

# LIBYA'S OIL LEGACY

ESG and Climate Adaptation for a Sustainable Future

### SECURING LIBYA'S OIL LEGACY THROUGH ESG AND CLIMATE ADAPTATION

Libya is at a crossroads. The nation must balance its role as Africa's leading oil producer with the urgent need to address climate change. This balance is achievable through innovation, sustainable practices, and a commitment to Environmental, Social, and Governance (ESG) principles.

#### Libya's Energy Challenge: Balancing Growth and Sustainability

With over 48 billion barrels of proven oil reserves, Libya stands as Africa's leading oil producer, generating 1.24 million barrels per day. But beyond this vast potential, the nation is faced with a stark reality: climate change is no longer a distant concern but an immediate threat to its economic future. As the world shifts towards decarbonization, the question arises—how can Libya reconcile its reliance on oil with the growing pressures of global climate action?

The answer lies in the integration of Environmental, Social, and Governance (ESG) principles. Libya's oil sector, the lifeblood of its economy, must evolve, not just to meet increasing production targets but to confront the pressing environmental challenges that threaten its long-term sustainability. As Libya aspires to increase oil output to 2 million barrels per day in the coming years, it is crucial to consider how ESG-focused strategies can help tackle these climate challenges without compromising the nation's economic growth.



#### The Climate Threats Libya Faces

Libya is already experiencing the impacts of climate change in its oil-producing regions. Rising temperatures, severe droughts, and increasing desertification are placing unprecedented strain on vital infrastructure and natural resources. Specific climate threats to Libya's oil and gas industry include:

Water Scarcity: Oil extraction and refining processes demand large amounts of water, which is increasingly difficult to access in one of the world's most water-scarce countries. Without significant improvements in water management, this will lead to further environmental stress and tensions over resource allocation.

**Desertification:** The rapid advance of desertification is threatening infrastructure, roads, and pipelines crucial for oil transport. As the Sahara expands, maintaining and upgrading these systems will become more costly and challenging.

**Extreme Weather Events:** Droughts and heatwaves are not only affecting production efficiency but also raising operational risks. With rising temperatures and extreme weather events becoming more frequent, the risk of infrastructure failure and operational disruptions continues to grow.

These risks are a direct threat to Libya's ability to meet its ambitious production goals. Without proactive measures, they could severely undermine the oil sector's stability and Libya's economic future.

#### Bridging the Gap: Climate Action Without Compromising Oil Production

Libya's oil sector need not be sacrificed for the sake of climate action. In fact, ESGfocused strategies provide a path for the nation to both safeguard its oil output and address the environmental risks it faces. Here are some of the immediate solutions that can be implemented:

#### Adopt Low-Carbon Technologies in Oil

**Production:** The first step toward a sustainable oil industry is reducing carbon emissions at the source. Technologies such as carbon capture and storage (CCS) can be incorporated into existing operations to minimize the environmental footprint of oil extraction. Libya can also explore the use of renewable energy—such as solar power—to support oil production processes and reduce reliance on fossil fuels for operational energy needs.

**Climate-Resilient Infrastructure:** The vulnerability of Libya's oil infrastructure to extreme weather must be addressed. Investing in more climate-resilient pipelines, facilities, and transportation routes will not only protect production but also reduce long-term operational costs. This should be accompanied by measures to improve the durability of equipment in extreme heat conditions and enhance maintenance protocols to prevent weather-related breakdowns. **Efficient Water Use:** Water is vital for oil production, and Libya must take urgent steps to enhance water efficiency in the sector. Recycling wastewater, adopting water-saving technologies, and investing in desalination plants are essential strategies. Additionally, the oil sector should collaborate with international experts on water management solutions tailored to the unique environmental challenges Libya faces.

**Integrating Renewable Energy**: Libya has immense potential for renewable energy, particularly solar. Harnessing this potential to power oil operations, rather than relying on conventional fossil fuels, would not only reduce emissions but also open new revenue streams for the country. Developing a hybrid approach that combines oil production with renewable energy investments can strengthen Libya's energy security and future-proof its economy.



## The First Steps Towards a Sustainable Future

For Libya to lead the way in responsible energy production, it must start by embedding ESG into every aspect of its oil and gas sector. Immediate actions that can be taken include:

#### **Establish Clear ESG Standards and**

**Targets:** Libya must set clear, actionable goals for emission reductions, water efficiency, and community engagement. These benchmarks will not only guide the industry but also build confidence among international investors, positioning Libya as a responsible player on the global stage. One of the cornerstones of ESG is strong governance. Libya must implement robust oversight mechanisms, ensuring that environmental and social risks are systematically assessed and mitigated. Transparent reporting on ESG performance will be key to attracting sustainable investments and fostering long-term partnerships with international stakeholders.

**Engage Local Communities:** The social pillar of ESG is just as critical as the environmental one. Libya's oil wealth must translate into tangible benefits for its people. This means creating jobs, investing in local infrastructure, and improving the quality of life in oil-producing regions. By fostering strong relationships with communities, Libya can ensure that its energy future is inclusive and sustainable.

#### **Promote International Collaboration:**

Tackling climate risks and transitioning to a more sustainable oil industry cannot be achieved in isolation. Libya should leverage its position as a key player in the African and global energy landscape to foster partnerships with international organizations, investors, and technology providers. These collaborations can bring the expertise and resources necessary to implement large-scale ESG initiatives.

### Navigating the Future Through ESG

As the world stands on the cusp of an energy transition, Libya has an opportunity to reimagine its role in the global oil market. The Libya Energy & Economic Summit serves as a platform not just to discuss production targets, but to initiate meaningful conversations about how the oil sector can adapt to the realities of climate change while remaining a cornerstone of the economy.

Through decisive ESG actions, Libya can protect its oil industry from the growing risks posed by climate change, attract sustainable investments, and lay the foundation for a diversified and resilient energy future. The path ahead may be challenging, but with the right strategies, Libya can emerge as a leader in sustainable energy production—one that balances economic growth with environmental stewardship.

#### **Driving Sustainable Progress**

As the global energy landscape transitions towards sustainability, Libya stands at a crossroads. By embedding ESG principles into its oil sector, Libya can not only safeguard its oil output but also address the pressing environmental challenges that threaten its future. The Libya Energy & Economic Summit provides an opportunity to lead these efforts, fostering collaboration and dialogue on sustainable energy strategies.

Now is the time for decisive action. Through investments in low-carbon technologies, climate-resilient infrastructure, and renewable energy, Libya can chart a path toward a diversified and resilient energy future. By taking these steps, Libya has the potential to emerge as a leader in sustainable energy production—one that balances economic growth with environmental stewardship.

Let's transform challenges into opportunities and build a future where Libya's energy sector thrives sustainably on the global stage.

#### Partner with Experts

At Moore, we understand the complex challenges and opportunities facing Libya's energy sector. With decades of global expertise in ESG strategy, climate adaptation, and energy sector transformation, Moore provides tailored solutions to help nations like Libya achieve sustainable growth.

#### To find out more, please contact our Expert below:



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