Welcome to Mubadala Petroleum’s inaugural Sustainability Report, covering our activities and performance in 2019. The information included in the report focuses primarily on our head office in the United Arab Emirates, and our operations in Thailand, Indonesia and Malaysia.

The information in this report was prepared and confirmed through a rigorous process, including review by relevant departments and support from external sustainability consultants. All health, safety, environment and quality information is supported by verification during periodic internal audits.

This report has been prepared in accordance with the GRI Standards: Core option. As recommended by these guidelines, our report discloses information on the specific topics that are most material to our organization and our stakeholders. The GRI table is provided on page 65.

The report contains a detailed discussion of the material issues that could affect our ability to create value in the short, medium or long-term. A listing of these topics is provided on page 18.

Cautionary Message
This report contains statements that may be deemed as “forward-looking statements” that express the way in which Mubadala Petroleum intends to conduct its activities. Forward statements could be identified by the use of forward-looking terminology such as “plans”, “aims”, “assumes”, “continues”, “believes”, or any variations of such words that certain actions, events or results “may”, “could”, “should”, “might”, “will”, or “would” be taken or be achieved.

Mubadala Petroleum has made every effort to ensure that this report is as accurate and truthful as possible. However, by their nature forward-looking statements are qualified to inherent risks and uncertainties surrounding future expectations that could cause actual results to differ materially from those projected or implied statements. Such statements are subject to risks that are beyond Mubadala Petroleum’s ability to control and therefore do not represent a guarantee that events implied in these forward-looking statements will actually occur.

For feedback and suggestions on our Sustainability Report, please write to us at:

- e: sustainability@mubadalapetroleum.com
- a: Al Maryah Island, Abu Dhabi Global Markets Square, Al Maqam Tower: 28 Floor PO Box 4887, Abu Dhabi, United Arab Emirates

www.mubadalapetroleum.com
As Chairman of Mubadala Petroleum, I am honored to welcome you to the company’s inaugural Sustainability Report.

Across the Mubadala Group, we aim to generate sustainable financial returns for our shareholder, the Government of Abu Dhabi, while also growing our business and conducting our operations to world class standards.

At Mubadala Petroleum, we are driven by our values of Accountability, Integrity, Inspiration and Partnership. We are inspired by the principles of the UAE’s Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan, who strongly believed in human development, sustainability and respecting all mankind. Therefore, we take a responsible role in protecting the health and safety of all those associated with our operations, carefully managing our impact on the natural environment and contributing to the long-term, sustainable development of the communities where we operate.

Our community investment programs and projects, undertaken in the countries in which we operate, focus on education and training, community development, and stakeholders for their genuine support that led to such a great performance in 2019. 2020 has started with some very significant challenges. Nevertheless, Mubadala Petroleum has already shown its commitment to supporting its local communities and ensuring its business remains resilient through a rapid and significant response to COVID-19 and some challenging market conditions. Our values will remain our compass and will navigate us through challenges and towards sustainable financial achievements in the future.

Our goal of sustainable growth requires everyone’s devotion to continuous improvement and excellence. Therefore, I want to express my gratitude to Mubadala Petroleum’s employees and stakeholders for their genuine support that led to such a great performance in 2019.

We will continue delivering sustainable financial performance and maintaining operational excellence as we continue to grow in the coming years. Our strategy will navigate us through challenges and towards sustainable financial achievements in the future.

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It is a great pleasure to be presenting Mubadala Petroleum’s very first Sustainability Report. This report features the remarkable achievements of last year and our sustainability performance in various aspects: health and safety, governance, environment and community development.

2019 was a very successful year for Mubadala Petroleum. We achieved many milestones and strong results against our Key Performance Indicators (KPIs) that demonstrate our operational excellence and sustainable financial performance, and, in turn, contributed to Mubadala’s performance overall.

In line with our strategy and with the global transition towards lower carbon emitting fuels, we have become a more gas-based company. While we continue to invest in low cost oil, more than two-thirds of our working interest production is already coming from natural gas. Our focus in the years to come will therefore be on material gas assets, with targeted investments in low-risk oil projects, driving a long-term self-sustaining business.

We build our success on strong capabilities, combining significant operational experience with substantial technical expertise and commercial acumen. This is coupled with our commitment to developing the next generation of young talent and local nationals across our operations. An example of this commitment in action is the various internship programs and training initiatives we offer for new graduates who are interested in the oil and gas industry, providing them with career opportunities post-university.

We believe that innovation plays an imperative role in our preparedness for the future and in maintaining sustainable financial performance. As such, we always welcome new ideas and recognize our people for creative thinking. While dedicating our efforts towards ground-breaking projects, we maintain a keen focus on operational excellence. Deploying new technologies and processes will continue to be the key driver to achieve greater productivity and optimize our cost efficiency.

In light of the most recent challenges that we face as a result of the COVID-19 pandemic, it is imperative that we continue developing innovative ways to maintain the well-being of Mubadala Petroleum and its stakeholders, while ensuring the company’s long-term performance remains on a sustainable path. I would like to take this opportunity to thank everyone who has contributed to our progress and accomplishments over the last year. I look forward to building on these successes, upholding our values of Integrity, Accountability, Partnership and Inspiration as the core of our business while preparing for the challenges that lie ahead.

Dr. Bakheet Al Katheeri
Chief Executive Officer
Mission and Values

Mission
To be Abu Dhabi’s strategic international upstream oil and gas company, delivering sustainable financial performance through an optimized portfolio of exploration, development, and producing assets.

Our Values

Integrity
We are committed at all times to do the right thing, the right way.

Partnership
We build strong stakeholder relations and work as a team, internally and externally.

Accountability
We are responsible for our actions individually and as a company.

Inspiration
We continuously strive to excel in our execution.

Mubadala Petroleum is a leading international upstream oil and gas exploration and production company, headquartered in Abu Dhabi. We are a wholly-owned subsidiary of Mubadala Investment Company (Mubadala), which is owned by the Government of Abu Dhabi.
Our portfolio and operating locations

Established in 2012, we are one of the strategic companies managed under the Petroleum & Petrochemicals Platform of Mubadala, with a focus on building a portfolio that delivers attractive and sustainable returns to our shareholder. Exploration, development and production activities are the core of Mubadala Petroleum’s business.

We manage assets and operations across 10 countries with a primary geographic focus on the Middle East, North Africa, Russia and Southeast Asia.

*Partnering with PTTEP (operator), commencing 24 April 2022
(op) = operator

**In the process of being transferred to a third party
(op) = operator
In Southeast Asia, we are the operator of the majority of our exploration, development and production assets across Thailand, Indonesia and Malaysia.

**Thailand**

With a presence since 2004, Mubadala Petroleum is today the second largest operator of oil fields in the Gulf of Thailand.

**Jasmine oil field**
Mubadala Petroleum has a 100% working interest in the successful Jasmine field. The cumulative field production is at over 75 million barrels of oil.

**Manora oil field**
The field started production in November 2014 and has produced over 15 million barrels of oil. Mubadala Petroleum has a 70%* interest as operator.

*60% working interest and 10% beneficial interest

**Nong Yao oil field**
Nong Yao was the second development in Thailand, after Manora, taken safely from discovery to development into production. Since June 2015 the field has produced over 12 million barrels of oil. Mubadala Petroleum has a 90% working interest as operator.

**Erawan gas field**
In April 2022, Mubadala Petroleum will commence a partner role with a 40% working interest in the Erawan gas field, where PTTEP Energy Development Company Limited (PTTEP ED), a wholly owned subsidiary of PTT Exploration and Production Public Company Limited, will be the operator.

**Indonesia**

Ruby gas field
The Ruby gas field in Sebuku has reliably and safely supplied gas to the domestic market since 2013, with cumulative gas production of over 150 billion cubic feet. Mubadala Petroleum has a 70% working interest in the block.

Mubadala Petroleum is also the operator of three exploration blocks, West Sebuku, Andaman I and South Andaman, and holds a non-operated interest in Andaman II.

**Malaysia**

Pegaga gas field development
Mubadala Petroleum is the operator of the offshore discovery at Pegaga in Block SK 320, with 55% working interest. The Pegaga gas field is located in the Central Luconia province, offshore Malaysia at about 108 meters water depth. The project is currently in construction stage and holds the record of Malaysia’s biggest roll ups of jacket outer bends, with first gas expected in 2021.
Mubadala Petroleum was established as a wholly-owned subsidiary of the Mubadala Investment Company in 2012, incorporating and building on the success of Mubadala’s Oil & Gas business unit.

On behalf of our shareholder, Mubadala Petroleum manages a 51% interest in the Dolphin gas project which started production in 2007, supplying gas to the UAE and Oman via subsea pipeline from currently the world’s largest gas field.

Staying within the Middle East, Mubadala Petroleum entered the Block 53 consortium in Oman in 2005, with a 15% working interest in the Mukhaizna oil field. In 2018, the company further expanded its presence in the region, with the acquisition of 10% working interest in the Shorouk concession, and a subsequent acquisition of 20% working interest in the Nour concession, both in Egypt. Within the Shorouk concession lies the Zohr gas discovery, which to date, is the largest gas find in the Eastern Mediterranean region. Zohr was brought online in 2017 by operator Eni.

Also in 2018, Mubadala Petroleum entered Russia with the acquisition of a 44% working interest in the Gazprom-Neft-Vostok joint venture, which focuses on the development and acquisition of a 44% working interest in the Gazprom-Neft-Vostok joint venture, marks entry into Russia.

With an increasing focus on expanding the gas portfolio within the business, and following a successful exploration campaign in Malaysia’s SK320 offshore block, the Pegaga gas field was one of three discoveries made by Mubadala Petroleum in Malaysia in 2014. The Pegaga development is currently underway, and with production startup anticipated by 2021, the field will be a significant gas supply source into the Malaysia Bintulu LNG complex.

In 2019, Mubadala Petroleum signed the Production Sharing Contract to enter Thailand’s Block G1/61 in 2022, alongside operator PTTEP ED. The block includes the producing Erawan gas field, which is one of Thailand’s largest gas producing fields, and a key supply source of gas to the country’s domestic market.

In Indonesia, Mubadala Petroleum operates the Ruby gas field, which was brought online in 2013, and has a cumulative field production of over 150 billion cubic feet of gas as at the end of 2019. Ruby’s operations in Indonesia has received ISO 14001 and OHSAS 18001 certifications. The company also operates an exploration block in West Sebuku and entered into a Production Sharing Agreement for Andaman I and South Andaman.

Over the years Mubadala Petroleum has built a robust operatorship position across Southeast Asia. Following the 2006 acquisition of Pearl Energy, Mubadala Petroleum currently operates three main oil fields in the Gulf of Thailand Jasmine, Manora and Nong Yao. Jasmine, which has been in production since 2005, has a cumulative field production of over 75 million barrels of oil as at the end of 2019. Both Manora and Nong Yao were developed and brought online in production since 2005, has a cumulative field production of over 75 million barrels of oil as at the end of 2019. Both Manora and Nong Yao were developed and brought online in 2019 and 2015 respectively. Mubadala Petroleum’s operations in Thailand have received ISO 14001 and OHSAS 18001 certifications.
Partnerships

For Mubadala Petroleum, collaboration to optimize costs, access new markets and develop our employees’ skills is a key part of our strategy. Over the years we have built a portfolio of both operated and non-operated assets that complement each other in many ways. Lasting partnerships with host governments, national and international oil and gas companies, and above all, the communities in which we operate are central to our success.

Utilizing our experience and strong track record of safe and efficient operations from Southeast Asia across our entire business, has seen us emerge as a very active partner in all of our projects, including those where we are not the operator. One example of this is our recent investment in the Erawan gas project in Thailand.

Mubadala Petroleum is one of the top oil producers in Thailand, however, we made a strategic entry into the country’s gas business earlier in 2019, alongside PTTEP ED, by investing in one of Thailand’s major gas producing assets.

Production from Erawan is key to meeting Thailand’s overall domestic gas demand, and we are committed to working with the government and PTTEP ED to ensure a smooth transition by 2022, which is when our participation as a partner begins.

Over the years, Mubadala Petroleum has built a solid reputation as strong and collaborative partner within our joint ventures, while working closely with governments to establish our position as a credible, long term investor.

Performance highlights 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>14+ million</td>
<td>man hours, lost time injury free since May 2017</td>
</tr>
<tr>
<td>360,000</td>
<td>working interest production in barrels of oil equivalent per day</td>
</tr>
<tr>
<td>2,500+</td>
<td>healthy young coral colonies produced and transplanted into degraded reefs</td>
</tr>
<tr>
<td>62%</td>
<td>natural gas share of overall portfolio production</td>
</tr>
<tr>
<td>500+</td>
<td>employees from more than 30 countries</td>
</tr>
<tr>
<td>35,000+</td>
<td>students, teachers and community members benefit from our school and community development program</td>
</tr>
<tr>
<td>20,000+</td>
<td>community members supported in various Ramadan initiatives in 2019 including distributing food for iftar and hosting community iftar events</td>
</tr>
<tr>
<td>9</td>
<td>safety award recognitions for Thailand, Indonesia and Malaysia</td>
</tr>
<tr>
<td>ZERO</td>
<td>oil spills above one barrel</td>
</tr>
</tbody>
</table>
Our sustainability framework aligns to the most material sustainability issues for our business across our value chain. This allows us to address the right issues and report on them more effectively. We identified these material issues through the following process, aligned with the GRI Standards:

Mubadala Petroleum recognizes and embraces the industry’s movement towards a more sustainable future. Our sustainability framework combines our drive for operational excellence and financial performance with our desire to shape a more sustainable future and our passion for people and society.

Identification: We compiled a list of material topics based on research on the latest industry trends and national and international developments, peer benchmarking and internal stakeholder engagement, including the GRI Standards and Sector Disclosures, IPIECA Voluntary Reporting Guidelines, International Association of Oil and Gas Producers (IOGP), American Petroleum Institute (API), The National Visions and Strategies of the UAE and the United Nations (UN) Sustainable Development Goals (SDGs). This resulted in an initial list of 14 relevant material issues.

Prioritization: Through the course of a workshop with internal stakeholders, we prioritized 10 issues and ranked them accordingly. This process involved considering how each relevant issue affects Mubadala Petroleum’s ability to achieve its corporate vision, as well as our stakeholders’ perceptions of our business.

Validation: Once the materiality analysis was completed, the results were reviewed by our sustainability team and management to ensure that our list of most material topics is complete, and reflects the perspectives of our company as well as our stakeholders.
Our contribution to sustainable development

The UN’s 17 Sustainable Development Goals (SDGs) are a call to action for all developed and developing countries, in a global partnership. The SDGs recognize that ending poverty, tackling climate change and other global challenges go together with strategies aimed at improving health and education, reducing inequality and creating economic growth.

Materiality matrix

The material issues identified reflect Mubadala Petroleum’s most significant economic, environmental and social impacts, both in terms of importance to our business and of highest concern to our stakeholders.
Mubadala Petroleum engages with a wide and varied group of stakeholders at every level of our activities, all of whom have different concerns and priorities. We aim to communicate openly to ensure that we understand the needs and concerns of all stakeholders and communities and that they, in turn, understand the nature of our operations.

Management of stakeholder engagement is an ongoing process that also helps Mubadala Petroleum to understand the interaction between our activities and the cultural and socio-economic fabric of local communities.

We have a clearly defined stakeholder engagement process that aims to:

- create positive relationships with stakeholders through understanding their expectations and developing agreed objectives;
- ensure effective and coordinated stakeholder management that builds trust with internal and external stakeholders and helps to build effective long-term positive relationships for the operations teams and joint venture partners;
- undertake engagements and communications with all internal and external stakeholders within a planned framework with a long-term view.

In developing and executing any stakeholder engagement plan across a project lifecycle we follow the principles of the Mubadala Code of Conduct, Mubadala Petroleum’s Operations Management System (OMS) and associated Asset Integrity Standard, our Values, Communications Policy and Community Investment and Donations Policy plus any country-specific Environmental Impact Assessment processes and other applicable regulations.

Effective stakeholder management covers different stages, from stakeholder identification and issues important to business, mapping and prioritization, to engagement strategies. We regularly review and assess who our stakeholders are and define engagement plans for key communities directly related to our operations. Building and maintaining a good relationship with all identified stakeholders around our assets has helped to maintain our license to operate and avoid any disruption to operational activities. Our aim is that all parties involved benefit from this cooperation, through addressing issues early and in a transparent way. The below table maps our major stakeholder groups and describes their importance to Mubadala Petroleum, their needs and expectations and how we engage with them.

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Importance to Mubadala Petroleum</th>
<th>Needs and Expectations</th>
<th>Methods of Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder</td>
<td>100% owned by Mubadala, which is 100% owned by the Abu Dhabi Government</td>
<td>- Recognized as responsible investor and operator, provide expected financial returns, protect Mubadala’s reputation</td>
<td>- Face-to-face, meetings and committees, reports</td>
</tr>
<tr>
<td>Employees (including employees on contracts)</td>
<td>Key to our success</td>
<td>- Employment remuneration, job security and growth opportunities</td>
<td>- Face-to-face, town-hall, e-mails, intranet, visits, meetings - Grievance/Complaint process</td>
</tr>
<tr>
<td>Customers</td>
<td>Sale of oil and gas</td>
<td>- Responsible, effective and timely supply</td>
<td>- Annual customer survey - Grievance/Complaint process - Website, social media</td>
</tr>
<tr>
<td>Business Partners</td>
<td>Close cooperation, either as operator or as a partner of our assets</td>
<td>- Partnerships and collaboration, long term view</td>
<td>- Managed directly in business units for operated assets, and via dedicated Asset Managers for non-operated assets, regular meetings (e.g. Technical Committee Meeting, Operations Committee Meeting, Board), reports, high-level senior meetings - Website</td>
</tr>
<tr>
<td>Contractors (technology)</td>
<td>Coordination to ensure project delivery, or the deployment of specific technology</td>
<td>- Collaboration</td>
<td>- Grievance/Complaint process - Website</td>
</tr>
<tr>
<td>Local Community</td>
<td>Key for license to operate</td>
<td>- Collaboration - Transparency - Management of their concerns and expectations and agreed objectives</td>
<td>- Country Manager, Government Affairs teams in business units manage direct contact (face-to-face meetings, e-mail, letters), senior management engagement - Grievance/Complaint process - Website, social media</td>
</tr>
<tr>
<td>Government Authorities</td>
<td>Key for license to operate</td>
<td>- Transparency - Investments - Management of their concerns and expectations and agreed objectives</td>
<td>- Country Manager, Government Affairs teams in business units manage direct contact (face-to-face meetings, e-mail, letters), senior management engagement - Grievance/Complaint process - Website</td>
</tr>
</tbody>
</table>
Economic performance and impact

Mubadala Petroleum continues to build on its strong base rooted in the Dolphin project and our leading operating capabilities in Southeast Asia. As a wholly-owned subsidiary of Mubadala, which is owned by the Government of Abu Dhabi, we are one of the strategic pillars of Mubadala’s Petroleum & Petrochemicals platform, with the aim of building a world class Exploration and Production business.

Mubadala Petroleum recognizes the industry’s movement toward a more sustainable future, and we have been deliberately reshaping our portfolio accordingly. In line with our strategy, more than two-thirds of our working interest production is now coming from natural gas. Testing and deploying new technologies and processes will continue to be a key driver of our business to optimize what we can control to efficiently manage our cost base, while maintaining the safety and integrity of our operations.

Performing Profitably

Our Economic and Financial Impact

360,000
working interest production in barrels of oil equivalent per day

0
reported incidents of corruption

383
emergency response drills conducted across our three business units
Our ambition and approach

Compared to some of our partners and industry counterparts, we are a fairly young company, but with the support of our shareholder, we have already managed to carve out a distinctive position for ourselves. Mubadala Petroleum’s strategic priorities are closely aligned with the market trends. One such trend is the transition towards lower carbon emitting fuels, and the recognition by producers that the energy system as we know it is changing rapidly. At Mubadala Petroleum, alongside our investments in gas, we are constantly improving our business, systems and processes, to become a more efficient producer. We invest in projects that have solid technical and commercial fundamentals, with a focus on delivering robust and sustainable returns to our shareholder.

Mubadala Petroleum recognizes the industry’s movement towards a more sustainable future, and we have been deliberately reshaping our portfolio in line with the new realities. We believe that we have the right capabilities to compete effectively in this new reality we face in our industry, which is why building the right partnership with our people and stakeholders is more important than ever before.

Business strategy and value chain management

We are a responsible operator and valued partner, with a long-term view and an excellent safety record, seeking sustainable financial returns.

Core to Mubadala Petroleum’s business is being a responsible corporate citizen and operator with a strong commitment to health, safety and the environment to safeguard our employees, contractors and communities in the vicinity of our operations. We operate the majority of our assets in Southeast Asia, where we are recognized for an excellent track record of safe and efficient operations.

Mubadala Petroleum takes a long-term view in all of our dealings, and we seek to maximize the value of investments to the benefit of our shareholder, our employees, business partners and all other stakeholders. As an upstream oil and gas producer, the ability to control our costs and become more efficient is a key contributor to growth and competitive market positioning.*

Our strategy is clearly focused on continuing to be Abu Dhabi’s strategic international upstream oil and gas company, ensuring value-adding strategic investments in projects that have solid technical and commercial fundamentals. We will be focusing on material and resilient oil and gas assets in MENA, South East Asia, and Russia.

To achieve this, our partnerships are key. We operate on the basis of a collaborative approach – one in which we find more innovative and cost-effective ways to do business and we actively work alongside our partners in assets where we hold non-operated positions.

Performance

As a result of our strategic focus on gas, our gas production has increased by 22% over the past three years and at the end of 2019, it represented almost 62% of our production by volume.

Production

Total production volume: oil / liquids (mmboe)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>50.27</td>
<td>49.74</td>
<td>48.81</td>
</tr>
</tbody>
</table>

Total production volume: gas (mmboe)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>65.01</td>
<td>71.53</td>
<td>79.60</td>
</tr>
</tbody>
</table>

Total Production (mmboe)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>115.28</td>
<td>121.27</td>
<td>128.41</td>
</tr>
</tbody>
</table>

Enterprise Risk Management

The intention of our Enterprise Risk Management (ERM) program is to provide assurance to Mubadala Petroleum’s stakeholders that risks to the achievement of objectives are being proactively and systematically identified, assessed, managed and reported.

ERM was originally implemented in 2012 when Mubadala Petroleum was established, and was subject to a comprehensive update in 2019 to capture lessons learned, ensure alignment with other risk management processes within Mubadala Petroleum and also to ensure compliance with the requirements of our shareholder.

The Mubadala Petroleum ERM Standard documents the approach to be followed together with the governance structure, roles and responsibilities. The ERM process is supported by a bespoke information management system and interactive risk landscape dashboard.

Key risks, together with mitigation plans, are reported to Mubadala Petroleum leadership and our shareholder on a regular basis.
Governance and business ethics

We take the issue of business ethics very seriously and follow the ethics and compliance program of our parent company Mubadala. Its Ethics & Compliance Office, based in Abu Dhabi, covers a wide range of topics, including the Code of Conduct and policies on Anti-Bribery and Corruption, Conflicts of Interest, Gifts and Entertainment, Data Privacy, Competition Law, Trade Controls, Business Partner Due Diligence and Securities Trading and Inside Information.

Furthermore, since we operate in various locations, we follow all local governance and business ethics legislation and regulations. Our ethics policies and practices safeguard our interests against corruption and bribery and enhance transparency.

SDG 16.5: Substantially protect against corruption and bribery in all their forms

SDG 16.6: Develop effective, accountable and transparent institutions at all levels

Our ambition and approach

Mubadala Petroleum has dedicated compliance resources, including a Compliance Counsel in Abu Dhabi. Mubadala Petroleum also has a network of champions, part of the Ethics & Compliance (E&C) Network of the Mubadala Group, which consists of employees from different departments who support the ethics and compliance program. In addition, Mubadala Petroleum conducts E&C roadshows in Southeast Asia, delivering sessions on work ethics, compliance and leadership. Mubadala Petroleum also developed a smartphone application, which is available to everyone and can be downloaded on IOS and Android devices. The application contains all E&C resources, Q&A, disclosures forms for easier and quicker submissions and a free text field, where employees can raise issues and queries. This is a tool that allows for a more direct access to our E&C material in a user-friendly way.

Mubadala’s Code of Conduct

The Mubadala Code of Conduct applies to all wholly and majority-owned businesses in the Mubadala Group, including Mubadala Petroleum. It sets forth our standards for business conduct that will allow us to execute against our mandate without compromising our commitment to integrity and the law. It also provides the foundation for the Ethics & Compliance Program. The Code covers how to maintain an ethical culture to ensure that Mubadala Petroleum personnel are doing the right thing, the right way.

Performance

<table>
<thead>
<tr>
<th>Total number of reported incidents of corruption</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of employees that the organization’s anti-corruption policies and procedures have been communicated to</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total number and percentage of employees that have received training on anti-corruption</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Ethics and Compliance Network Conference in Abu Dhabi

Every year the Ethics & Compliance Network Conference brings together the E&C Network, making it one of the biggest events on the Mubadala Group calendar. The Head of the E&C Office, Shahzad Khan, is the host of the Conference. At the event, Ethics & Compliance Champions have the opportunity to attend keynote sessions, network, participate in panels and learn about developments directly from our E&C leadership and team. Mubadala Petroleum’s SVP of Operations, Dr. Ian Warrillow, was the 2019 winner of the Year of Tolerance Award. This is a clear indication of Mubadala Petroleum leadership’s commitment to the values of tolerance, especially in communication with colleagues, respecting diversity in the workplace and utilizing it as a tool for success. Members of Mubadala Petroleum’s Executive Leadership Team attended the conference, signaling the importance of ethical leadership in the workplace.

Mubadala Petroleum’s SVP of Operations, Dr. Ian Warrillow, receiving the Year of Tolerance award at the 2019 Ethics and Compliance Network Conference in Abu Dhabi.

Significance of doing things the right way and the Year of Tolerance learnings are exactly about respect, acceptance and understanding. We will continue working with our colleagues in Southeast Asia and across the Mubadala Petroleum business for the further growth of a remarkable ethical culture, for which we express our appreciation to every single employee’s good work.*

*Mubadala Petroleum Sustainability Report 2019, Page 27
Supply chain management

Mubadala Petroleum aims to work with diverse local and sustainable suppliers, developing mutually beneficial relationships with businesses throughout our supply chain. Mubadala Petroleum Global Procurement and Supply Chain Management (GPSCM) is fully aligned with the company objective of playing a responsible role and contributing to the long-term, sustainable development of the communities where we operate.

The Mubadala Petroleum Supplier Code of Conduct sets forth minimum expectations for our suppliers, including Health, Safety, Security and Environment (HSSE) and ethical requirements, and is the basis of the relationship with our suppliers and customers.

SDG 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Local resources and suppliers

Mubadala Petroleum GPSCM is committed to adding economic and social value by direct and indirect employment of local resources in all its sourcing and procurement activities in Southeast Asia. In Thailand, Malaysia and Indonesia the focus lies on three key areas: employing and training of a local workforce, opening up opportunities to local suppliers and improving the employment opportunities of community members through local community investments. In addition to the locally hired individuals in the Southeast Asia region, we aim to develop mutually beneficial relationships with local businesses throughout our supply chain. On the corporate level, the GPSCM function in Abu Dhabi continues to provide the local teams across the globe with opportunities to develop technical, commercial and leadership skills that will benefit them throughout their future careers with Mubadala Petroleum.

Governance and sustainable supply chain

Mubadala Petroleum’s suppliers agree to meet our robust safety, technical, environmental and human rights expectations and requirements. For existing agreements, a select number of suppliers are audited each year for contract compliance. Audit components include pricing, safety, and drug and alcohol policy compliance. A supplier who does not meet our expectations may be subject to supplemental training and contractual remedies.

Going forward, to enhance supply chain sustainability, the GPSCM function is aiming to determine where significant sustainability impacts exist – to gain an improved understanding of the dynamic supply chains in the oil and gas industry, and to identify new possibilities and approaches to optimal sustainable supply chain management.

Our ambition and approach

Mubadala Petroleum is committed to preserving the environment, complying with all applicable environmental laws and regulations, demonstrating continual improvement in its environmental performance, and following industry practices to do so. The Mubadala Petroleum GPSCM function is fully aligned with the company objective in playing a responsible role and contributing to the long-term, sustainable development of the communities where we operate and beyond.

Supply chain management and local content

GPSCM is following a set of best practices to help ensure our company consistently engages with local and diverse suppliers. By full adherence to the local regulators’ policies on local content we will continue to maximize the local content, boost the domestic private sector, facilitate technology transfer and build a competitive local workforce. In addition, we cultivate long-lasting and mutually beneficial relationships with diverse suppliers to contribute to the economic development of the countries where we operate.

Mubadala Petroleum’s Supplier Code of Conduct

Mubadala Petroleum maintains the highest ethical standards in its business activities and expects the same from its suppliers. Acting ethically requires, but is not limited to, complying with all applicable laws and regulations and conducting business with respect for principles of basic human rights and decency when interacting with both colleagues and external parties.

The Mubadala Petroleum Supplier Code of Conduct sets forth minimum expectations for supplier conduct in performing work, for or on behalf of Mubadala Petroleum. Failure to adhere to the standards of the Supplier Code may reflect negatively on a supplier’s relationship with Mubadala Petroleum and will be considered in future business determinations.

The Supplier Code of Conduct covers human rights issues such as child and forced labor, fair treatment and employment practices as well as health and safety requirements for the workplace. The code also sets forth requirements for business ethics, including anti-bribery and corruption, competition, improper payments, gifts and entertainment as well as conduct with third party suppliers. The code also covers sustainability, whereby suppliers are obliged to minimize their waste of energy, water, and other resources, prevent discharge that would have an adverse impact on the environment, and recycle whenever possible.
Asset integrity and emergency preparedness

Asset Integrity is an important part of our HSSE focus to maximize our achievements, as we believe it is vital that all of our facilities adhere to the highest standards. To achieve this, we have implemented an Asset Integrity Management Program at all of our operational sites and projects. This program aims to ensure the technical integrity of our facilities, including processing systems, pipelines and platform structures.

Our ambition and approach

Our Asset Integrity Management Program (AIMP) ensures that all our assets perform at each stage of the lifecycle (start-up, operating, maintenance, and shut down) in a manner which is safe for people and the environment. The sound execution of integrity management principles reduces the risk of failure, potential threats to safety of personnel, potential damage to the environment and assets resulting in loss of reputation and trust. Hence, the asset integrity management program is a core business activity whose ultimate goal of “Zero Failures” is aligned with Mubadala Petroleum’s policies.

Ultimate goal of “Zero Failures”

AIMP is developed in relation to the scope of application of the Quality, Health, Safety, Security & Environment (QHSS&E) management system that covers risks related to process integrity. This ensures that appropriate procedures are established and maintained for start-up, operation, maintenance, and shutdown of facilities, with a focus on critical equipment, systems and processes. To achieve this, assets are inspected and maintained to minimize risks and integrity anomalies as well as any interruptions in production due to failures in asset integrity. Different elements within asset integrity provide the roadmap for managing the integrity of all facilities through applying effective inspection and non-routine maintenance for assets. To achieve the above, assets are inspected and maintained to minimize risks of incidents, ensure continuous improvement and that risks are fully understood and managed to ultimately achieve zero integrity related incidents.

Emergency preparedness drills

A total of 383 emergency response drills were conducted across our business units in 2019. At our business unit in Thailand, our Site Response Team (SRT) conducts emergency drills and exercises at offshore facilities at least once a week per site, e.g. for fire and explosion as well as other high potential HSSE incidents. In addition, a Country Response Team (CRT), also referred to as Offshore Response Team, based in Bangkok provides support and guidance to the site-based teams and acts as the interface with regulatory agencies, local media, and public and respective corporate departments and crisis management teams. This team conducts an emergency exercise on a yearly basis. The business unit in Indonesia also conducted several emergency response exercises, including a desktop simulation exercise in the Jakarta office and a two-day joint oil spill exercise in Balikpapan. In addition, weekly exercises are performed at the Ruby offshore platform. The team in Malaysia conducted two emergency preparedness drills in 2019, one CRT exercise and one simulated Business Continuity Plan (BCP) exercise in Putrajaya and the KLCC office.

383 emergency response drills were conducted across our business units in 2019.

Business Continuity Management

All our business units in Abu Dhabi, Thailand, Indonesia and Malaysia have a Business Continuity Management (BCM) program in place, covering the local head office as well as the operational offshore fields and supporting warehouses. A dedicated Business Continuity Management Team (BCMT), led by the respective country managers, is responsible for the implementation of the Business Continuity Plan (BCP). The business continuity and recovery strategy covers business impact analysis, risk assessment and business solutions. To ensure the response readiness, annual business continuity awareness training and exercises are conducted in all locations.

Initiatives in Thailand

Pipeline inspection to verify anomaly

The field life for Jasmine and Banyan has continuously been extended due to the growth in the estimated volume of reserves. At the same time, it is challenging to maintain commercially viable operations as the facilities and pipelines require additional maintenance as they age. To ensure integrity and prevent any loss of containment, a detailed pipeline inspection was successfully conducted at Jasmine and Banyan fields. Findings showed most pipelines are in good condition with only minor anomalies.

Underwater inspection and routine maintenance

In 2019, an underwater inspection and routine maintenance project was successfully completed for the three operated fields in the Gulf of Thailand (Jasmine, Manora and Nong Yao). The project was carried out in compliance with the American Petroleum Institute Recommended Practice as well as Mubadala Petroleum Procedures. Further project highlights during 2019 included the following:

- Conducted maintenance shutdown of Jasmine and Banyan fields.
- Launched a first intelligent pigging operations in subsea pipelines for the Jasmine and Banyan fields.
- Conducted global asset integrity management audit.
- Developed an online asset integrity system tool.

Initiatives in Indonesia

New corrosion inhibitor to solve gas turbine compressor fouling problem

A new corrosion inhibitor was introduced in 2019 after extensive laboratory testing of various formulations. The onsite test confirmed success.

Damage mechanism study to verify anomaly

The team successfully completed a damage mechanism study to investigate anomalies of the surface facility. An external corrosion corrective action plan was developed for 2020.
At Mubadala Petroleum, we have an exceptionally strong commitment to HSSE to safeguard all our employees, contractors and communities in the vicinity of our assets.

We continuously seek to improve our HSSE performance and foster a culture of collective and personal responsibility. Employees of all levels must perform their work with diligence and have regard for the integrity of our assets, and everyone is empowered to intervene and stop any unsafe acts or address any unsafe conditions they observe.

We have consistently demonstrated outstanding commitment to HSSE through our leading approach and dedicated resources while ensuring policies and procedures are properly executed. By placing HSSE management processes and policies at the center of our operations, we aim to eliminate or reduce incidents. Our processes mandate that potential risks or hazards to be identified, controlled and mitigated at the outset of every operation. This results in an enhanced business performance, where operational incidents are minimized, ultimately creating a safer working environment for everyone associated with our operations.

Over the past several years, we have delivered excellent HSSE performance through continuous development, drilling and production operations. In benchmarking against other oil and gas companies represented in the International Association of Oil & Gas Producers (IOGP) annual HSE reports, our performance has been consistently higher than the industry average being positioned in the top quartile. Since May 2017, we reached over 14 million man hours without lost time injury (LTI).

Continuous improvement of our HSSE performance is a key company priority and is a prime responsibility of management and employees at all levels, one which is driven by goals and supported by policies and management systems. Every year, we have a number of HSSE activities and occupational health and safety campaigns to make sure our employees are healthy and can safely perform their duties.

SDG 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

SDG 8.8: Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

500+ employees from more than 30 countries

14+ million man hours, lost time injury free since May 2017

3,500+ scholarships provided to underprivileged school and university students to stay in school or pursue higher education

20,000+ community members supported in various Ramadan initiatives in 2019 including distributing food for Iftar and hosting community Iftar events

35,000+ students, teachers and community members benefit from our school and community development program

9 safety award recognitions for Thailand, Indonesia and Malaysia

3,500+ scholarships provided to underprivileged school and university students to stay in school or pursue higher education

20,000+ community members supported in various Ramadan initiatives in 2019 including distributing food for Iftar and hosting community Iftar events
Our ambition and approach

Our QHSE Policy sets out the commitments and obligations for our employees, stakeholders, and others involved in, or who may be affected by, our operations. Our Corporate Policies are further broken down into different requirements and standards, e.g. our Occupational Health & Industrial Hygiene Standard, Resilience Standard or Accident Incident Investigation Reporting Standard. These standards and requirements are then operationalized in each business unit, taking into account local regulations and legislation.

Our QHSE Policy is clear in that it states that everyone who works for, or on behalf of, Mubadala Petroleum must do so with diligence and have regard for the integrity of our assets, the health, safety, and security of persons affected by their work and the impact on the environment.

We develop a “Just & Fair” culture with accountabilities. Our leadership demonstrates clarity and determination concerning safety issues, ensuring that all our employees understand their safety accountabilities. Our employees are empowered to report unsafe acts and conditions, and intervene and stop unsafe work without retribution. We have established a systematic program for rewarding safety inputs. Mubadala Petroleum has zero tolerance for unsafe actions and conditions. Everyone who works for, or on behalf of, Mubadala Petroleum must do so with diligence and have regard for the integrity of our assets, the health, safety, and security of persons affected by their work and the impact on the environment.

HSSE management systems

The integrated management systems governing all our operations in Thailand and Indonesia are accredited to international standards of ISO 9001 Quality Management System, OHSAS 18001 Occupational Health and Safety Management, and ISO 14001 Environmental Management System. In this regard, we are the pioneers in the exploration and production industry in Thailand. In 2020, our business unit in Thailand plans to obtain ISO 45001 (Occupational Health & Safety certification to replace OHSAS 18001).


Health and safety committees

Our business unit in Thailand has an HSSE Committee which consists of managers and employees, and meets monthly as per Thai legal requirements. This committee acts as an agent for HSSE improvement and change. At the meetings, the committee assesses HSSE performance, reviews incidents to learn appropriate lessons, addresses the findings by internal and external audits, formulates new HSSE initiatives, and measures the progress against the unit’s annual HSSE plan.

In Indonesia, our HSSE & Asset Integrity Leadership committee meets monthly to address any relevant issues and develop plans and strategies to avoid any incidents in the future. In Malaysia, we have a dedicated HSSE committee with a similar agenda, which has been meeting twice a year, and organized the Contractor HSSE Leadership Forum in March 2019.

Workplace monitoring and incident reporting

A systematic approach for addressing gaps and shortfalls is used to develop corrective measures.

The program comprises monitoring and workplace control of several parameters, including physical, chemical, biological, ergonomic, and psychological factors (e.g. noise level, light intensity, heat stress, indoor air quality etc.). Any findings result in action plans to mitigate or reduce the risk to as low as reasonably practicable.

All employees and contractors must report any incidents or observations concerning unsafe acts and unsafe conditions following company procedures. Everyone can exercise Stop Work Authority to intervene in such unsafe situations and taking corrective action to ensure works are executed safely and according to company requirements. Incident reports and Hazard Observation Cards are processed for review, root cause identification and trend analysis. Based on this review and analysis, a systematic approach for addressing shortfalls and gaps at system level are used to develop corrective and preventive measures in order to prevent the event from happening again.

Golden Rules of Safety

Our eight Golden Rules for Safety align to eight high risk activities conducted in the course of our operations. The rules are shared across Mubadala Petroleum’s business and operations, and must be fully understood and obeyed by everyone. They relate to:

01 Permit to work
02 Plant and equipment isolation
03 Confined space
04 Lifting, rigging and slinging
05 Driving
06 Work at height and dropped objects
07 Management of change
08 Alcohol and drugs

Level 1

Corporate Direction

| Policies |

Level 2

Corporate Requirements

| HSSE Requirements and Standards | CMS | Functional Requirements and Standards |

Level 3

Operational response

| Processes and Systems Operations Level |

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HSSE training

We conduct HSSE related training at all our operational locations. The aim is to ensure that employees and contractors know how to work safely and without risk to health.

In 2019, our business unit in Thailand provided mandatory HSSE training to employees and contractors as required by regulation. A dedicated HSSE training matrix was developed and specified for each position. Every new employee as well as contractors undergo a mandatory HSSE induction prior to commencing work. Thereby we aim to establish a common understanding on Mubadala Petroleum’s HSSE rules and requirements and raise awareness on potential risks and how to respond to incidents. In addition, offshore employees undergo a 3-day HSSE refresher training every year to re-emphasize HSSE requirements, programs and campaigns but also to discuss issues and collect feedback and improvement suggestions.

The HSSE training in Indonesia is based on a training needs analysis and monitoring that is conducted for all employees. Throughout 2019, HSSE training was conducted as planned, including highlights such as the Take HEART! Training, a Control of Substance Hazard to Health training as well as basic and advanced first aid courses. In addition, we conducted a comprehensive awareness program for the new ISO 9001, ISO 45001, and ISO 14001:2015 management system.

In Malaysia, HSSE training included four training sessions on defensive driving, to ensure those employees travelling frequently to and from our construction site follow safe and defensive driving tactics. In addition, all employees participated in the Take HEART! training sessions to enhance safety culture as part of the Global HSSE & Al Campaign.

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HSSE requirements for contractors

All our business units are required to enforce HSSE requirements for contractors, such as the Contractor Management Standard in Thailand. Contractors must ensure their workforce understands and properly executes all Mubadala Petroleum HSSE requirements. A quarterly QHSSE Contractor Meeting is held to review performance related to productivity, incidents and injuries, and to share lessons learnt, and best practices. In addition, contractors conducting high risk operations need to undergo an annual HSSE audit to assess the effectiveness, efficiency and reliability of the contractor’s HSSE system through various KPIs and ensure they are in compliance with Mubadala Petroleum regulations and action plans are implemented to mitigate any shortcomings identified. In Malaysia, contractors need to adhere to the Mubadala Petroleum OMS, the 8 Golden Rules of Safety as well as to PETRONAS Guidelines and Malaysian law and regulations. In the event of any compliance breaches, they will be investigated and followed by corrective action plans.

Occupational health and safety campaigns

We run various health, fitness and recreational programs for our employees including mental health and awareness campaigns throughout our business units.

We implement many health and safety programs across all our operational business units. In Indonesia, the program consists of the medical screenings for fitness to work, smoking cessation programs, general health information and a fitness challenge as well as a triathlon participation opportunity. In Malaysia several ‘Lunch and Learn’ sessions were conducted, covering topics ranging from mental health and work-life balance, prostate cancer awareness, to an ergonomic awareness talk to help employees identify and avoid health conditions or injuries related to bad ergonomic practice in the workplace.

HSSE Day and MPTHlon in Indonesia

Our employee engagement activities in Indonesia included the first mini triathlon race, called MPTHlon, which included a 3 km run, 10 km cycle and 200-meter swim. More than 100 employees participated in the event at Senayan, Jakarta, and everyone completed the run, bike ride and swim in under 2 hours.

The program inspired employees to get more active and participate in sports to ultimately improve their physical, social and emotional wellbeing, happiness, engagement, and productivity.

The event was followed by the HSSE Family Day 2019, aiming to improve awareness of safety and sustainable living. The highlight of the event was a session on how to create home-based composting to reduce household waste.
Community development and investment

Core to Mubadala Petroleum’s business is being a responsible corporate citizen and operator, committed to contributing to the development of the UAE and the countries where we operate. These projects and programs improve the lives of the disadvantaged people in different countries, support sustainable agricultural practices, including better access to education, implementing waste recycling and food waste minimization, as well as promoting mental health and well-being.

Over the past several years, we have consistently delivered an impressive HSSE performance. This performance is due to our exceptionally strong commitment to safeguarding the wellbeing of our employees, contractors, and communities in the vicinity of our operations.

In 2019, two recordable injuries were reported, both in Thailand. These were followed by a full investigation to avoid repetition of such incidents in the future.

Performance

| Total number of work-related fatalities (employees and contractors) |
|-------------------------|-----------------|-----------------|
| 2017                    | 0               | 2018            | 0               | 2019            | 0               |

| Lost-time injury rate (LTIR, employees and contractors, per 200,000 man hours) |
|-------------------------|-----------------|-----------------|
| 2017                    | 0.05            | 2018            | 0               | 2019            | 0               |

| Total recordable incident rate (TRIR, employees and contractors, per 200,000 man hours) |
|-------------------------|-----------------|-----------------|
| 2017                    | 0.15            | 2018            | 0.05            | 2019            | 0.05            |

| Number of emergency preparedness drills |
|-------------------------|-----------------|-----------------|
| 2017                    | 364             | 2018            | 378             | 2019            | 383             |

In 2019, 2,324 exercise activities were completed by 166 employees and contractors, resulting in 3,011,010 calories being burned. These calories were converted to the scholarship for students at Ban Bang Bor School for a total amount of THB 300,000 ($US9,900).

The Sweat for Smile Program in Thailand

The Sweat for Smile Program was aimed at improving fitness and well-being, engagement and teamwork among our employees, along with serving our local community. We encouraged our staff to exercise more while raising funds to help underprivileged children. There were 19 different sports and exercises available, including boxing, cardio, cycling, football, golf, running, swimming, table tennis, weight training and yoga.

Over the course of 75 days, 166 employees and contractors completed 2,324 exercise activities, resulting in 3,011,010 calories being burned. These calories were converted to the scholarship for students at Ban Bang Bor School for a total amount of THB 300,000 ($US9,900).

In 2019, two recordable injuries were reported, both in Thailand. These were followed by a full investigation to avoid repetition of such incidents in the future.

Our ambition and approach

Mubadala Petroleum is committed to playing a responsible role and contributing to the long-term, sustainable development of the communities where we operate. A clear and transparent Corporate Social Responsibility (CSR) approach is implemented through comprehensive community investment and donation activities and goes beyond simply contributing financially, but is on a tiered, repeatable and sustainable long-term footing aimed at creating real, sustainable value in communities. Our focus is on education and training, community development, economic diversification, environmental improvements and employee engagement, undertaken in a planned and transparent way with annual plans focused on local needs and active stakeholder engagement.

To deliver effectively against our commitments, we take an organized, consistent approach based on good industry practices, integrity and transparency. In fulfilling these commitments, we communicate openly to ensure that local stakeholders understand the nature of our operations and have an opportunity to raise concerns and have them appropriately addressed.

We work in partnership with local stakeholders, including local authorities, community groups and NGOs, to understand the needs of local communities and implement the relevant community investment projects and programs. Our efforts are focused on supporting operations by developing relationships and mitigating risk among local communities through stakeholder dialogue and community investment programs but also expanding, in some cases, into some more nationwide projects. All our CSR programs are completed as per stated objectives, including reporting and review elements, and have received recognition and acknowledgment from national governments, regulators, and local government authorities, universities, and community leaders.

Community investment projects implemented that create real value, lead to transformational change and bring real improvements into peoples’ lives.
“20by2020” Initiative

Apart from our operationally-focused community investment initiatives, Mubadala Petroleum recently became a sponsor of the “20by2020” initiative, an impact-focused, global humanitarian initiative under the Zayed Sustainability Prize. Under the patronage of The UAE Year of Tolerance, and together with various leading UAE-based partner organizations, Mubadala Petroleum plans to donate sustainable technologies and solutions to empower vulnerable communities in 20 countries by the end of 2020 to bring positive change to their lives in the areas of energy, water, food, and health, by deploying proven technologies developed by the winners and finalists of Zayed Sustainability Prize.

“As Abu Dhabi’s international upstream oil and gas company, we have always been committed to contributing to the long-term, sustainable development of communities where we operate – which is reflected in our well-established, impactful and recognized community investment initiatives. We are very pleased to be partnering with the Zayed Sustainability Prize for the ‘20by2020’ humanitarian initiative, to reach other vulnerable communities and bring real change to their lives. At the same time, with the ‘20by2020’ initiative, we continue to globally share the values of the UAE’s Founding Father, the late Sheikh Zayed, and of the Year of Tolerance in the UAE, while also supporting the United Nations’ Sustainable Development Goals.”

Dr. Bakheet Al Katheeri
Chief Executive Officer

Performance

Currently, across our operational activities and in the UAE, we undertake between 40 and 50 programs and projects annually, mainly aimed at providing long-term, sustainable environmental and social improvement to the communities in the vicinity of our operations and building and maintaining long-term relations with these local stakeholders. They are based on community needs and planned and implemented in partnership with local stakeholders to create real value and lead to demonstrable improvements in peoples’ lives, while bringing long-term benefits to society. Our total spending on community initiatives has more than doubled since 2017, while the number of beneficiaries has increased to over 90,000 people. We also encourage our employees to participate in volunteering activities, and we have seen a positive trend in this area.

Community engagement supporting “People of Determination” in Abu Dhabi

In April 2017, the government of the UAE decided that people with disabilities be called “People of Determination” or “the Determined” to recognize their strong will and encourage them further to challenge their circumstances. Since then, Mubadala Petroleum has been supporting the educational and physiotherapy programs for four girls at the Rashid Center for the Determined Ones. In addition, our employees regularly visit and participate in various activities at the Center.

We expanded our support last year to include three Autistic children at Al Hanan Center in Abu Dhabi. Our support of young People of Determination aims to ensure that these children are able to achieve their full potential, provide them with improved educational and development opportunities, and involve them in the community.

Community investment

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<th>Year</th>
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**Integrated Development Program in Thailand**

In 2018, Mubadala Petroleum launched the Mubadala Petroleum Integrated Development Program (MPID) in Songkhla and Prachuap Khiri Khan, in partnership with the Education for Development Foundation of Thailand (EDF). The aim of the program is to create a more sustainable approach to education and community development, specifically with the local communities in the vicinity of its Nong Yao and Manora oil fields in the Gulf of Thailand.

The MPID offers scholarships to underprivileged elementary, secondary and university students through a systematic and transparent review process and at the same time provides improved facilities for educational development within schools and communities, as many school facilities are used for community activities outside school hours too.

School and community development is not a short-term goal, and the project links to the development of agriculture, aquaculture, cultural and vocational skills and capabilities through projects and activities initiated and led by the schools and community groups. Thereby it encourages community participation, preserves local wisdom, uses local resources and supports local business and employment with the aim of developing sustainable projects.

In 2019, after six years, over 80 schools, 10,000 students, 750 teachers and 17,000 community members have benefitted across four districts in Songkhla. The program has created significant improvements, and funding has been retained in the communities including:

- **2,600** scholarships allowed underprivileged students to complete minimum educational requirements; over 90 percent of them remained in school.

- **137** facility improvement and development projects allowed schools to:
  - have safe drinking water, sufficient books and library facilities, hygiene school conditions;
  - offer healthy lunches using produce from organic farming projects;
  - sell additional produce at local markets to sustain and extend projects on their own;
  - provide Manora traditional dance classes: increase students’ confidence, preserve the culture and perform at ceremonies;
  - incorporate projects and learnings into school curriculums.

- **Students gained** life and leadership skills plus knowledge through vocational training by participating in the school development projects.

- **Seven** school Learning Centers (from soap making, frog and vegetable farming to batik weaving) documented the full learning process and thereby serve as role models for other schools and communities to visit and learn from.
  - Bi-annual leadership camps capture best practices and disseminate knowledge.
  - Students passed their learnings and ideas to parents and local communities, which resulted in projects related to organic farming as well as making and selling local traditional food and handmade products.

In Prachub Khiri Khan, after three years, this program has benefitted 22 schools, over 6,000 students, 400 teachers and over 3,500 community members. Both MPID programs together have already benefitted over 35,000 people and most importantly have strengthened and further developed relations with the communities and many other stakeholders, including the governors, energy offices, and other government organizations, who are all important stakeholders for Mubadala Petroleum’s license to operate.

The MPID approach showcases that it is essential to take a long-term view and find the right partner for initiatives like this to succeed. EDF brought the necessary development knowledge and capabilities to the partnership, had relations with education services, and experience in creating close relationships with communities that Mubadala Petroleum was relatively new to. Active involvement from both partners in each stage of the program is important addressing the objectives, business requirements and approach, which is reviewed at least annually to align with continuous feedback, business and stakeholder needs.

This innovative approach, which puts students and schools at the center and empowers and encourages them to develop their own strategies and make decisions, is an excellent model for larger, more sustainable solutions for education and community development for others in the oil and gas industry.
Integrated Irrigation System Building Project in Thailand

Mubadala Petroleum in Thailand joined hands with the King’s Mongkut’s University of Technology Thonburi (KMUTT) to launch the “Integrated irrigation system building project to support Mlabri community, Boklue District, Nan Province in Northern Thailand”, a project under the supervision of the Royal Project Foundation & King’s Recommended Project Supporting Center of KMUT. This project aims to establish long-term benefits for the Mlabri community who live in the forests of Nan Province of Thailand. Deforestation, a lack of employment opportunities and disruption to the area in which they live has impacted the Mlabri community. The integrated irrigation system originally included the building of a pipeline system to bring water from the mountain to the community plus water treatment and distribution systems for agricultural areas. With our support to build the integrated irrigation system, the community will have water for household consumption, agriculture, and livestock. We also support the Mlabri in pursuing more diversified careers and increasing farming, crafts, and technical skills to become more self-reliant.

The implementation of this project will lead to the community’s self-sufficiency and sustainability in the future. Moreover, this project has encouraged them to buy 123 rai (48 acres) of land to build their permanent homes, so that they will not have to migrate any longer.

Community-based Waste Management Project in Indonesia

In Indonesia, together with the local community in Hilir Muara village in Kotabaru of South Kalimantan, we initiated a community-based waste management project in the village. The ultimate objective of the project was to enhance the environmental quality in the village that has been facing a waste management problem for decades.

The participatory approach has succeeded in making the community of about 120 families the main driver of the project. They have determined what kind of capacity building is required, the design of equipment needed, the design of project campaigns and how to collaborate with the local government.

After almost two years of implementation, the project has taught the village community how to manage household waste and has improved the local environment through better waste management by forming a so-called Waste Bank (locally known as Bank Sampah). In addition, a women’s group has decided to focus on developing products from the recycled products and now they produce reusable bags, lamps and other items and sell them to other communities.

Based on these early project achievements, the local government registered the village for the Village National Competition for Best Environmental Action for Climate Change Impact (Proklim). At the end of 2019, Hilir Muara village received the Proklim award at the provincial level and people from other communities in the area are visiting the village to learn more about the initiative and approach.

SDG 1.A: Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programs and policies to end poverty in all its dimensions
The Lost Food Project in Malaysia

Mubadala Petroleum supported The Lost Food Project, a local NGO in Malaysia, to collect and redistribute surplus food supplies in communities in need, eradicating hunger and reducing waste sent to landfill.

This partnership has enabled The Lost Food Project to purchase a five tonne, refrigerated truck that collects surplus food from wholesalers and manufacturers in Kuala Lumpur and delivers fruit, vegetables and other produce in fresh condition to impoverished communities around the city and Klang Valley area.

Within the first seven months, The Lost Food Project has collected more than 75 tonnes of nutritious surplus food using the truck funded by Mubadala Petroleum. This equates to over 214,285 meals.

**214,000+ meals collected by the Lost Food Project**

**SDG 12.3:** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

**SDG 12.5:** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
CSR Activities 2019

- Lecture on Happiness
- Recognition for service staff
- Ice-cream day
- Happy Birthday Initiative
- Yogurt Day
- Eat healthy
- Back to School Initiative
- School workplace orientation day
- Instructor Scheme recognition and awards
- Emirati and International Women’s Day
- Lecture on tolerance at workplace
- Ramadan initiatives

- 1st MPThlon
- Fitness Challenge Program
- Employee Assistance Program
- Counselling On Call Program
- Housing Loan Program
- Inhouse 7 habits mini workshop program
- IYP Programs: 5 Programs of Employee Wellbeing
- Engagement Map for Employees
- Employee Team Building, Employee and Family Gathering
- Hajj Pilgrimage Assistance Program
- Spiritual Program Alignment with Wellbeing

- Team Awards and Individual Awards during Year End Teambuilding and Annual Dinner
- Lunch and Learn sessions
- International Women’s Day
- Malaysian National Day Picnic
- Happiness in the Workplace and Positive Psychology session
- Birthday and Festive Celebrations
- Bowling Tournament
- Virtual Run

- Birthday Parties
- Workplace Relaxation Session
- Thai New Year Day
- World Milk Day and Trick or Treat
- Sweat for Smile Program
- Fresh Fruit Day / Mid-Year Booster Campaign
- Work-Life Harmony and Wellness Initiative
- 7 77 Theme to celebrate Mubadala Petroleum’s 7th anniversary alongside 75 millionth barrel of oil produced and 7 million man hours without LTI
- ‘Gift & Give’ Appreciation Day
Our human capital

We aim to be leaders in the international upstream oil and gas business, and our people are central to our success. The Mubadala Petroleum team is incredibly diverse, with employees drawn from over 30 different countries with a wide variety of experience in national, independent and international oil and gas companies. We are committed to the development of the next generation of leaders everywhere we operate.

In all our locations, we have policies and programs for employee training and development, engagement and satisfaction, retention, and diversity and inclusion. Recognition, wellness, and interaction are all harnessed to foster strong employee engagement, teamwork, and satisfaction. We support a culture of recognition and reward for our existing employees and newcomers alike and promote health through sports and other activities, including programs on improving work-life balance, reducing anxiety, and relieving body and mind from work stress. We also regularly celebrate milestones and events such as birthdays and anniversaries.

Performance

At the end of 2019, 70% of our employees were male and 30% female. The total nationalization across our business units is 82%. However, the percentage of national employees in management positions has increased since 2017.

Workforce profile

<table>
<thead>
<tr>
<th>Percentage of female / male employees</th>
<th>Percentage of national employees in management positions</th>
<th>Nationalization among total workforce (%)</th>
</tr>
</thead>
</table>

In Malaysia, for the second year in a row, we attained the Privilege Program by PETRONAS in recognition of efforts on Malaysianization and capability building in Malaysia, enabling flexibility in managing manpower requirements and costs. We consistently achieve and exceed Malaysianization targets.

For the second consecutive year, Mubadala Petroleum’s subsidiary Pearl Oil (Sebuku) Ltd. in Indonesia has received the “Career Development Monitoring” (CDM) Award from SKK Migas as industry runner up. The CDM Award is granted to companies that have succeeded in developing national human resources in accordance with the strategy set by SKK Migas.

Employee training and development

Our business and operations are driven by a core of industry recognized leaders and professionals whose reputation is built on their expertise and achievements in the sector globally. For our employees, Mubadala Petroleum is a place where they can apply their skills and innovative spirit to pursue new challenges and approaches and provide leadership to the next generation of industry leaders.

We offer productive employment and quality work for our people, as well as providing training on a wide range of issues, including industry training to build skills and experience, mandatory safety inductions, corporate policies training, and internships. We also offer systematic development and training roadmaps which are based on the Individual Development Plans (IDP). Not only do these activities ensure that we have the best workforce to drive us to success, but they also make our people stronger and more confident.

SDG 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

SDG 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training

SDG 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
Learning
...encourage people to challenge themselves and continue to grow, programs that emphasize on learning and career growth, specialized courses for the industry, programs to promote spreading knowledge

Interaction
...share good moments, have fun at work, serious about work but not too serious, celebrate milestones and events

Recognition
...celebrate achievements together, promote a culture of recognition and reward, notice the extra efforts and show appreciation

Wellness
...promoting health through sports and other activities, tips and programs on improving work-life balance, relief body and mind from work stress and tips and programs for reducing anxiety

CSR
...give back to under-privileged, support Ramadan and Iftar campaigns, exercise for charitable causes and participate in special community assignments

Performance
In 2019, our employees received a total of 3,384 training days, almost 54% more than in 2017. The average training days per employee increased by 25%, from 4.7 days in 2017 to 5.9 in 2019.

Number of training days

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Training Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2,201</td>
</tr>
<tr>
<td>2018</td>
<td>3,002</td>
</tr>
<tr>
<td>2019</td>
<td>3,384</td>
</tr>
</tbody>
</table>

Average number of training days per employee

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Number of Training Days per Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>4.7</td>
</tr>
<tr>
<td>2018</td>
<td>5.4</td>
</tr>
<tr>
<td>2019</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Employee engagement and retention

We strive to hire the best people and keep them in the company. We realize that motivation, engagement, cooperation, and strong commitment are essential for our staff to perform their best at work. Furthermore, physical exercise and sport activities help our employees to stay fit and reduce health risks. We want our employees to be happy both in and out of work, hence our Happiness Initiative includes many interesting and special events throughout the year. We also offer our employees competitive compensation and benefits packages, as well as career development opportunities.

SDG 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day

SDG 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

SDG 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

SDG 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training

SDG 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

Performance

<table>
<thead>
<tr>
<th>Percentage of new hires of total staff (%)</th>
<th>Percentage of female new hires of total new hires (%)</th>
<th>Percentage of youth new hires (&lt;30) of total new hires (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9%</td>
<td>28%</td>
<td>23%</td>
</tr>
<tr>
<td>15%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>12%</td>
<td>18%</td>
<td>10%</td>
</tr>
</tbody>
</table>

In Abu Dhabi we rolled out flexible working hours for all Mubadala Petroleum employees to encourage work-life balance. We also introduced a monthly 6-hour allowance which is available to all employees for personal appointments and honored our Internal Instructors in our yearly townhall meetings. In addition, we have recently upgraded the internal employee services platform to make it more user-friendly.

In Malaysia, we rolled out a new Recruitment Policy and Flexible Working Hours Policy, as well as drafted and finalized the Offshore Assignment and Allowances Policy. In 2019, we also honored 17 employees with long service awards for five years of service. Following a human capital audit conducted by our business unit in Thailand, we revised our policies related to recognition awards and gifts, long service awards as well as offshore allowance and paid leave. We also arrange events to recognize and honor our long service employees and their contribution to the company.

In addition to our existing internship program for students and new graduates, we introduced the Coaching and Mentoring Logbook Program in our Indonesian business unit. We also conducted a new internal employee satisfaction survey, where the employees of the Indonesian business unit reported a 72% satisfaction level.
Purposeful Sustainability

Our Climate and Environmental Impact

Our business unit in Indonesia, represented by Mubadala Petroleum’s local subsidiary Pearl Oil (Sebuku) Ltd., has successfully maintained its Blue PROPER rating from the Ministry of Environment and Forestry for 100% environmental performance compliance. It has also received a prestigious Patra Nirbhaya award from the Ministry of Energy and Mineral Resources for Zero Recordable Incident. The business unit was also nominated as GREEN candidate of Environmental Beyond Compliance Management from more than 200 companies in Indonesia.

**Water, waste and energy management**

At Mubadala Petroleum, we apply sustainable management approaches to ensure the efficient use of natural resources, environmentally sound handling of chemicals and all waste. Effective energy management is essential for saving our company’s financial resources. We aim to reduce our discharges and waste generation, including hazardous waste, and to fully comply with all the applicable environmental legislation and regulations in the locations where we operate.

| SDG 7.3: | By 2030, double the global rate of improvement in energy efficiency |
| SDG 12.2: | By 2030, achieve the sustainable management and efficient use of natural resources |
| SDG 12.4: | By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment |
| SDG 12.5: | By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse |

- 0 oil spills above one barrel
- 8.6% waste recycled*
- 25.9% reduction in gas flaring compared to 2018*
- 0 gas (MMSCF) vented over the last three years*
- 608,695 total GHG emissions*
- 2,500+ healthy young coral colonies produced and transplanted into degraded reefs

* across our operations in Thailand and Indonesia
Our ambition and approach

All our operations in Thailand and Indonesia have accreditations for ISO 14001 Environmental Management System

In addition, our business unit in Malaysia applied the Pegaga Environmental Management Plan approved by the Malaysian authorities for the Pegaga project and is aiming for ISO certification in 2023.

Below are some examples of initiatives related to water and waste management that have been implemented by our operational business units in Thailand and Indonesia.

Water and waste management initiatives in Thailand

Waste gas utilization at Jasmine Field

In order to reduce the amount of associated gas emissions at our offshore wellhead platform, we conducted a trial to install an added bi-fuel unit to one of the diesel generators and utilize the waste gas for power generation. As a result, we were able to substitute 10% of the diesel with gas, despite the low quality of the gas. Therefore, we will install additional bi-fuel units on the remaining two diesel generators in 2020 and plan to further roll out the initiative to other platforms.

Energy conservation of the wellhead platform lighting

In order to reduce the energy consumption at the wellhead platform, we replaced all conventional halogen floodlights with more efficient LED lights. A total of 300 lights were replaced on all 6 wellhead platforms at the Jasmine field, resulting in a 60% energy reduction. For 2020, we aim to replace more than 100 conventional fluorescent emergency lights at the Nang Yao field with LEDs.

Water and waste management initiatives in Indonesia

Ex-HVAC condensate water reuse program

The business unit in Indonesia has started the initiative of reusing the water produced from the HVAC condensation system at the Ruby offshore field. The execution of this initiative began with a preliminary risk assessment and cost benefit study through a management of change (MOC) process. After the MOC was approved, minor additional pipeline installation was conducted to flow condensation water from the HVAC system to the water tank. This program has the potential to save approximately 110 m³ of potable water a year.

Improvement of key equipment power efficiency

Low pressure water injection pumps are considered to be high-power consuming equipment on the wellhead platform. In order to reduce energy consumption, a trial was commenced on the wellhead platform B at the Jasmine field by replacing two centrifugal pumps with a higher efficiency model. Successfully, the new pumps delivered same capacity with a 10% reduction in power consumption, therefore the remaining two pumps will be replaced in 2020.

Use of produced water

Our business unit in Thailand manages produced water by re-injecting it completely into water disposal wells without any overboard discharge. Through the process, the produced water is separated from crude oil at a production separator and is re-injected back into the producing reservoirs via water injection wells. This maintains reservoir pressure on a voidage replacement basis and increases oil recovery.

Mooring buoy application on standby vessel

In order to reduce the power consumption of the standby vessel at the Ruby platform, the team in Indonesia installed mooring buoys besides the vessel. As a result, the vessel is able to keep its position close to the platform running its engines for 12-16 hours a day instead of 24/7. This effort resulted in energy savings of 7,805 GJ in 2019.

Potable water maker automation

Since 2013 the potable water maker, which recycles sea water into clean drinking water, has been efficiently automated. This has contributed to 385 GJ of energy savings a year since 2013.

Energy efficiency initiatives

Usage of a new soft starter for the compressor contributed to energy savings of 1,139 GJ per year. We also switched to rechargeable batteries and LED lamps in order to improve energy efficiency.

Electrical Submersible Pump (ESP) power optimization

The Electrical Submersible Pump (ESP) is the main artificial lifting equipment to maintain production at the Nong Yao field and is considered very energy intensive. The power optimization program was conducted by simply adjusting the pump operating conditions. The program successfully reduced the overall power consumption by 5%, and therefore will be replicated on other fields to improve the overall pump and power efficiency.
**Performance**

We operated with zero spills above one barrel in 2019. Since 2018 our energy consumption as well as produced water discharge at our business unit in Indonesia both increased, while the total water consumption improved. The increase in energy use directly relates to the continuous compressor unit operation, which was not required in 2017, as the natural wellhead pressure was sufficient for gas export activity.

The increase in produced water discharge is caused by our increased production activity.

The variation in waste generated (Thailand and Indonesia) can be related to non-routine activities like major field shutdowns, which do not occur on an annual basis.

**GHGs and other air emissions**

Mubadala Petroleum is committed to playing a responsible role and contributing to long-term sustainable development. This commitment includes full compliance with all local environmental legislation and regulations and limiting GHG and other air emissions, as well as supporting capacity building of local communities to make them more climate change resilient.

**Our ambition and approach**

For Mubadala Petroleum, the last two years have been ones of unprecedented growth, reflecting our current strategic priorities that are also well aligned with current market trends. One of these trends is the transition toward lower carbon-emitting fuels and the recognition by producers that the energy system is changing rapidly. Overall, we recognized the industry’s movement toward a more sustainable future early on, and we have been deliberately reshaping our portfolio in line with the new realities.

**Reshaping our portfolio to transition into lower carbon-emitting fuels**

The variations in GHG emissions and total flaring over the past years directly relate to our production activities and fluctuate accordingly.

**SDG 13.B:** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

**SDG 2.4:** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

**Performance**

The variations in GHG emissions and total flaring over the past years directly relate to our production activities and fluctuate accordingly.

**Total GHG emissions**

(tons of CO₂eq)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>664,098</td>
<td>765,061</td>
<td>608,695</td>
</tr>
</tbody>
</table>

**Total flaring**

(mmscf)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,412</td>
<td>1,677</td>
<td>1,242</td>
</tr>
</tbody>
</table>

**GRI 305: 103-1, 103-2, 103-3**

**Purposeful Sustainability**

Mubadala Petroleum Sustainability Report 2019

Mubadala Petroleum Sustainability Report 2019

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Mubadala Petroleum Sustainability Report 2019

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GRI 302-1, 302-3, 303-4, 303-5, 306-3, 306-4
### Emissions

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct GHG emissions</td>
<td>664,098</td>
<td>765,061</td>
<td>608,695</td>
</tr>
<tr>
<td>(Scope 1) (tons of CO₂eq)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect GHG emissions</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(Scope 2) (tons of CO₂eq)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total GHG emissions</td>
<td>664,098</td>
<td>765,061</td>
<td>608,695</td>
</tr>
<tr>
<td>(tons of CO₂eq)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO₂ emissions (tons)</td>
<td>1.20</td>
<td>1.06</td>
<td>1.07</td>
</tr>
<tr>
<td>NOₓ emissions (tons)</td>
<td>67</td>
<td>87</td>
<td>92</td>
</tr>
<tr>
<td>VOC emissions (tons)</td>
<td>88</td>
<td>117</td>
<td>113</td>
</tr>
<tr>
<td>Emissions of ozone-depleting substances (tons)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total flaring (mmscf)</td>
<td>1,412</td>
<td>1,677</td>
<td>1,242</td>
</tr>
<tr>
<td>Total venting (mmscf)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1. Note: data only covers the business units in Thailand and Indonesia
2. Note: data only covers the business unit in Indonesia

### GHG saving initiatives in Thailand

**Nong Yao and Manora fields use produced gas for generator**

Our business unit in Thailand was able to reduce the amount of gas flaring at Manora and Nong Yao fields by trapping associated gas from the production separator to generate electricity by gas generator sets in Manora and bi-fuel diesel generators in Nong Yao. Emissions from flaring gases were reduced as a result.

### GHG saving initiatives in Indonesia

**Installation of an electric gas heater to reduce amount of gas to be flared**

During 2013-2017 the dry gas seal of the gas turbine compressor experienced repetitive failures that led to equipment unavailability. It was found that the root cause was the temperature of the seal gas, which was lower than the designed operating temperature. However, to prevent condensation, the temperature must be maintained above the dew point, either by increasing the flow rate of seal gas or by releasing some of the gas to flare. This led to increased consumption of seal gas burned to flare.

In response, the team installed an electric heat tracing to increase the temperature of seal gas to 70°C from 50°C. This prevented the issue of condensation and ultimately resulted in a reduction of the amount of seal gas that need to be flared. The compressor seal gas temperature alteration attempted in 2019 resulted in a 76% reduction of gas flaring compared to the previous year.

### Biodiversity management

In the oil and gas industry, it is critical to ensure that the impact of operations on environment, including biodiversity, is minimized. With our programs, we contribute to conserving the oceans, seas and marine resources.

### Our ambition and approach

At Mubadala Petroleum, we have a whole range of biodiversity management programs. These programs include regular monitoring of seawater quality, plankton, fish larvae, benthos, and marine mammals.

### Biodiversity initiatives in Thailand

**Environmental Quality Monitoring Program**

As required by Environmental Impact Assessments, the business unit in Thailand conducts an Environmental Quality Monitoring Program with the objective of monitoring the potential impact of our operation on environment. Environmental sampling and analysis are conducted according to the environmental monitoring programs determined and approved by government agencies. The parameters monitored include physical and chemical properties of seawater, physical and chemical properties of sediment, plankton and fish larvae, benthos and marine mammals.

Our contribution to environmental protection in Thailand has received recognition since 2011, particularly our coral research and restoration project, which was recognized through Royal Audiences with the HRH Princess Maha Chakri Sirindhorn.

So far over 2,500 healthy young coral have been transplanted and developed into new reef areas in the Gulf of Thailand, while funding of solar panels have made the coral hatchery facility more environmental friendly.
Biodiversity initiatives in Indonesia

**Monitoring program**
Our operations in Indonesia have a biannual monitoring program for plankton abundance and diversity around offshore platforms. The program aims to observe whether there is any disruption to plankton condition resulting from our operations. Recent results showed that plankton abundance and diversity were maintained with minor variation compared to the baseline level prior to gas production activities.

**Sighting observation program**
Since 2016 the business unit has conducted a sighting observation program for marine mammals and sea reptiles at offshore platforms. At the beginning, this program was developed to prevent any potential negative impact on the local fauna due to our production activities, such as sea construction, seismic activities, vessel movement etc. Our Ruby offshore platform is known to be situated at a migration path of marine mammals and sea reptiles, which is why all workers on site are asked to record any sightings. In the future, we are aiming to engage and raise awareness among coastal community members for the protection of marine species.

Marine animal sightings:

<table>
<thead>
<tr>
<th>Year</th>
<th>Bottlenose Dolphins</th>
<th>Green Turtles</th>
<th>Spinner Dolphins</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>15</td>
<td>22</td>
<td>82</td>
</tr>
<tr>
<td>2017</td>
<td>3</td>
<td>78</td>
<td>60</td>
</tr>
<tr>
<td>2018</td>
<td>33</td>
<td>57</td>
<td>68</td>
</tr>
<tr>
<td>2019</td>
<td>292</td>
<td>151</td>
<td>59</td>
</tr>
</tbody>
</table>

For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report.
The service was performed on the English version of the report.
## Material Topics

### GRI 103: Management Approach 2016
- **103-1** Explanation of the material topic and its Boundary
- **103-2** The management approach and its components
- **103-3** Evaluation of the management approach

### GRI 204: Procurement Practices 2016
- **204-1** Proportion of spending on local suppliers

### GRI 300: Environmental Standards Series

<table>
<thead>
<tr>
<th>Topic</th>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>302-1</td>
<td>Energy consumption within the organization</td>
</tr>
<tr>
<td></td>
<td>302-2</td>
<td>Energy intensity</td>
</tr>
<tr>
<td></td>
<td>302-3</td>
<td>Energy intensity</td>
</tr>
<tr>
<td></td>
<td>302-4</td>
<td>Reduction of energy consumption</td>
</tr>
<tr>
<td>Water and Effluents</td>
<td>303-1</td>
<td>Management of water discharge-related impacts</td>
</tr>
<tr>
<td></td>
<td>303-2</td>
<td>Water discharge</td>
</tr>
<tr>
<td></td>
<td>303-3</td>
<td>Water consumption</td>
</tr>
</tbody>
</table>

### Biodiversity

<table>
<thead>
<tr>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>304-1</td>
<td>Direct (Scope 1) GHG emissions</td>
</tr>
<tr>
<td>304-2</td>
<td>Energy indirect (Scope 2) GHG emissions</td>
</tr>
<tr>
<td>304-5</td>
<td>Reduction of GHG emissions</td>
</tr>
</tbody>
</table>

### Emissions

<table>
<thead>
<tr>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>305-1</td>
<td>Direct (Scope 1) GHG emissions</td>
</tr>
<tr>
<td>305-2</td>
<td>Energy indirect (Scope 2) GHG emissions</td>
</tr>
<tr>
<td>305-5</td>
<td>Reduction of GHG emissions</td>
</tr>
</tbody>
</table>

### Waste

<table>
<thead>
<tr>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>306-1</td>
<td>Waste generation and significant waste-related impacts</td>
</tr>
<tr>
<td>306-2</td>
<td>Management of significant waste-related impacts</td>
</tr>
<tr>
<td>306-3</td>
<td>Waste generated</td>
</tr>
<tr>
<td>306-4</td>
<td>Waste diverted from disposal</td>
</tr>
</tbody>
</table>

### Employment

<table>
<thead>
<tr>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>401-1</td>
<td>New employee hires and employee turnover</td>
</tr>
<tr>
<td>401-2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees</td>
</tr>
</tbody>
</table>

### Occupational Health and Safety

<table>
<thead>
<tr>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>403-1</td>
<td>Worker participation, consultation, and communication on occupational health and safety</td>
</tr>
<tr>
<td>403-2</td>
<td>Hazard identification, risk assessment, and incident investigation</td>
</tr>
<tr>
<td>403-4</td>
<td>Workers covered by an occupational health and safety management system</td>
</tr>
</tbody>
</table>

### Water and Effluents

<table>
<thead>
<tr>
<th>GRI Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>303-1</td>
<td>Management of water discharge-related impacts</td>
</tr>
<tr>
<td>303-2</td>
<td>Water discharge</td>
</tr>
<tr>
<td>303-3</td>
<td>Water consumption</td>
</tr>
</tbody>
</table>

### GRI 102-55 Disclosure

- **102-52** Reporting cycle: Annual
- **102-53** Contact point for questions regarding the report: None
- **102-54** Claims of reporting in accordance with the GRI Standards: None
- **102-55** GRI content index: Page numbers and/or URLs and/or direct answers/reason for omission:

### GRI Standard

- **GRI 103: Management Approach 2016**
  - **103-1** Explanation of the material topic and its Boundary
  - **103-2** The management approach and its components
  - **103-3** Evaluation of the management approach

### GRI 200: Economic Standard Series

- **GRI 103: Management Approach 2016**
  - **103-1** Explanation of the material topic and its Boundary
  - **103-2** The management approach and its components
  - **103-3** Evaluation of the management approach

### GRI 204: Procurement Practices 2016

- **204-1** Proportion of spending on local suppliers

### GRI 205: Indirect Economic Impacts 2016

- **205-1** Infrastructure investments and services supported

### GRI 300: Environmental Standards Series

- **GRI 302** Energy Consumption
  - **302-1** Energy consumption within the organization
  - **302-2** Energy intensity
  - **302-3** Energy intensity
  - **302-4** Reduction of energy consumption

- **GRI 303** Waste
  - **303-1** Management of water discharge-related impacts
  - **303-2** Management of water discharge-related impacts
  - **303-3** Water discharge
  - **303-4** Water consumption

### GRI 400: Social Standards Series

- **GRI 401** Employment
  - **401-1** New employee hires and employee turnover
  - **401-2** Benefits provided to full-time employees that are not provided to temporary or part-time employees

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- **102-53** Contact point for questions regarding the report: None.
- **102-54** Claims of reporting in accordance with the GRI Standards: None.
- **102-55** GRI content index: Page numbers and/or URLs and/or direct answers/reason for omission: None.
- **102-56** External assurance: None.

- **102-57** GRI 102-55 GRI content index: Page numbers and/or URLs and/or direct answers/reason for omission: None.

- **102-58** GRI 102-55 GRI content index: Page numbers and/or URLs and/or direct answers/reason for omission: None.
List of Abbreviations

AI  Artificial Intelligence  LED  Light Emitting Diode
AIMP  Asset Integrity Management Program  LT1  Lost Time Injuries
API  American Petroleum Institute  LTIR  Lost-time Injury Rate
BCMT  Business Continuity Management Team  M³  Cubic Meter
BCP  Business Continuity Plan  MBOE  Thousand Barrels of Oil Equivalent
CDM  Career Development Monitoring  MMBOE  Million Barrels of Oil Equivalent
CEO  Chief Executive Officer  MMSCF  Million Standard Cubic Feet
CO₂eq  Carbon Dioxide Equivalent  MOC  Management of Change
COVID-19  Coronavirus Disease  MP  Mubadala Petroleum
EDF  Education for Development Foundation of Thailand  MPIID  Mubadala Petroleum Integrated Development Program
ERM  Enterprise Risk Management  NGOs  Non-Governmental Organizations
ESP  Electrical Submersible Pump  NOx  Nitrogen Oxides
GJ  Giga Joule  OHSAS  Occupational Health and Safety Assessment Series
GHG  Greenhouse Gas  OMS  Operations Management System
GRI  Global Reporting Initiative  PETRONAS  Petronas Nasional Berhad (Malaysia’s national petroleum corporation)
GRI 103: Management Approach 2016
GRI 103: Management Approach 2016
GRI 404: Training and Education 2016
GRI 413: Local Communities 2016
EDF  Education for Development Foundation of Thailand
RE  Environmental Risk Management
GRI 404-1 Average hours of training per year per employee 52
GRI 404-2 Programs for upgrading employee skills and transition assistance programs 51-53
LED  Electric Lamp Diode
HSSE  Health, Safety, Security and Environment
HSE  Health, Safety and Environment
HVAC  Heating, Ventilation, and Air Conditioning
LTI  Lost Time Injuries
LTI  Lost Time Injuries
LTIR  Lost-time Injury Rate
LTI  Lost Time Injuries
M³  Cubic Meter
MBOE  Thousand Barrels of Oil Equivalent
MMBOE  Million Barrels of Oil Equivalent
MMSCF  Million Standard Cubic Feet
MP  Mubadala Petroleum
Mubadala Petroleum
MPID  Mubadala Petroleum Integrated Development Program
NGOs  Non-Governmental Organizations
NOx  Nitrogen Oxides
OHSAS  Occupational Health and Safety Assessment Series
OMS  Operations Management System
P  Mubadala Petroleum
PETRONAS  Petronas Nasional Berhad (Malaysia’s national petroleum corporation)
PROPER  Pollution Control, Evaluation and Rating Program
PTTEP ED  PTTEP Energy Development Company Limited
Q&A  Questions & Answers
QHSE  Quality Health Safety Security and Environment
QHSE  Quality Health Safety Security and Environment
SDGs  Sustainable Development Goals
SO₂  Sulfur Dioxide
SRT  Site Response Team
SVP  Senior Vice President
THB  Thai Baht (Thai currency)
TRIR  Total Recordable Injury Rate
USD  United States Dollar
USD  United States Dollar
VOC  Volatile Organic Compound
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