also volunteered as teachers, bringing fresh perspectives to classrooms and fostering meaningful community engagement. In 2024, we partnered with the Chemical Engineering Association for a STEM program at Pasargad School in Qeshm, co-developed with local educators. PEDC's integrated infrastructure and training focus builds futures, driving quality education across Iran. By scaling proven models, partnering with community stakeholders and local authorities, and innovating, we strengthen STEM skills, ensure equitable access, and support communities' upward mobility. These efforts not only address immediate educational needs but also lay the groundwork for long-term societal resilience. Through ongoing collaboration, we aim to replicate these successes in other underserved regions.



## OUR ACTIONS: AIM 13-QUALITY TRAINING & EDUCATION (CONTINUED)













#### University Cooperation and Student Development



PEDC bridges academic talent and industry needs through strategic university partnerships, student-focused initiatives and campus infrastructure investments, cultivating tomorrow's energy leaders skilled in advanced drilling, Al-driven solutions, digital innovation and sustainable technologies.

At Amirkabir University of Technology, PEDC reconstructed the Fracturing Process Design Laboratory and established the Pasargad Energy Fracturing Process Design Specialized Lab, where students and PEDC engineers collaborate on hydraulic fracturing techniques. In collaboration with Sharif University of Technology, we established the WRFM Center at our corporate headquarters, applying advanced reservoir analytics and Al for optimized gas extraction with lower environmental impact. In partnership with Shiraz University, we developed the Black Oil Retina Simulator, a sophisticated software tool for oil-field management and Al-driven scenario testing. These initiatives not only enhance PEDC's operational capabilities but also immerse students in cutting-edge research and practical innovation through close collaboration.

Our flagship internship program engages 72 top students from Tehran's leading universities in upstream and downstream operations, renewable sites and technical centers, while scientific tours and site visits connect theoretical knowledge with real-world processes.

Ongoing mentorship programs and student forums provide career guidance, networking opportunities and sustained engagement, helping us identify and develop future talent. Through educational memoranda with Sharif and Amirkabir universities, PEDC formalizes joint research and curriculum development. Co-hosted seminars and practitioner-led courses bring industry expertise directly into the classroom, and the WRFM training course, providing 1,200 hours of instruction to students, industry stakeholders and PEDC staff, delivers hands-on reservoir management skills. Collaborative research projects with Tehran University on drilling-time analysis in Iran-Iraq shared fields and with the Research Institute of Petroleum Industry on completion fluid quality evaluation offer applied research tied to operational excellence.

In a standalone but impactful project, PEDC contributed to the construction of Khatam University's new campus by handling excavation, foundation and structural work for the agriculture faculty building. This effort strengthens higher-education infrastructure and indirectly supports student development by improving access to modern facilities. By equipping advanced labs, expanding internships, deepening academic partnerships and enhancing campus infrastructure, PEDC is shaping a generation of energy professionals ready to lead Iran's transition to a dynamic, sustainable future.















PEDC SUSTAINABILITY REPORT - 2024

AXIS 4: SNAPSHOT





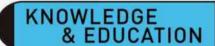








PEDC 2024 SOCIAL & HUMAN CAPITAL PERFOMANCE







1200 HRS OF **WRFM TRAINING** 



**500** ACADEMIC **SCHOLARSHIPS** 



72 STUDENT INTERNS



**TEACHERS TRAINED** 



> 200 MILLION USD **INVESTED IN** KNOWLEDGE-BASED **INITIATIVES** 

# COMMUNITY IMPACT & INFRASTRUCTURE





4 SCHOOLS CONSTRUCTED



880 INDIVIDUALS REACHED THROUGH CHARITABLE CONTRIBUTIONS IN 2024 (GROUP-WIDE)



100% GENERAL CONSUMABLE MATERIALS & SERVICES SOURCED LOCALLY(GROUP-WIDE POLICY)



17,940 M2 **EDUCATIONAL FACILITY CONSTRUCTED** 



200 CHILDREN/ADULTS SUPPORTED WITH AUTISM



~6,000 STAKEHOLDERS ENGAGED IN 2024 (GROUP-WIDE)

# WORKFORCE & DIVERSITY





10% WOMEN 90% III MEN



14% WOMEN . 86% MEN

TOTAL WORKFORCE COMPOSITION (GROUP)

**MANAGEMENT COMPOSITION (HEADQUARTERS)** 



30% WOMEN I 70%



75% ORGANIZATIONAL COMMITMENT SCORE

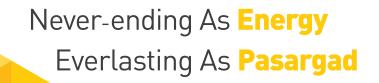
WORKFORCE COMPOSITION (HEADQUARTERS)





Al	Artificial Intelligence				
ALARP	As Low As Reasonably Practicable				
APETDC	Arman Pasargad Energy Technologies Development Company				
BCE	Before Common Era				
BERT	Bidirectional Encoder Representations from Transformers				
BOD	Board of Directors				
BOT	Build Operate Transfer				
BP	British Petroleum				
CBAM	Carbon Border Adjustment Mechanism				
CCPS	Center for Chemical Process Safety				
CCS	Carbon Capture & Storage				
CCUS	Carbon Capture, Utilization & Storage				
CEO	Chief Executive Officer				
CHP	Combined Heat & Power				
CMMS	Computerized Maintenance Management System				
COP	Conference of Parties'				
CSR	Corporate Social Responsibility				
DEMICO	Design Engineering Manufacturing Company				
DOE	Department of Enviroment				
E&P	Exploration & Production				
EFQM	European Foundation for Quality Management				
EIA	Environmental Impact Assessments				
EJ	ExaJoules				
EPC	Engineering Procurement Construction				
ESTD	Engineering Support & Technology Development				
EUR	Euro				
FGR	Flare Gas Recovery				
GDP	Gross Domestic Product				
GHG	Green House Gas				
GRI	Global Reporting Initiative				
HAZID	Hazard Identification				
HAZOP	Hazard & Operability				
HIPPS	High Integrity Pressure Protection System				
HQIMDC	Hengam Qeshm Industrial Mobilization & Development Company				
HSE	Health, Safety & Environment				
HVAC	Heating, Ventilation & Air Conditioning				
IACHE	Iranian Assoication of Chemical Engineering				
IFMA	Iranian Financial Management Association				
IGAT	Iran Gas Trunkline				
IMA	Iranian Management Association				
IOGP	International Association of Oil & Gas Producers				
IOT	Internet of Things				
IPC	Iranian Petroleum Contract				
IPCM	Intelligent Power Plant Condition Monitoring				
IRENA	International Renewable Energy Agency				
IPIECA	International Petroleum Industry Environmental Conservation Association				
IS0	International Organization for Standardization				

JEPCO	Javid Energy Pasargad Company					
KPI	Key Performance Indicator					
LED	Light Emitting Diode					
LOPA	Layers of Protection Analysis					
LPM	Loss Prevention Material					
MC	Managing Contractor					
MOS	Mobile Oil Seperator					
MPFM	Multi-Phase Flow Meter					
MSR	Management Social Responsibility					
MTU	Motoren- und Turbinen-Union					
MW	Mega Watt					
NEBOSH	National Examination Board in Occupational Safety & Health					
NGO	Non Governmental Organization					
NGS	Niroo Gostar Sirjan					
NIGC	National Iranian Gas Company					
NIOC	National Iranian Oil Company					
0&M	Operation & Maintenance					
OMS	Operations Management System					
PDC	Polycrystalline Diamond Compact					
PDK	Petro Danial Kish					
PEC0	Pezhvak Energy Pasargad Company					
PEDC	Pasargad Energy Development Company					
PEGA	Poly Ethylene Gostaran Alborz					
PEKA	Petro Kala Pasargad Kish					
PKOK	Petro Kariz Omid Kish					
PSI	Pounds per Square Inch					
PSM	Process Safety Management					
PSSR	Pre-Startup Safety Review					
PV	PhotoVoltaic					
QR CODE	Quick Response Code					
R&D	Reasearch & Development					
RBI	Risk Based Inspection					
RBPS	Risk Based Process Safety					
RIPI	Research Institute of Petroleum Industry					
SASB	Sustainability Accounting Standards Board					
SCID	Sina Chemical Industry Development					
SDG	Sustainable Development Goals					
SEPID	Soroush Energy Paydar Industry Development Company					
SIL	Safety Integrity Level					
SME	Small & Medium Sized Enterprise					
SPE	Society of Petroleum Engineers					
SRP	Sucker Rod Pumps					
STEM	Science, Technology, Engineering and Mathematics					
TFEC	Total Final Energy Consumption					
UNESCO	United Nations Educational Scientific & Cultural Organization					
WRFM	Well Reservoir Facility Management					
ZLD	Zero Liquid Discharge					





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