



## **IFPEN: INNOVATION AND TRANSFER TO INDUSTRY**

**Didier Houssin  
Chairman and CEO**

5<sup>th</sup> European Energy Forum, CFE-WEC  
Paris, 9<sup>th</sup> May 2016



## WHO ARE WE?

A public-sector R&I  
body

A training center

An industrial group

An international scope in the fields of energy,  
transport and the environment

## IDENTITY CARD



**1,660**

people  
of whom



**1,130**  
researchers



**125**

doctoral and post-  
doctoral researchers



A very high-quality technical  
environment: testing resources,  
equipment, **110** teraflop  
supercomputer



**2** sites:

Rueil (near Paris)  
and Solaize (near Lyon)



More than **50**  
professions, from  
geological engineers  
to powertrain engineers

## IDENTITY CARD

**11,000**  
active patents

**Award-winning research:**  
**2014:** Woman Scientist of the Year  
**2005:** Nobel Prize in Chemistry

More than **200**  
articles/year published  
in international scientific  
journals

# DEVELOPING INNOVATIONS

## MOBILITY

High-efficiency IC powertrains, vehicle electrification and connectivity, emission reduction

## NEW ENERGIES

Biofuels, bio-based chemistry, ocean energies and offshore wind power, energy storage, circular economy

## OIL AND GAS

Optimization of production and recovery, produced water management, environmentally-friendly fuel and chemical intermediate processes

Fundamental research, the bedrock for the development of our innovations

> 50%

One of the few public research body to fund more than 50% of its budget using its own resources



## CREATING WEALTH AND JOBS

More than **100** industrial partners around the world

Technological support for around **twenty** SMEs and intermediate-sized companies every year

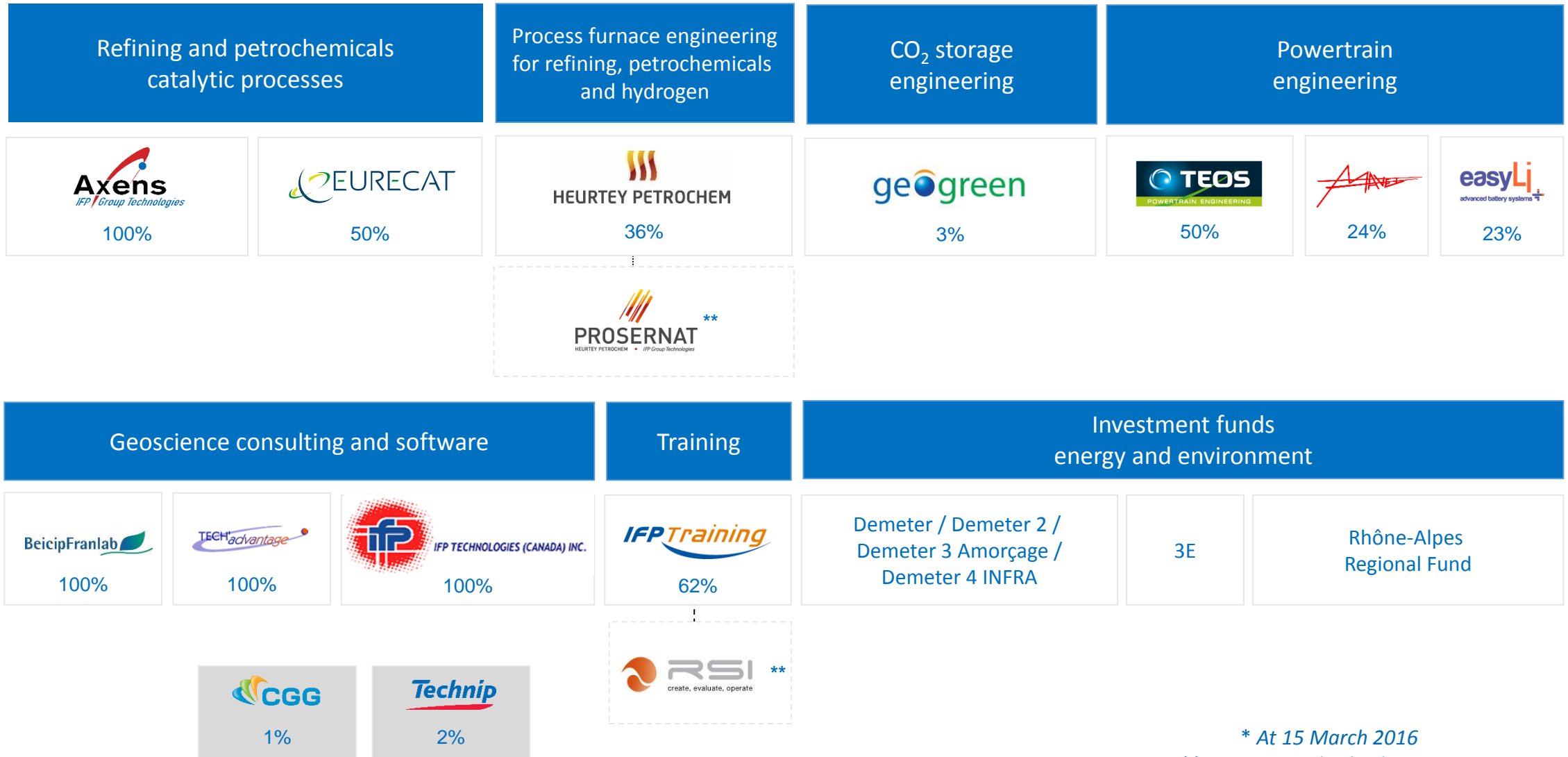
### THE GROUP



**€1.2 billion**  
turnover in 2015

**4,500** people  
in **25** countries

# PORTFOLIO OF INDUSTRIAL STAKEHOLDINGS\*

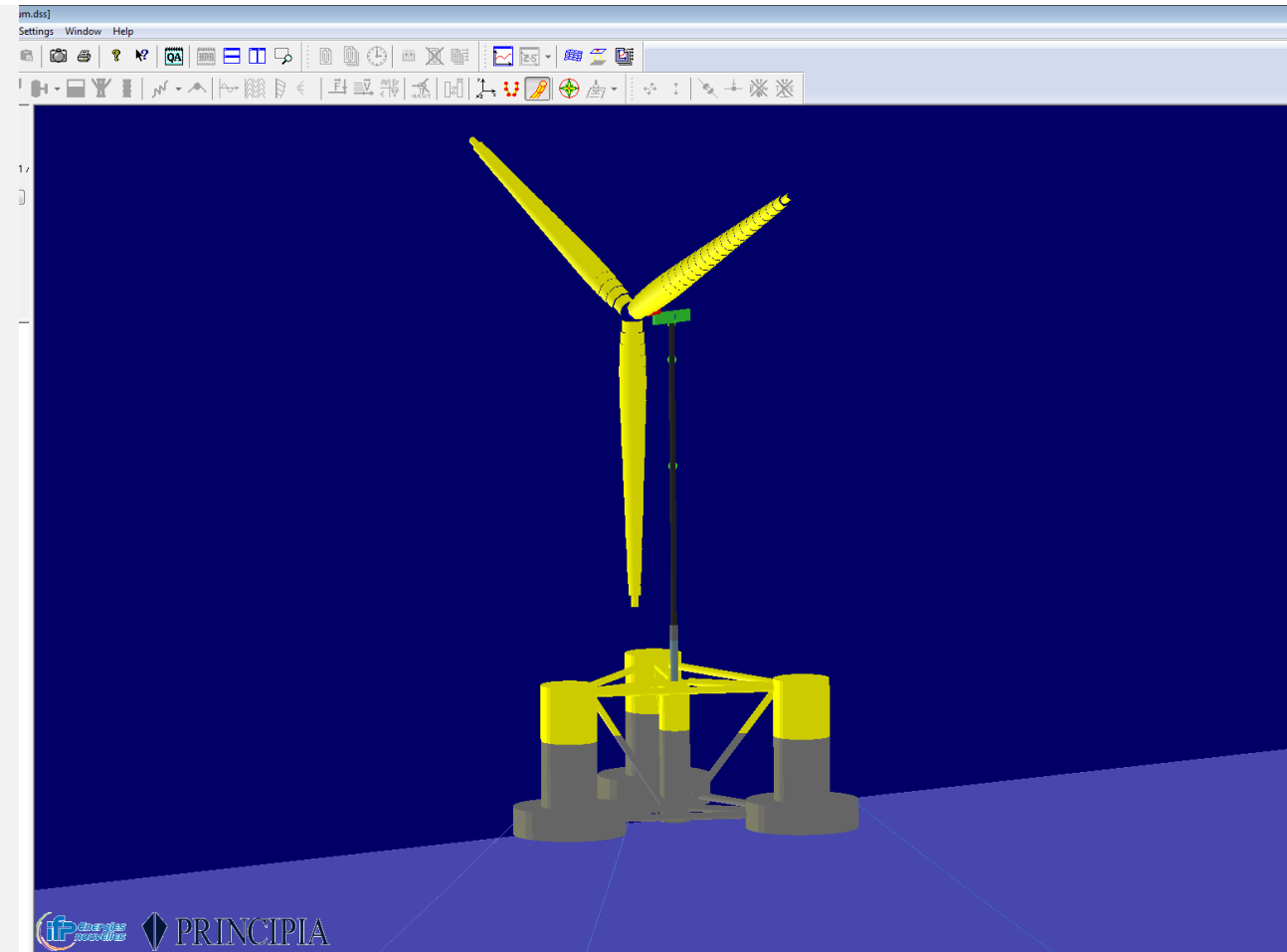


\* At 15 March 2016  
\*\* 100%-owned subsidiary



Simulation software relating to the behavior of fixed-bottom and floating wind turbines, on a horizontal axis, with a view to optimizing their design and reducing costs

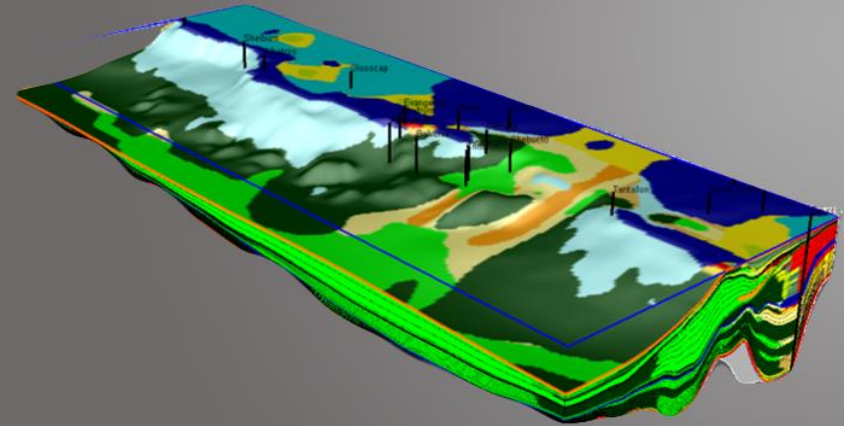
Marketed by Principia



Stratigraphic modeling software principally developed using consortium approach

Received the EAGE's Robert Mitchum award in **2014**

**6th** consortium underway on organic matters (*Dionisos Organic Matters JIP*)



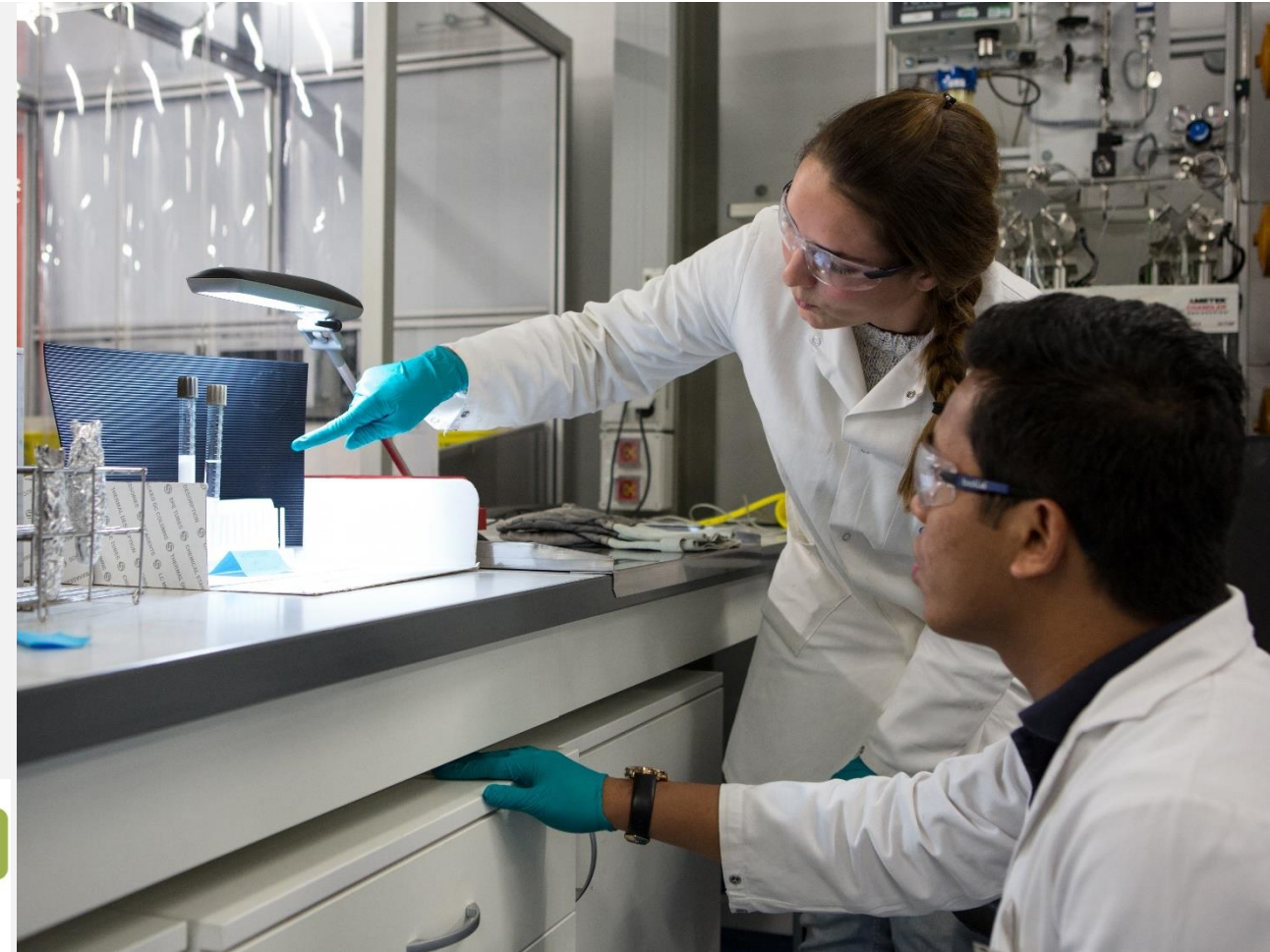
# THE EOR ALLIANCE™

RESPONSIBLE  
OIL AND GAS

Integrated Enhanced Oil Recovery (EOR) services, from formulation to roll-out and field monitoring

Created in **2010**, the EOR Alliance brings together IFPEN, Beicip-Franlab and Solvay

More than **100** researchers mobilized within the Alliance



# THE FUTUROL™ PROJECT

NEW ENERGIES

Lignocellulosic ethanol production process

**2015:** launch of the continuous pilot unit



Objective for **2017:** launch to market of a complete production chain

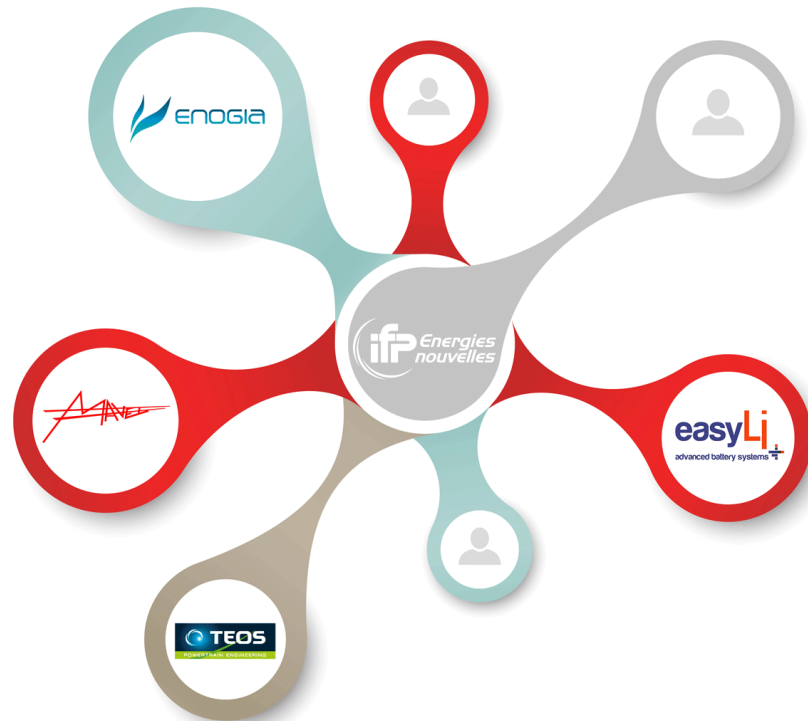
Marketing of the technology by Axens

# UNCOVERING GOLD NUGGETS

- From joint development... to stakeholdings

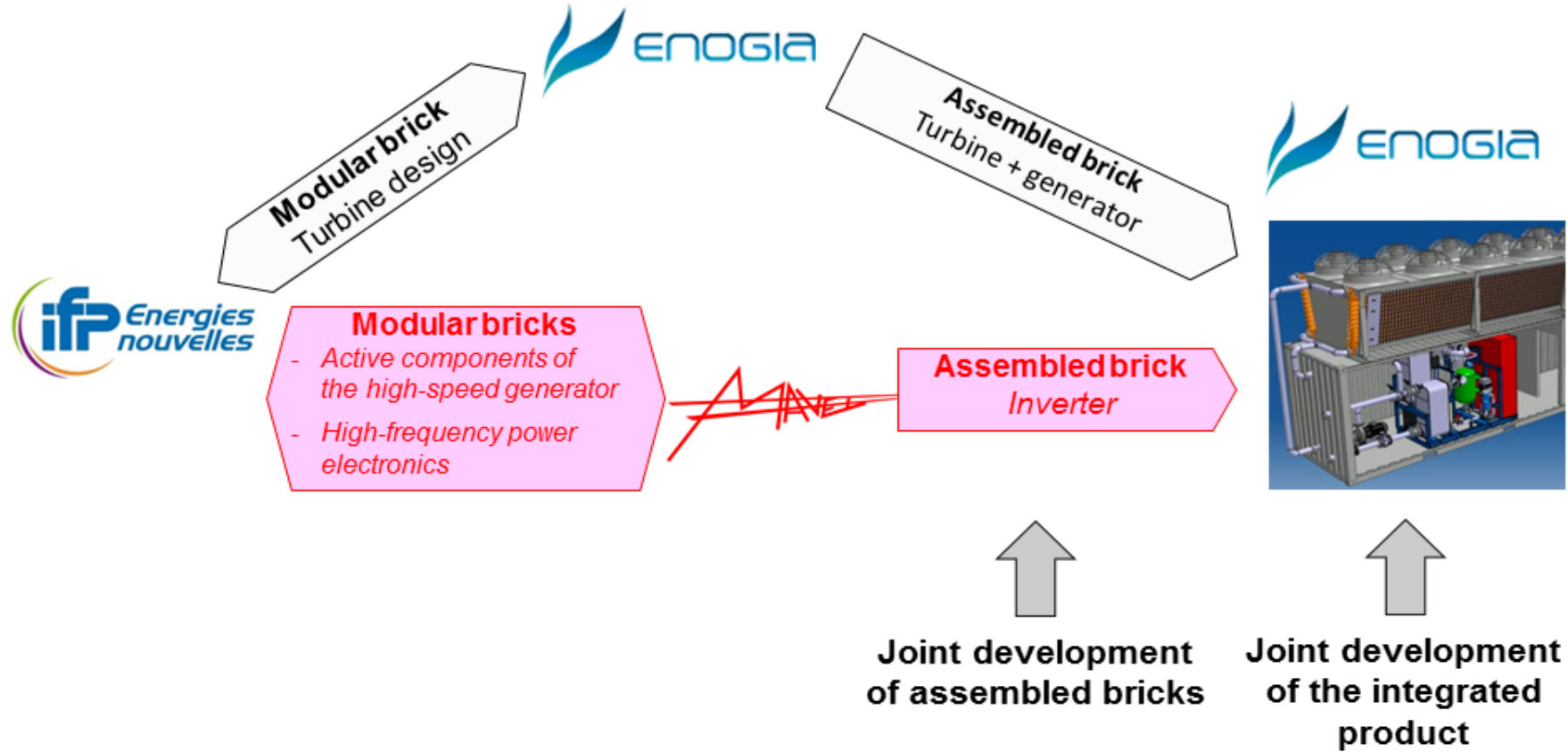
- Creating and coordinating an ecosystem

Creating links between partner SMEs to help them work together, be more innovative... and create value





## Example of application to an integrated product: ORC 100



# DARING TO TAKE A DIFFERENT VIEW

## ● Our fields of the future

- New energy technologies
- New markets
  - Circular economy
  - Energy storage
  - Big data



## ● Cultivating a new state of mind : example of IT

- Change of methods
- Change of practices
- Change of patterns



*Innovating for energy*

Find us on:

 [www.ifpenergiesnouvelles.com](http://www.ifpenergiesnouvelles.com)

 @IFPENinnovation

