



Responsible oil and gas

Fuels

FUELS

OVERVIEW AND CHALLENGES

The fuel sector today is marked by profound changes and accelerating societal trends such as:

- commitments made by signatory countries to the **Paris agreement** concerning the reduction of GGEs,
- the drive to **improve air quality**,
- the emergence of **soft transport modes**,
- the quest to find **substitutes** for fuels and chemical intermediates of **fossil origin**, etc.,

The evolution in the demand for oil products (fuels, naphthas, bitumen, etc.) is currently impacted by geographic and structural factors: on the one hand, growing needs in terms of individual mobility in emerging zones, road and maritime freight transport and aviation; on the other hand, the demand for fuels is also influenced by the roll-out of alternative solutions (electrification of the vehicle fleet, public policies aimed at encouraging the use of low-carbon fuels and the development of new mobility models) that will lead to radically changing needs in the future. In parallel, oil products are governed by increasingly strict specifications and the reinforcement of regulatory constraints, with, in particular, stringent standards aimed at tackling air pollution and reducing the sulfur content of gasolines and diesel fuels, limited to 10 ppm (since 2009 in Europe and since 2020 in China, India and the USA).

The pattern of evolving needs for oil products will remain divergent and heavily regionalized with:

- a fall in the global demand for gasoline fuel,
- the continued growth of middle distillates (jet, diesel) used for freight transport and aviation,,
- the structural evolution of needs for heavy oil products, marked by a reduction in the demand for heavy fuels and an increase in the demand for marine fuels (associated with the growth in freight

transport combined with the 0.5% limit placed on the sulfur content of marine fuels since 2020).

In this context, root and branch changes are required in the refining industry: it has to adapt refining facilities to propose clean products, **address mobility needs** and contribute to the **energy transition**, in an economic and sustainable manner.

In this context, root and branch changes are required in the refining industry: it has to adapt refining facilities to propose clean products meeting the strictest standards, address mobility needs and contribute to the energy transition, in an economic and sustainable manner. It will also need to integrate new non-fossil sources and improve its operations in order to reduce its CO2 emissions. To lead this transformation in an uncertain context - also marked, in the short and medium terms, by the economic impacts of the Covid-19 pandemic -, the sector is seeking to optimize its investments; it also has to speed up the process of converting its sites using the tools and software solutions of the digital revolution.

Developing innovative, eco-efficient production processes for clean, sustainable fuels meeting stricter standards and state incentives in terms of the incorporation of biofuel.

[Our solutions](#)

[Our strengths](#)

CONTACTS



Antonio Pires Da Cruz

Program manager "Gasoline Production and Purification"

antonio.pires-da-cruz@ifpen.fr



Magalie Roy-Auberger

Program manager "Conversion" and "Distillate Production and Purification"

magalie.roy@ifpen.fr

Fuels

Link to the web page :