CHAPTER SIX
ALIGNING WITH GLOBAL CLIMATE GOALS: OIL AND GAS

Since the first LCDS was published, oil and gas have been discovered off Guyana's coast, creating new opportunities to transform Guyana's development prospects. Oil and gas revenues will be managed strategically and responsibly, by:

- Using oil and gas revenues to boost national budget resources to fund **increased investments as well as social and economic investments, most notably in health and education.** This will enable all Guyanese to reach higher standards of living and wellbeing.
- Support for **diversification of the economy** by supporting non-oil sectors and supporting future development all across Guyana. This will involve support for transformational physical infrastructure outlined in this document – including river, road and air transport networks; the national digital connectivity network; and repairing coastal and Hinterland climate protection infrastructure.
- Managing oil and gas revenues **in accordance with the rules of the Natural Resources Act**, which sets a formula for saving revenues beyond those that are invested in the above objectives.

At the same time, the Government recognises that Guyana will need to align development of its oil and gas sector with global trends towards decarbonisation. It will do this through two strategic objectives:

- **Ensuring a domestic low-carbon transition:** As outlined in earlier chapters of this document, Guyana intends to achieve ambitious domestic targets to maintain its position as a net-zero economy, prioritising action on forests, low-carbon energy and transportation. In summary, Guyana's non-forest emissions can continue to stay low as the country grows its economy, while the forest will continue to sequester carbon and sustain the country's status as a net absorber of carbon. With the right economic incentives, ecosystem services can provide an at-scale diversification opportunity for Guyana, reducing the need to pursue high-carbon economic pathways.

- **Participating in a global low-carbon transition:** The majority of Guyana's oil and gas will be sold in the global marketplace. The Government believes that this market needs to develop in alignment with the goals of the Paris Climate Agreement, specifically, to stablise global temperature increases at less than 1.5 degrees Celsius above pre-industrial levels.

As a result, most of Guyana's oil and gas will serve global demand, and the trajectory will be set by those who create the demand. The Government will steward Guyana's oil and gas industry accordingly, and the measures to achieve this are set out below.

The Global Low-Carbon Transition: Aligning with Global Net Zero

To achieve the goals of the Paris Climate Agreement and stabilise global temperatures at or below 1.5 degrees above pre-industrial levels, global oil demand needs to fall sharply before 2050.

In March 2021, the International Energy Agency, with the involvement of energy and climate leaders from over 40 countries, set out seven key principles for meeting the goals of the Paris Climate Agreement, and "implementing net zero" in the global energy sector by 2050.

The seven key principles led to a July 2021 report, setting out how "Net Zero by 2050" could be achieved, and outlined how this requires a complete transformation of the global energy and transportation sectors. Between 2020 and 2030, global renewable energy capacity needs to increase four-fold, the use of electric vehicles across the world needs to increase eighteen-fold, and the energy intensity of global GDP needs to decrease by four percent per annum. Achieving this transformation will require huge leaps in innovation including advanced batteries, hydrogen electrolysers and direct air capture and storage.

The report outlines how, under the "Net Zero by 2050" scenario, global oil consumption will decrease from 98 million barrels per day in 2019 to 72 million barrels per day by 2030, and 24 million barrels per day in 2050.

By 2050, at this level of consumption, 70% of oil use will be in applications where the fuel is not combusted and therefore does not result in any direct CO2 emissions, for example, the use of oil as chemical feedstocks and in lubricants, paraffin waxes and asphalt.

Therefore, the central challenge for the international community is to align behind a scientifically and economically rational set of policies to drive oil demand down from almost 100 million barrels a day to 24 million barrels within 40 years.

Guyana's Policy Position

Guyana supports the achievement of Net Zero by the 2050 target, including the more short-term target of a 28% reduction in global oil demand by 2030.

To be effective, global policies to achieve these targets need to be fair, economically rational and based on science.

Fairness requires that the oil industry – which is worth US$3-4 trillion every year – should not just be for the benefit of incumbents, particularly when those incumbents are already very wealthy. The world's largest oil producer – the United States of America – has a per capita income of US$65,000 – about ten times that of Guyana. If Guyana were to prematurely forego oil and gas revenues, it would simply mean a continuation of a defacto monopoly where incumbents would meet demand and benefit from the industry which will be worth trillions of dollars for decades to come. It would also mean that Guyana would remain poor and unable to invest in lifting the living standards of its people. Rather than expecting supplier countries to forego opportunities by leaving them to incumbents, predictable global policies are needed. Since 2009, Guyana has supported two main global policies:

- **A global price on carbon, whether through a global carbon tax regime or a global carbon market**
  A carbon price, levied on the consumption of oil and gas, incentivises both investment in lower carbon replacements for fossil fuel electricity and transportation (for example, renewable energy and electric vehicles) as well as managing the global low-carbon transition, by progressively driving out the highest carbon, least economically viable fossil fuels, particularly coal, oil and gas. Calls for such a carbon price have been made for many years – notably in the 2010 report of the United Nations Secretary-General High Level Advisory Group on Climate Change Financing for which Guyana was a part of the 15-member team. Subsequent analysis emphasised the criticality of this issue, including the "Report of the High-Level Commission on Carbon Prices", sometimes known as the "Stiglitz-Stern Report", which concluded that a carbon price between US$50 and US$100 will be needed to achieve the dual goals of increasing low-carbon investment and aligning with a Paris Agreement target for reducing fossil fuel usage.

Despite this long-standing consensus that a global carbon price regime is needed, international action to progress this regime remains inadequate. The Government of Guyana supports calls for the international community – working through the United Nations Framework Convention on Climate Change (UNFCCC) and other relevant international institutions – to accelerate work on both the methodology and implementation of this pricing regime.

- **The removal of subsidies for fossil fuel production**
  In 2019, fifty of the largest economies in the world – who account for 80% of global greenhouse gas emissions – increased their support for fossil fuel production by 30%, with total support reaching US$178 billion. Most of this was in developed (OECD) countries. In effect, this uses public money to drive down the costs of oil production, regardless of the carbon-intensity of the oil and gas being produced.

  The Government of Guyana supports calls for the elimination of such fossil fuel subsidies, especially in OECD countries where subsidies are the most distorting. This will lead to the breakup of the current monopoly-like situation, and the stabilising of price levels

Combined, these two policies can drive the most carbon-intensive and least economically-rational oil and gas out of the market, enabling the remaining post-2050 supply of oil to be the lowest carbon and most economically efficient.

At the same time, to drive down carbon intensity further and remain relevant in a Paris Climate Agreement-compatible oil market, Guyana will significantly increase domestic policy measures, including:

- **Tax on Flaring**
  Globally, gas flaring – which results from the burning of natural gas – causes more than 300 million tonnes of carbon dioxide equivalent to be emitted every year. If this was used to produce energy, it would generate enough electricity to supply the entirety of the African continent's current annual demand.

  When the current Government took office in 2020, there were no safeguards in place to disincentivise or disallow flaring. At the same time, the industry's first floating production, storage and offloading vessel (FPSO) was flaring excessively due to a faulty gas compression system.

  The Government has taken action to address the historical issues of limited safeguards and the consequent lack of incentives for preventing excessive flaring, at the same time as putting in place measures to dis-incentivise all excessive flaring from new FPSOs in the future.

Policies have been introduced which prohibit routine flaring from oil and gas operations except for those flare streams necessary for safe operations (e.g. pilot flares). Certain, limited non-routine flaring circumstances are permitted but only with the approval of the competent authority, the Environmental Protection Agency (EPA) – these limited circumstances including flaring for well testing, emergencies, maintenance, and restarts.

To further dis-incentivise flaring, the Government has also implemented one of the very few taxes on flaring in the world – where approved flaring is subject to an environmental tax. The amount of the tax is set by Government, and as of mid-2022 was US$50 per tonne of carbon, along with payments for the actual gas lost.

With the introduction of these measures in 2021 and 2022, Guyana now has one of the world's strictest anti-flaring policy regimes. To enable Guyana's experiences to be shared with other oil producing nations, and to enable Guyana to benefit from the experiences of others, Guyana will join the World Bank's Zero Routine Flaring by 2030 initiative (ZRF). The World Bank describes the initiative as "a growing global coalition demonstrating strong environmental leadership and effective natural resource management". All oil and gas operators in Guyana will be encouraged to endorse the initiative – while also recognising that Guyana's domestic policies and strategies are stronger than the ZRF's minimum requirements.

- **Support for New Technology**
  The Government will continue dialogue with oil producers to ensure that, alongside the above measures, exploration and production operations continue to explore all possibilities for lower carbon technological innovation – including the use of renewable energy in oil production, Carbon Capture Utilisation and Storage (CCUS) and, – when technologically viable – green hydrogen. Further, new measures are being introduced to ensure that all waste management is the responsibility of the oil producer, from "cradle to grave".