

# ENERGY OF THE FUTURE IN FRANCE

KEY INFO IN

**10**

POINTS

# 1

## ▶ AN ATTRACTIVE SECTOR

In 2016, France attracted 52 foreign investments in the energy and recycling sectors that helped create and maintain more than 806 jobs in France. (Business France)

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# 2

## ▶ DIVERSIFIED GENERATION

In 2013, France was the third largest producer and consumer of renewable energy in the European Union after Germany and Italy. In 2014, primary generation of renewable energy in mainland France totaled 22.4 Mtoe. The main sub-sectors were wood fuel (39%), hydropower (23.6%), biofuels (11.6%), heat pumps (6.8%) and wind power (6.6%). (Source: Renewable Energy Key Figures, 2015)

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# 3

## ▶ LOCAL ENERGY FROM SMART GRIDS

In Lyon, Bouygues is teaming up with Energisme and Stratumn to install a decentralized smart grid in the 'La Confluence' neighborhood, and is developing blockchain technology to secure data exchanges via smart grids. This will enable residents to use the solar power produced by each building in the neighborhood. The first building will be equipped in 2017.

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# 4

## ▶ HOME-GROWN NUCLEAR EXPERTISE

In September 2016, the British government authorized EDF to build two EPR nuclear reactors.

# 5

## ▶ **SABELLA D10: FRANCE'S 1ST INDUSTRIAL TIDAL TURBINE**

After a year of conclusive testing, Sabella D10, the first industrial-scale tidal turbine to be connected to France's national power grid, will be put into service in spring 2017. Its goal is to supply 15% of the power needs of the 800 inhabitants of the island of Ushant.

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# 6

## ▶ **GENEPAC: FRANCE'S 1ST FUEL CELL PROTOTYPE**

Led by the CEA and PSA Peugeot Citroën, the PEMFC (proton exchange membrane fuel cells) project led to the unveiling of the GENEPAC prototype. The result is the most powerful battery ever built in Europe, rated 80 kW.

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# 7

## ▶ **FRANCE: EUROPE'S #2 BIOFUELS PRODUCER**

In France, biofuels make up 11.6% of primary production of renewable energy. France is the EU's second-largest producer of biofuels after Germany (Renewable Energy Key Figures, 2015). HelioBiotec was created in 2008 to explore the possibility of using micro-algae to produce biofuels, in partnership with academia and industry.

# 8

## ▶ OPENING OF THE FIRST SOLAR ROAD

Solar power generation, which was virtually zero in 2005, continues to grow steadily, rising 23% from 2013 to 2014 (Renewable Energy Key Figures, 2015). The world's first solar road, built by construction firm Colas, opened in Tourouve (Normandy) in late 2016. Developed with the National Institute for Solar Energy, Wattway's photovoltaic slabs will produce energy locally and sustainably, helping lower the cost of connecting isolated regions to the national power grid.

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# 9

## ▶ COP 21: A HISTORIC AGREEMENT

The 188 signatories of the Paris Agreement, signed at the end of the COP 21 Paris Climate Conference, acknowledge the urgent need for energy transition to ensure sustainable growth.

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# 10

## ▶ TARGET 2020: 23% RENEWABLE ENERGY

Renewable energy as a proportion of gross end consumption increased steadily from 2005 to 2014, rising from 13.8% to 18.4% for electricity, from 11.6% to 18.1% for renewable heat, and from 1.7% to 7.7% for biofuels for transport (Renewable Energy Key Figures, 2015). This reflects France's efforts to achieve the target of producing 23% of gross end consumption of energy from renewable sources by 2020.



For further information, please visit:  
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**3rd**  
**LARGEST PRODUCER**  
**AND CONSUMER**  
**OF RENEWABLE**  
**ENERGY**  
**IN THE EU**



**FRANCE:  
EUROPE'S**

**#1**

**DESTINATION  
FOR FOREIGN  
INVESTMENT IN  
INDUSTRY**

ACCESS TO A MARKET OF  
**66**  
MILLION CONSUMERS  
AND GATEWAY TO THE EMEA





FRANCE

**2nd**

**LARGEST PRODUCER  
OF BIOFUELS IN THE EU**