



# **Eni**

## **SCALE UP SUMMIT**

**London, 2019 June 20<sup>th</sup>**

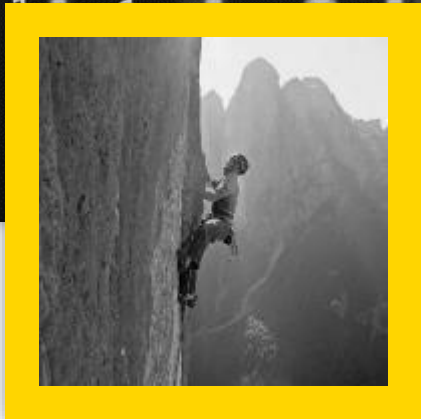
# Today's Objectives

The slide features a background of binary code (0s and 1s) in a light gray color. At the top, a yellow banner contains the text "Today's Objectives" in a dark blue, sans-serif font. Below this banner, there are three small, square images arranged horizontally, each with a yellow border. The first image on the left shows a pile of small, white cards with various words printed on them, including "would", "the", "worship", "time", "size", "put", and "and". The middle image shows a close-up of several hands, some wearing gloves, holding a small, dark object. The third image on the right shows a person climbing a large, textured rock face, with a mountain range visible in the background.

# Present Eni and its Digital Transformation Agenda



# Eni challenge to enhance Safety



# Eni Challenge to enable decarbonization & circular economy



# Agenda

# Paolo Cerioli

Group Head  
Digital Scouting &  
Open Innovation



# Present Eni and its Digital Transformation



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enable  
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# Eni in a nutshell

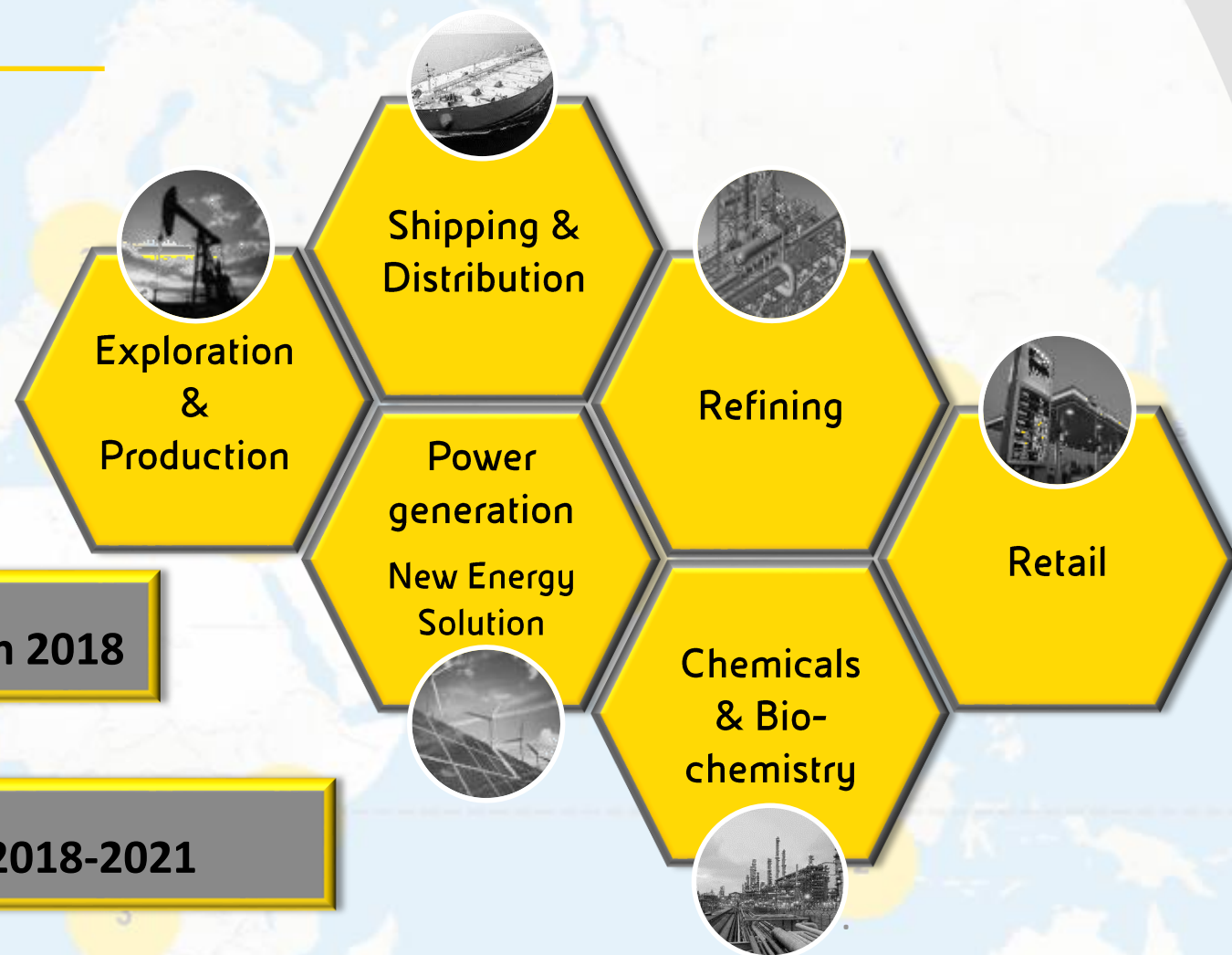
**71** countries

**33'000** employees worldwide

More than **€9B** technical investments in 2018

More than **€750M** R&D investments 2018-2021

Adjusted operating profit in 2018: **€11,2B**



Eni is building a future where access to energy is Universal, Efficient and Sustainable



# Eni Digital Agenda driven by 3 Strategic Areas

## Strategic Goals

1

**Excelling in Asset Integrity & Safety**



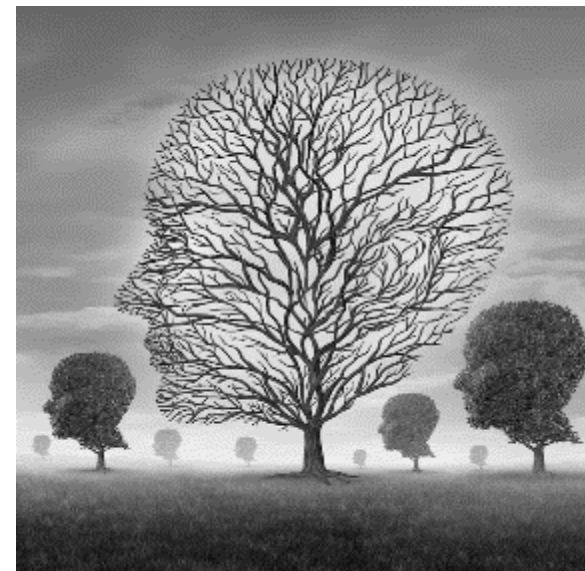
2

**Enhancing all performance drivers**



3

**Enabling Decarbonization & Circular Economy**



**People & Capabilities**

**Digital Innovation**

**Financial Investments**

# We leverage on a vast variety of integrated Digital Solutions

## Artificial Intelligence



- Machine/Deep Learning
- Natural language processing
- Image recognition
- Robot Process Automation
- Knowledge Representation & Reasoning
- Big Data



## Human Interaction

- Augmented Reality
- Virtual Reality
- Mixed Reality
- App
- Chatbot & Virtual assistant

## IoT, IIoT & Connectivity



- IoT Platform
- Sensors
- Wearable
- TAG (ie. RFID, QR code, etc)
- Connectivity (ie. 5G, etc)

## Blockchain



- Distributed Ledger and Storage
- Digital identity
- Data & Transaction Governance

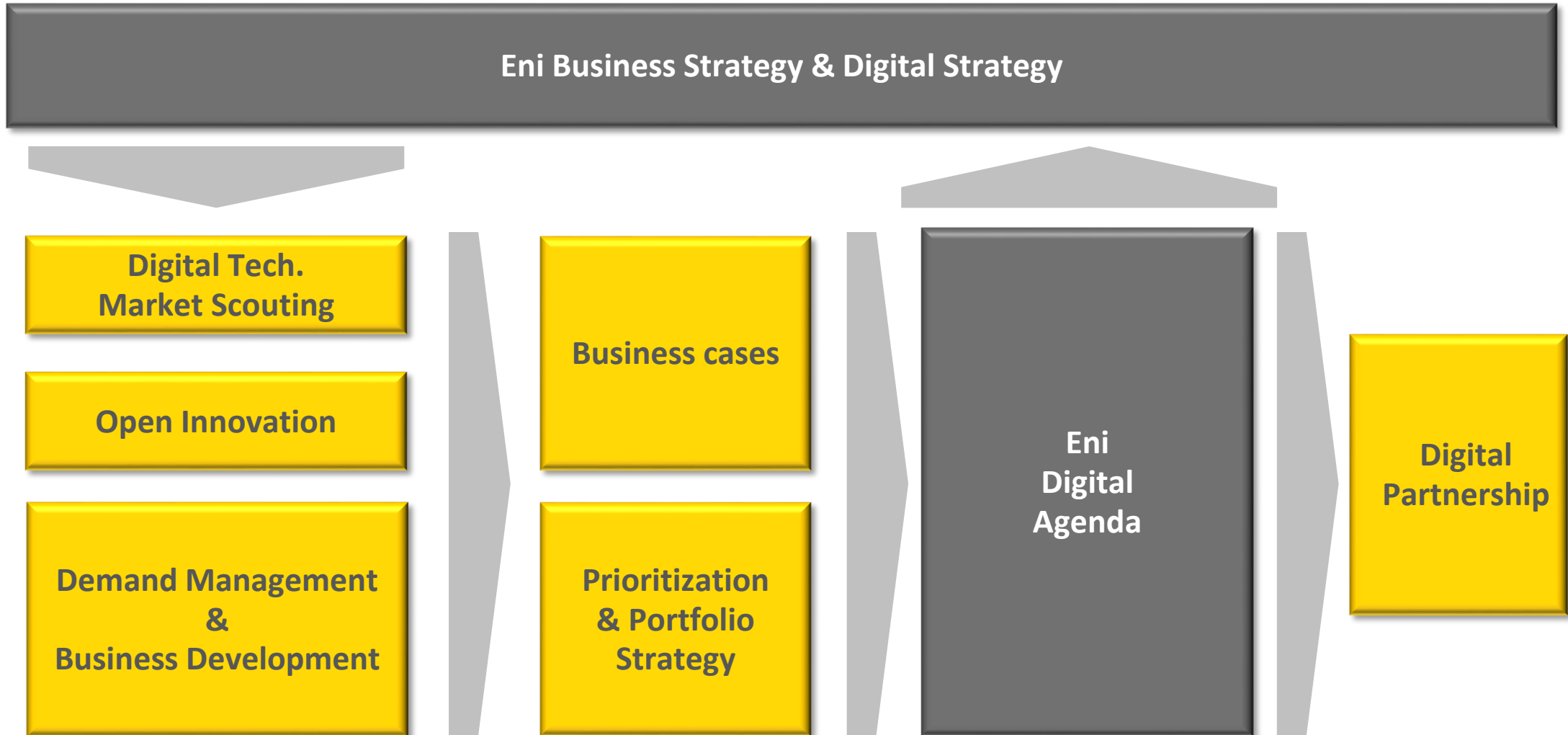
## Advanced Robotics & Additive manufacturing



- Automation & Robotics
- UAV – Unmanned Aerial Vehicles
- Wheeled
- 3D Printing



# The way we shape and drive our Digital Agenda & Strategy



# Eni Digital Agenda 2019-2022 in a nutshell

## Our Numbers

### Scope



Projects

200+

Focus

All businesses  
+ support function

Countries

38

### Innovation



Digital Technologies

All

Open Innovation

50 +

Agile & Design Thinking

35 +

### Involvement

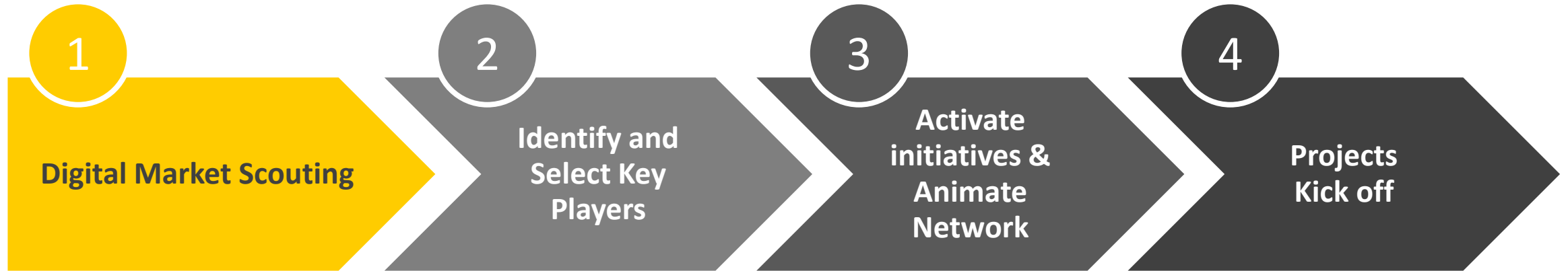


Directly involved people

ca. 1.300

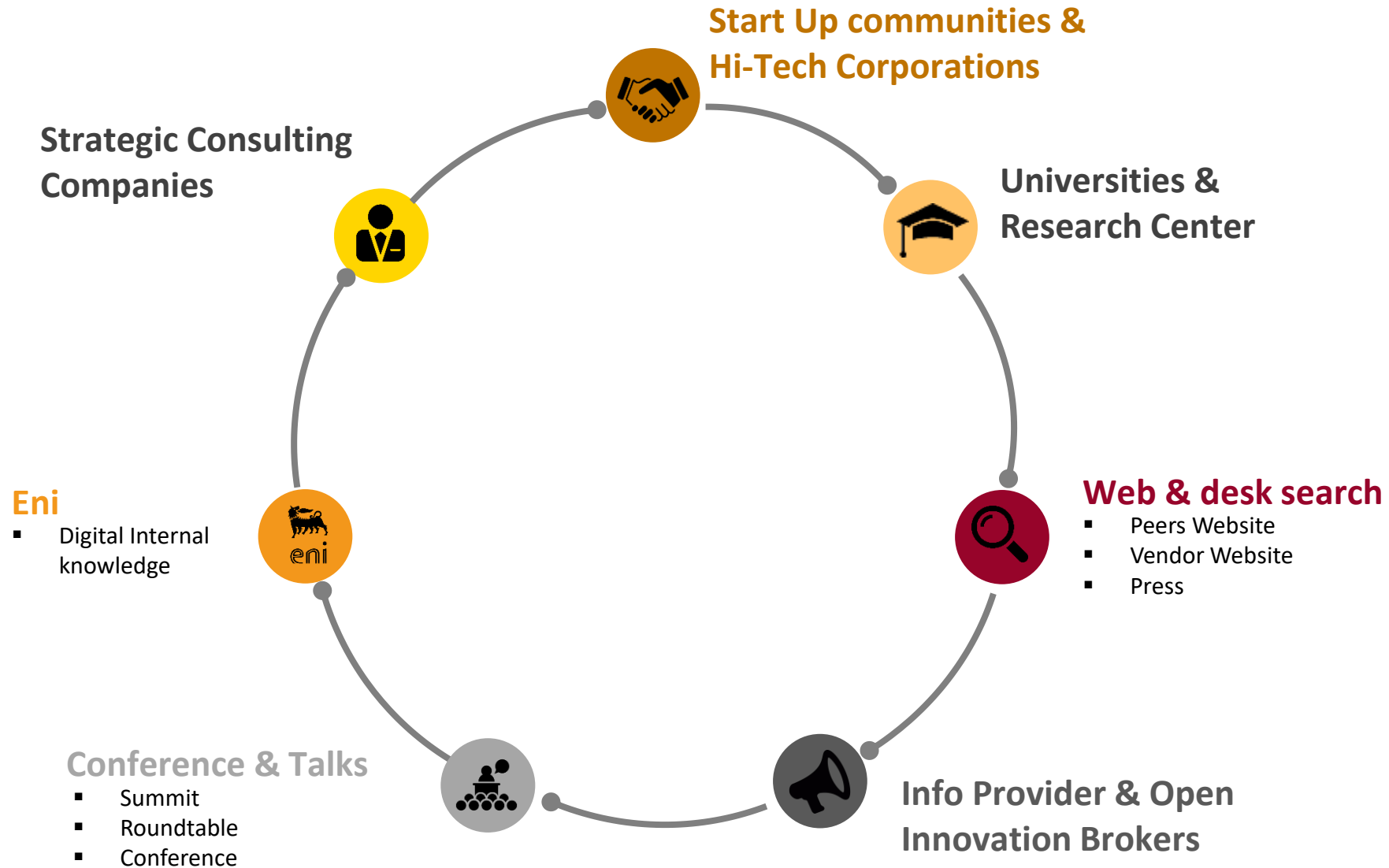


# How Eni has approached Open Innovation



# How we scout Digital trends and landscape:

## Key sources



# Agenda

**Paola Osto**

Group Head  
Digital Initiatives &  
Portfolio  
Management



Present Eni and its  
Digital  
Transformation



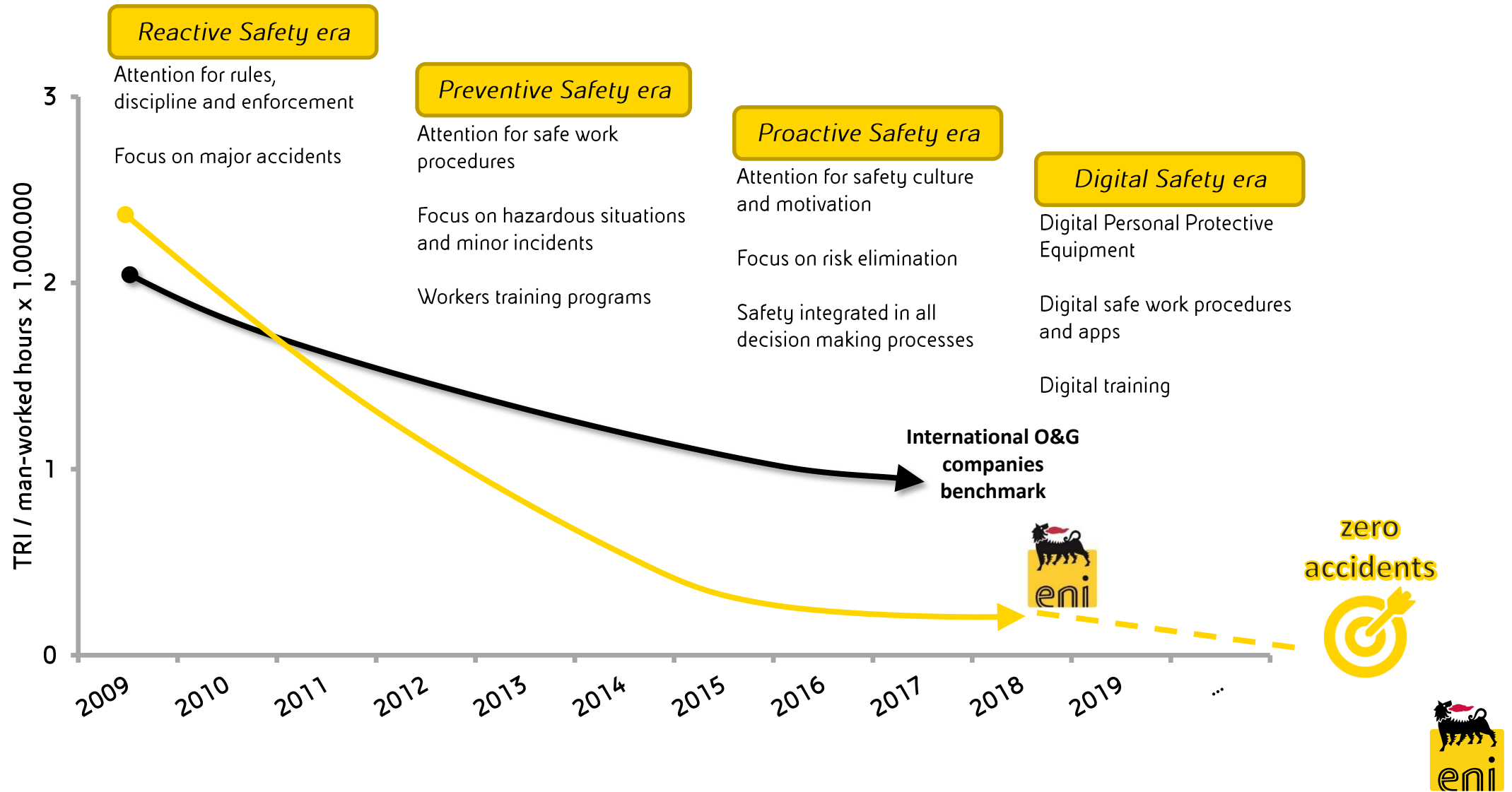
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# Eni Safety performance evolution





# Digital Technologies to increase safety: where we are today ...

## Eni safety goals



Improve workers' safety



Strengthen efficiency in safety, maintenance and operation



Monitor site activities in real time, reporting anomalies and hazardous situations



Increase the efficiency of HSE training activities

## Smart Operator Project

### Virtual Reality Training

To allow the training of operators on HSE scenarios through virtual reality technology



### E-WP

To make the work permit management and approval process more efficient.

### Smart Safety

- To monitor the correct use of PPE
- To allow man-down detection and SOS activation
- To prevent unauthorized access of areas
- To localize workers during an emergency and allow head-counting at muster points

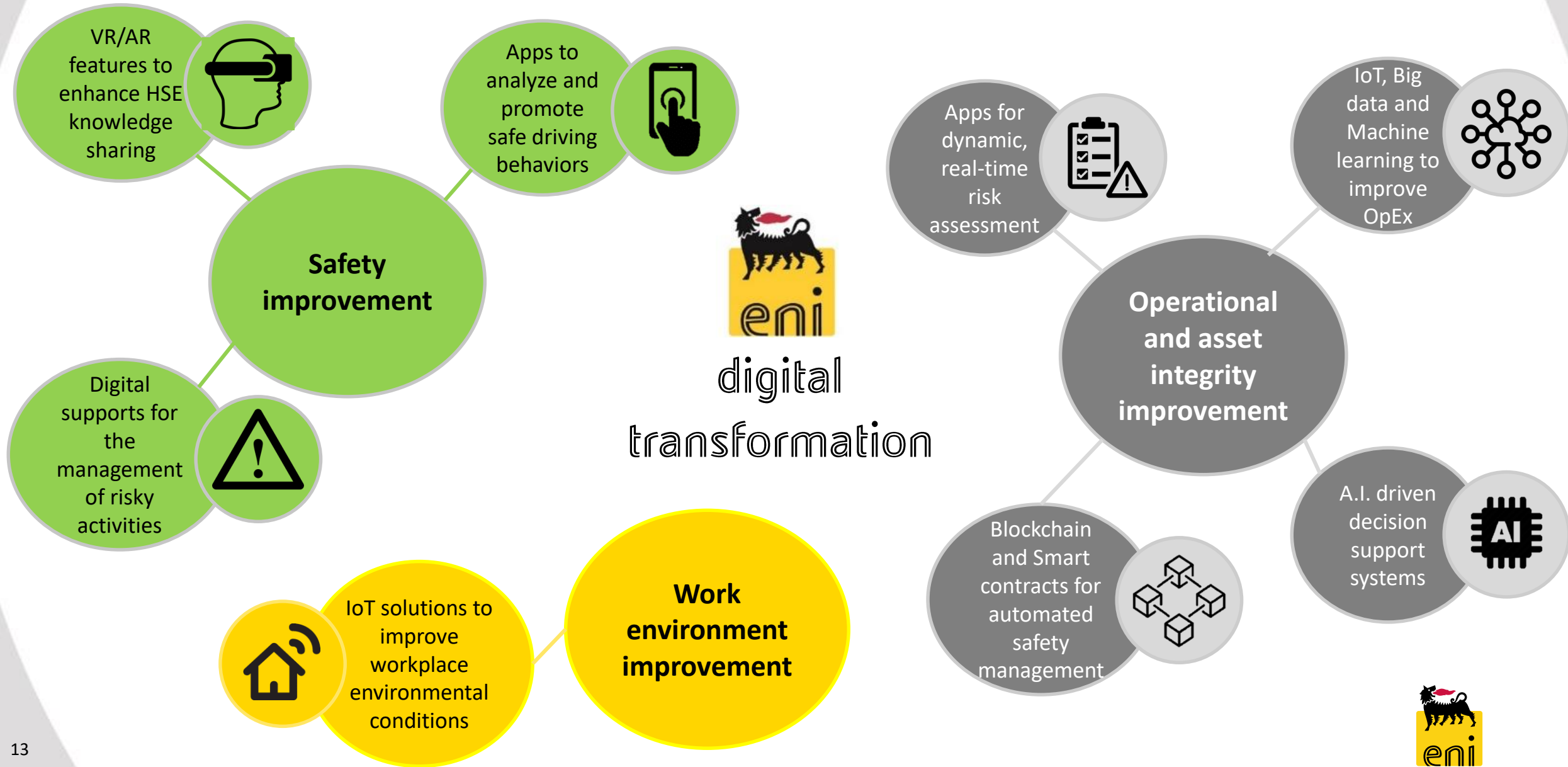


### Enhanced Operator

- To report unsafe conditions and equipment anomalies
- To consult checklists and plant documentation
- To collect equipment data
- To receive remote support during complex tasks



## ... what we would like in the future



# Agenda



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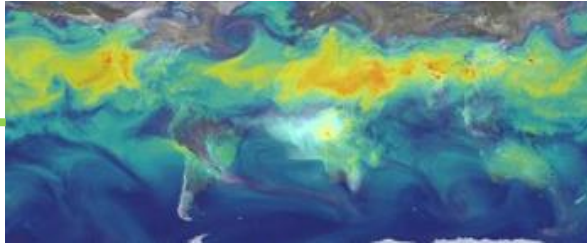
# An effective path to decarbonization

2014-17

4YP 2018-2021

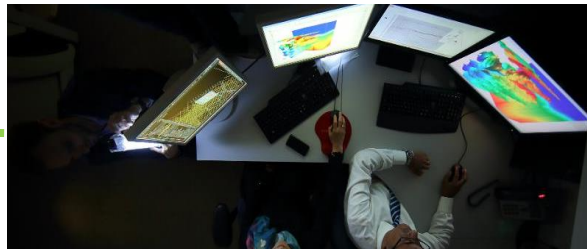
...2025

## DECARBONIZATION PATH & GREEN BUSINESSES



### CARBON FOOTPRINT REDUCTION – TARGET 2025

- -43% Upstream direct emissions vs. 2014
- -80% Fugitive methane emissions vs. 2014
- Zero routine gas flaring



### RESILIENT and LOW CARBON O&G PORTFOLIO

- Break-even for new upstream ongoing projects <30 \$/boe
- Resilient at low carbon scenario IEA SDS\*
- Gas reserves >50%



### GREEN BUSINESSES

- > 1.8 bln € investment
- 1 Mton of green products dal 2021



### R&D

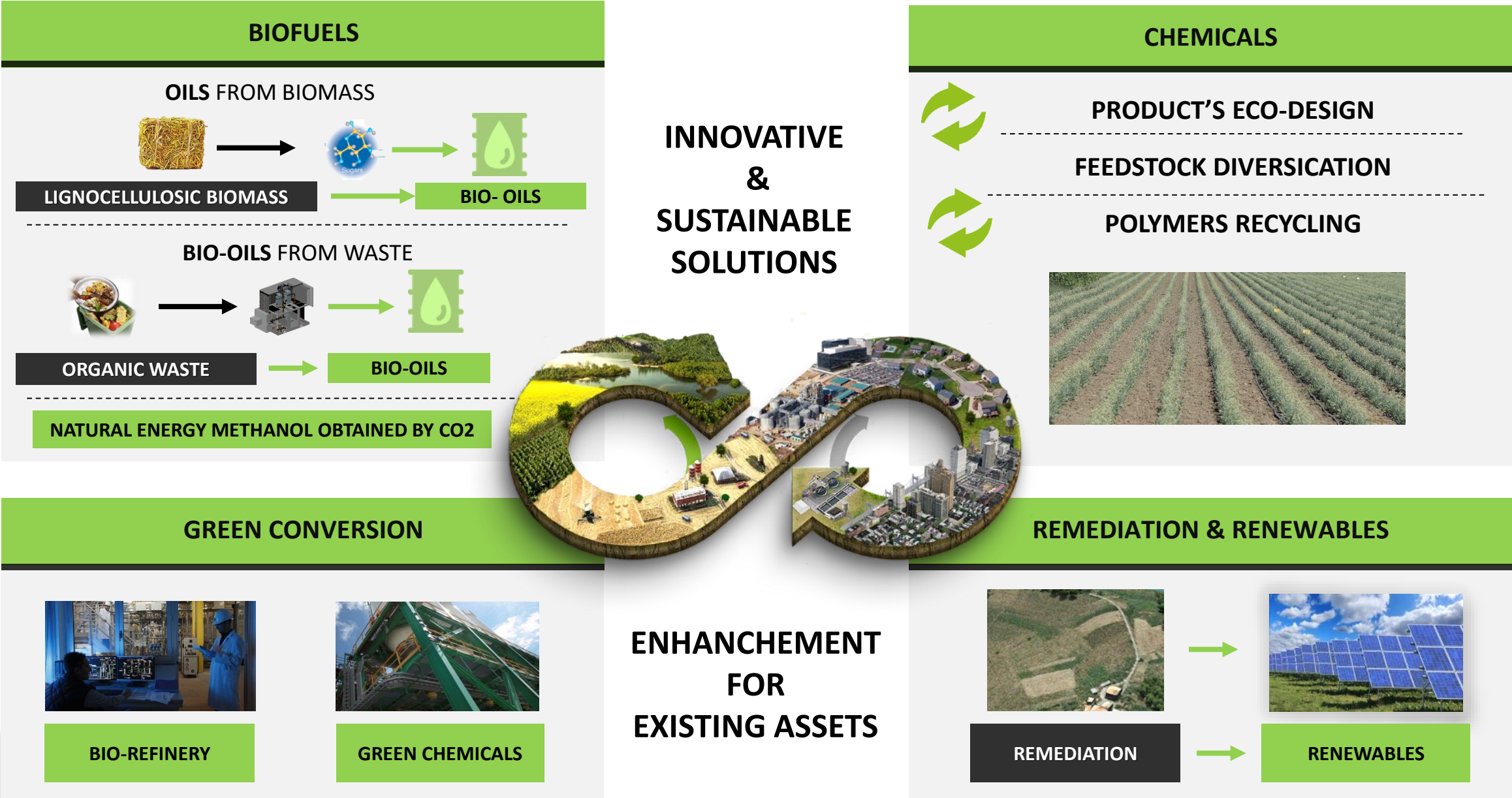
- Alternative Biofuels
- Renewables on an industrial scale and new low carbon sources
- Energy transition technologies



\* Sustainable Development Scenario



# Circular economy: a strategic driver for our strategy



### Digital solutions for Decarbonization & Circular Economy

#### Consumer

- **Reduce Waste :**
  - Digital system to track consumer waste and indicate the percentage of recycling and damp destination
  - Digital system for predictive recycling
  - Digital platform for sharing object, spaces and material
- **Reduce Emissions:**
  - Mobile solutions to calculate the CO<sub>2</sub> in transport sector and presentation of alternative solution as mobility sharing, public transport, alternative fuel etc
  - App to encourage the adoption of solutions with a lower emission profile and high efficiency in the use of resources
  - Green points

#### Industry

- **Digital solution to calculate the methane level (asset/country)**
- **Digital solution to monitor fugitive methane**
- **Digital solution for circular supply chains**