# **European Energy Transition 2030: The Big Picture**

# Ten Priorities for the next European Commission to meet the EU's 2030 targets and accelerate towards 2050

#### **Publication**

Report

#### Citation

Agora Energiewende (2019): European Energy Transition 2030: The Big Picture. Ten Priorities for the next European Commission to meet the EU's 2030 targets and accelerate towards 2050.

The 2030 targets for decarbonising the EU economy have been agreed, but what does this actually mean for the European energy and transport systems? In a new publication, Agora Energiewende is providing exactly this "Big Picture" of the EU energy transformation up until 2030. Based on an analysis of where we are today and where we need to be in 2030, the authors propose ten priorities and four flagship initiatives to make the European energy transition a success. Ecologic Institute supported Agora Energiewende in developing the publication, which is available for download.

The 2030 targets for decarbonising the EU economy have been agreed, but what does this mean concretely for the European energy and transport systems? In a new publication Agora Energiewende is providing exactly this "Big Picture" of the EU energy transformation until 2030. Based on an analysis of where we are today and where we need to be in 2030, the authors propose ten priorities and four flagship initiatives to make the European energy transition a success. Ecologic Institute supported Agora Energiewende in developping the publication.

Chapter 2 describes the **mega-trends** which drive the energy system, such as digitisation, automation or falling costs of clean energy technologies. Independent of policy decisions, the mega-trends will shape the context in which the energy transition takes place.

Chapter 3 makes the **case for a strong European Union** to help citizens and governments to cope with concrete issues that will arise in implementation and devise innovative solutions for new issues that will arise on the way.

Chapter 4 and Chapter 5 describes comprehensively how today's energy system (power, buildings, transport as well as the industry sector) will change to be consistent with the 2030 climate and energy targets, as well as what it will mean in terms of investments, costs and benefits for industry, households and the EU economy as a whole.

Chapter 6 gives an overview on the **EU's 2030 climate and energy framework** adopted over the course of 2016 to 2019 and highlights the main implementation challenges at the national level and the EU level.

Chapter 7 presents ten **EU-level initiatives** to decisively advance Europe's clean energy transition.

Finally, Chapter 8 highlights the important role that early and decisive action for advancing a just European energy transition will play in creating the political foundation for further raising the EU's climate & energy targets.

# Language

English

# **Authorship**

Matthias Buck (Agora Energiewende) Andreas Graf (Agora Energiewende) Dr. Patrick Graichen (Agora Energiewende)

### **Credits**

with support from Kerstin Meyer, Dr. Günter Hörmandinger (Agora Verkehrswende) Katharina Umpfenbach, Eike Karola Velten (Ecologic Institute) Dr. Alice Sakhel (Agora Energiewende)

# **Funding**

<u>Smart Energy for Europe Platform</u> (SEFEP), International <u>Agora Energiewende</u>, Germany

# **Published by**

Agora Energiewende, Germany

#### Year

2019

#### **Dimension**

104 pp.

# **Project**

Big Picture of the European Clean Energy Transition in 2030

# **Project ID**

3538

#### **Table of contents**

Preface Summary Introduction

1 The 10 megatrends shaping tomorrow's energy system

- 1.1 Decarbonization challenge
- 1.2 Deflation of fossil fuel prices
- 1.3 Decrease in costs
- 1.4 Digitalization
- 1.5 Electrification

- 1.6 Dominance of fixed costs
- 1.7 Influential cities
- 1.8 Demographic and economic change in rural areas
- 1.9 Decentralization
- 1.10 Interdependence
- 2 A European energy transition based on solidarity, security, competitiveness, and innovation
- 3 The European energy transition in 2030: a snapshot
- 3.1 Strategies for the cost-effective transformation of the different energy sectors by 2030
- 3.2 Transforming the power sector for 2030
- 3.3 Transforming the buildings sector for 2030
- 3.4 Transforming the transport sector for 2030
- 3.5 Transforming industry for 2030
- 3.6 Transforming grid infrastructure for 2030
- 4 The investments, costs, and benefits of the European energy transition
- 5 The EU's 2030 Climate and Energy Framework: The main implementation priorities
- 6 Ten priorities for the next European Commission: Meeting the EU's 2030 targets and accelerating towards 2050

Priority 1 A vibrant action framework for 2030: Kickstarting and supporting implementation at the national level

Priority 2 A state aid framework that enables and advances Europe's energy transition Priority 3 A shadow price on carbon emissions to guide infrastructure planning and investment decisions

Priority 4 Reducing emissions from individual mobility: An early and ambitious review of CO<sub>2</sub> standards for cars

Priority 5 Reducing emissions from heavy transport by raising ambition and increasing member state flexibility

Priority 6 Opening up a pathway to decarbonize aviation and shipping fuels

Priority 7 A strong, competitive, and sustainable battery industry in Europe

Priority 8 Establish the foundation for a scalable green hydrogen economy

Priority 9 "Buy Clean Europe": Create lead markets for low-carbon cement and steel

Priority 10 Prioritize energy transition in the new European budget for 2021-2027

7 Stepping up the EU's climate ambitions: The pathway to Net-Zero Europe

8 Conclusion

**Notes** 

References

# **Keywords**

Climate

**Economics** 

**Energy** 

**EU** 

**Governance** 

energy transition

Europe

Source URL: https://www.ecologic.eu/16385