THE IMPORTANCE OF A JUST ENERGY TRANSITION FOR O&G PRODUCING COUNTRIES

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WHAT IS THE CONCEPT OF JUST ENERGY TRANSITION?

The term "just transition" was first used by the labour movement in the United States in the 1970s, to warn about the negative economic impact that increased regulations could have on employment and income of workers in industries considered to be polluting. Since then, the term has evolved and spread among environmental justice groups, union movements, international organizations and the private sector.

In the energy sector, the concept of just transition is often associated with the adoption of criteria and measures to mitigate the negative economic and social impact in:

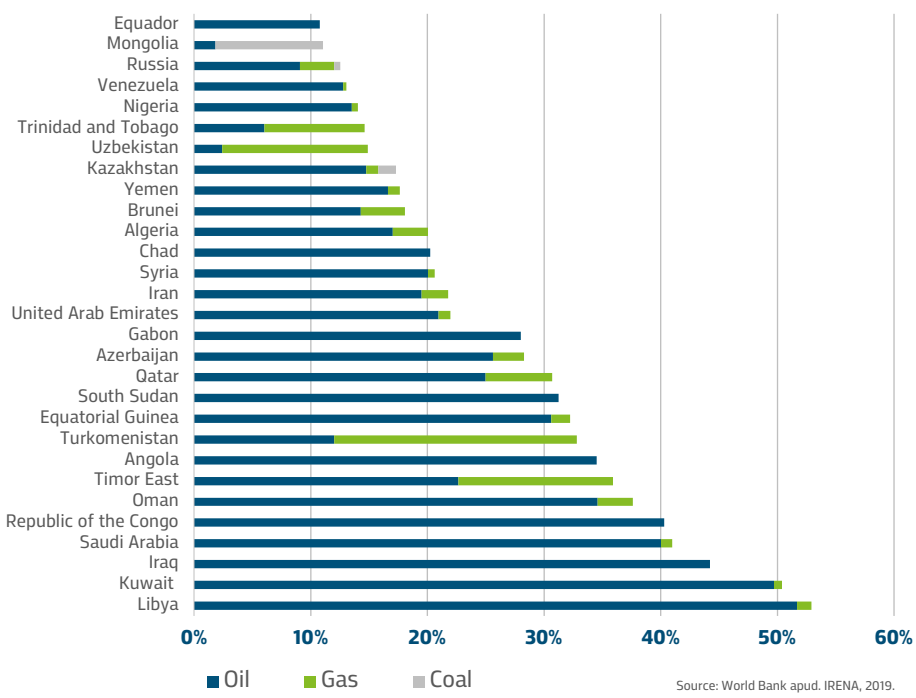
- **Fossil fuel industry workers**
- **Poor communities without resources to mitigate or adapt to climate change**
- **Countries, regions or localities that specialize in the production of fossil fuels**

IMPLICATIONS OF THE ENERGY TRANSITION IN O&G PRODUCING COUNTRIES

Productive activities associated with O&G extraction are the main source of wealth generation and employment in many producing countries. For this reason, a low-carbon energy transition must consider:

- **Assets valued in trillions of dollars**
- **Millions of direct and indirect jobs**
- **The sources of income that sustain national and sub-national economies**

Fossil fuel revenue as a percentage of GDP
(Average2007-2016)



Source: World Bank apud. IRENA, 2019.

AN INORDINATE ENERGY TRANSITION MAY CAUSE:

- **Deteriorating of socio-economic indicators in O&G producing countries**
- **Social and political tensions**
- **Other phenomena such as the forced migration of people for economic and social reasons**

The implementation of plans aimed at reducing the impacts of the energy transition in O&G-producing countries presents major challenges, especially for developing countries. For example:

- Difficulties in efficiently managing income from the O&G industry
- Challenges to improve socio-economic indicators
- In some cases, a high level of debt or poorly developed financial systems

At COP 27 in 2022, the difficulties faced by developing countries in financing their climate action plans, estimated at US$ 5.9 trillion by 2030, were highlighted.

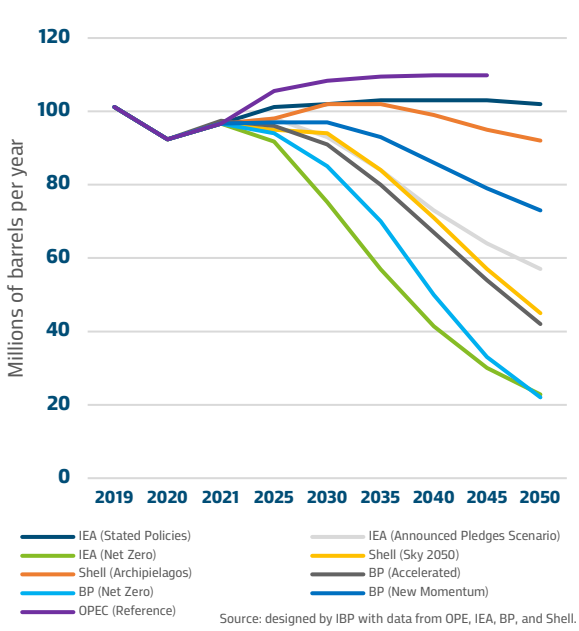
In recent years, developed countries and financial institutions have reduced credit lines for fossil fuel-based energy projects in developing countries.

At COP 26 in 2021, developed countries set an annual target of US$100 billion in joint financing for mitigation actions in developing countries. However, this target has not yet been reached.

DOES THE DECREASE IN O&G PRODUCTION IN DEVELOPING COUNTRIES CONTRIBUTE TO CLIMATE ACTION?

The reduction in O&G production needs to be aligned with decarbonization plans capable of encouraging a reduction in the demand for fossil energy sources in the main consumer markets and mitigation goals beyond the energy sector.

Global oil demand projections (mbd)



Source: designed by IBP with data from OPE, IEA, BP, and Shell.

According to more conservative scenarios, oil consumption should continue to grow for at least the next two decades

Main drivers of the demand for fossil fuels:

Industry

Cement and Steel

Transportation

Power generation

Thermal electricity

Non-energetic products

Petrochemical

Products that require inputs from the petrochemical industry

- Batteries
- Fertilizers
- Tires
- Electronic devices
- Personal hygiene products
- Solar panels
- Wind turbines
- Textiles
- Packaging
- Luggage
- Medicines

The drop in O&G production and exports from developing countries could have adverse effects:

- **An imbalance in supply and demand structures**
- **An increase in oil barrel prices**
- **Energy insecurity**

SOME OF THE COUNTRIES WITH O&G RESERVES, WHICH ARE AMONGST THE MOST VULNERABLE IN THE CONTEXT OF THE ENERGY TRANSITION, ARE ALSO THE LEAST RESPONSIBLE FOR GLOBAL GHG EMISSIONS

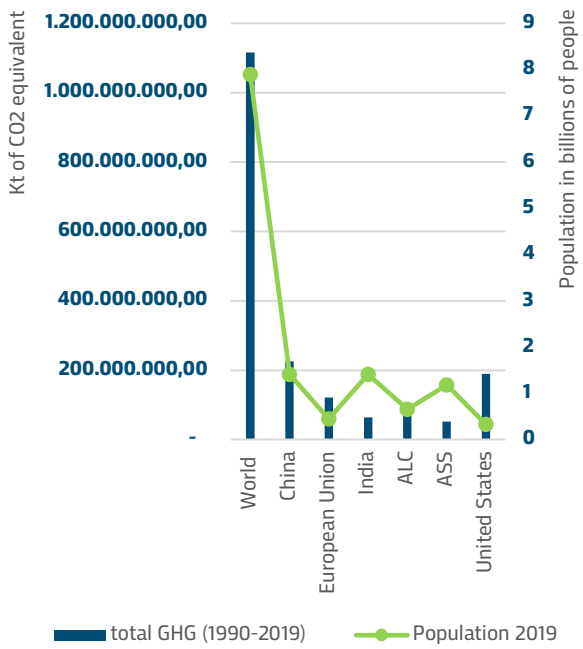
Amongst O&G-producing countries, the impact on global GHG emissions can be analyzed by considering the scope of their activities:

Countries that have significant O&G reserves but have not yet begun to monetize these resources; or are just starting these activities.

Countries whose production is predominantly of natural gas

Countries whose production is predominantly of oil

GHG emissions over the period 1990-2019 in selected countries and regions

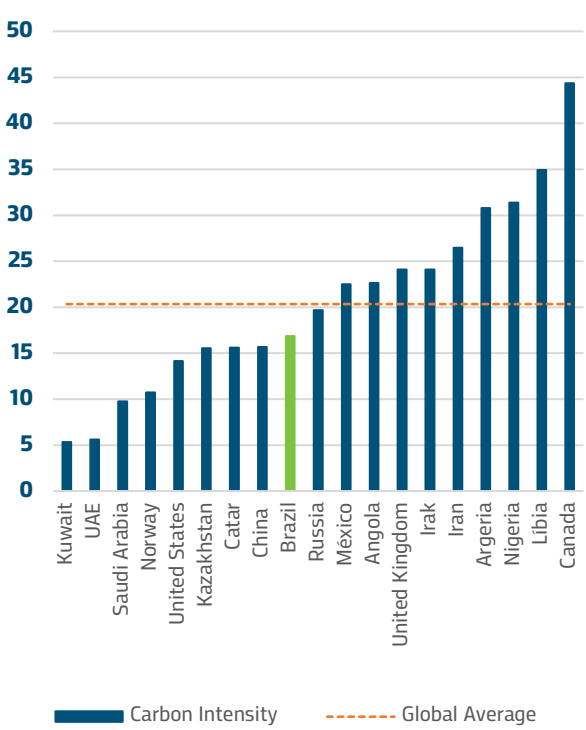


* Latin America and the Caribbean.
** Subsaharian Africa.
Source: designed by IBP using data from the World Bank, 2019.

THE SHARE OF GHG EMISSIONS LINKED TO OIL PRODUCTION ACTIVITIES VARIES ACCORDING TO THE VOLUME AND QUALITY OF THE RESOURCE EXTRACTED

Carbon intensity of oil production in selected countries

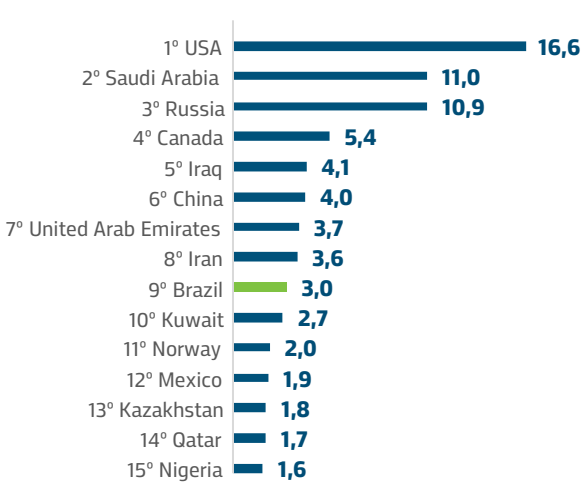
kgCO2/obe, (2019)



Source: designed by IBP using BP data, 2022.

World's largest oil producers

Millions of barrels per day, 2021



Source: designed by IBP using BP data, 2022.

The monetization of O&G resources could be an alternative for financing climate action plans in developing countries

The production and export of O&G can be a source of funds for developing countries to fund their climate action plans.

BUT WHAT DOES JUST MEAN?

The literature on just energy transition establishes some criteria for identifying which countries could have priority in monetizing their O&G reserves:

Criteria raised by the literature on just energy transition:

Accountability
The country's share of global GHG emissions

Necessity
Ability to finance their climate action plans

Equality
Population size and income level

Sovereignity
Energy supply security guarantees

Cost-effectiveness
Production costs, effectiveness in reducing GHG emissions, and institutional capacity

WHAT DOES THE PARIS AGREEMENT SAY?

Article 2 of the 2015 Paris Agreement states that its implementation will be done *"in a manner that reflects equity and the principle of common but differentiated responsibilities and respective capabilities in the light of diverse national circumstances".*

ALTERNATIVES FOR O&G-PRODUCING COUNTRIES

O&G-producing countries need to move forward in implementing plans to mitigate the socio-economic impact of the low-carbon energy transition. These plans could include the following measures:

- Implementing strategies to extend the longevity of the industry by reducing GHG emissions (CCUS, natural gas, and production of less carbon-intensive oils)
- Adopting plans for economic diversification beyond fossil fuel-intensive production activities and investments in RD&I
- Supporting workers in the sector in reformulating their professional career plans
- Carrying out climate change mitigation and adaptation plans

THE IMPORTANCE OF INTERNATIONAL COOPERATION TO MITIGATE THE IMPACTS OF THIS PHENOMENON IN MORE FRAGILE O&G-PRODUCING COUNTRIES

Industrialized countries, which have a greater share in global GHG emissions, can coordinate planned actions to fulfill their demand for fossil fuels by purchasing these resources from developing countries.

COOPERATION PLANS MAY INCLUDE:

- Diversification of O&G supply sources from reliable producing countries
- Institutional strengthening programs for the implementation of public policies focused on energy and climate
- Compensation programs to developing countries for the decision not to monetize their O&G reserves