



# A path to the future through holistic and integrated solutions



An energy transition report by Shell Catalysts & Technologies

**SHELL CATALYSTS & TECHNOLOGIES**  
TRANSFORMING ENERGY TOGETHER

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## INTRODUCTION

# As energy producers, how do you see the future?

Shell wants to accelerate its transformation into a provider of net-zero emissions energy products and services, powered by growth in its customer-facing businesses.

At Shell Catalysts & Technologies, we have always emphasized expertise and collaboration. Our mission is to work with customers and prospects alike to understand your unique positioning in location and market. We don't offer an answer to the uncertainties ahead, but we work with you to understand your goals and to present an integrated view of solutions.

In this resource, you will gain a glimpse into the collaborative mindset we adopt when approaching industry challenges including:

- the development of CO<sub>2</sub> impact assessment tools
- the integration of new assets into existing units
- the creation of a new-to-market product for renewable diesel feeds
- the evaluation of investment options across the Shell network.

We hope this will provide you with insight into how our experts help customers and prospects develop pathways for success.



## INTRODUCTION

# Understanding what you need

Every project begins with a discussion of your requirements to identify potential areas for value creation. Energy producers, in particular, are responding to changes in product demand and the growing societal and legislative focus on decarbonisation. Taking those considerations into account, market forecasts state that companies preparing for the longer-term decline in petroleum demand could strengthen their competitiveness in the coming years.<sup>1</sup> The time for change could be now.

We continue to work with energy producers who are using this period to invest in new market opportunities. These roadmaps are not only about utilising existing hardware or making optimisations, but also about the deployment of cutting-edge technologies. They often involve integrating existing assets with technologies of the future.

The challenge of creating this type of plan is that all of the solutions are not known at the start. That is why a successful roadmap relies on collaboration between parties that leverages their expertise. Our experts work with you and relevant teams across Shell's global organisation in an effort to solve some of the industry's most pressing energy transition challenges.

<sup>1</sup> "2021 oil and gas industry outlook," Deloitte, accessed 2 Feb. 2021, <https://www2.deloitte.com/us/en/pages/energy-and-resources/articles/oil-and-gas-industry-outlook.html>.







## **SNAPSHOT 1**

# **Assessing facilities' CO<sub>2</sub> impact with CO<sub>2</sub> intensity masterplanning**

## **The challenge**

Across the globe, energy producers are looking to invest in solutions that can lower the carbon footprint of their facilities and the products they produce. Concurrently, they also have increasing focus on incentives for renewables and carbon pricing policies. Energy producers are looking to assess their baseline CO<sub>2</sub> impact as well as the cost calculations with incorporated carbon tax or credit.



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