Our electricity system is undergoing a rapid, fundamental change. The Elia Group has identified three key trends:

- **Making the Energy Transition Happen**
  - More renewable energy
  - Development of new technologies and an increase in decentralised energy generation and consumption
  - And intensified international cooperation

As a transmission system operator, Elia serves society and intends to act as a driving force in the energy transition. Society's interests and safety are the cornerstones of our strategy. We are aiming for a reliable, sustainable and affordable energy system, which necessitates developing our infrastructure. We make decisions in consultation with our various stakeholders.

The electricity system is a key pillar of energy policy and a real driving force for economic growth and the decarbonisation of our society, thanks to the integration of rising volumes of renewable energy.

### A Central Position in the European Electricity System

The Elia Group is one of Europe's top five grid operators and comprises two electricity transmission system operators (TSOs): Elia in Belgium and 50Hertz, one of the four German TSOs. The Group is also part of the Nemo Link consortium, together with the TSO National Grid UK, for the construction of its subsea interconnection with the United Kingdom.

In addition to its activities as a TSO in Belgium and Germany, the Elia Group offers companies a wide range of consultancy and engineering services via its subsidiary Elia Grid International (EGI).

### In the Interest of Society

In 2016,

- Cross border exchanges

### 2016

- 2,100 employees
- 6 nationalities
- 30 mio residents and users
- 18,400 km high-voltage lines in Belgium and Germany
- 35,000 MW installed capacity of renewable energy
- 36.1 TWh electricity produced
- 10.1 TWh electricity imported
- 8.8 TWh electricity exported
- 5.2 TWh electricity consumed by industry
- 4.8 TWh electricity consumed by households
- 4.7 TWh electricity consumed by transportation
- 36.1 TWh electricity produced
- 1.8 TWh electricity imported
- 1.7 TWh electricity exported
- 1.5 TWh electricity through own flows
- 0.3 TWh electricity through power from wind
- 0.191 TWh electricity through hydropower
- 0.015 TWh electricity through power from solar

### Cross Border Exchanges

- Belgium
- France
- Luxembourg
- Czech Republic
- Denmark
- Germany
- Poland
- Netherlands
- Switzerland

### Key Facts and Figures

- 10,000 km high-voltage lines
- 3,000 km interconnection lines
- 100 substations
- 500,000 km transmission lines
- 15,000 km distribution lines
- 100,000 km underground cables
- 500,000 km overhead lines

### Key Contacts

**Elia System Operator / Elia**
Boulevard de l’Empereur 20
B-1000 Brussels
www.elia.be

**50Hertz GmbH**
Heidestraße 2
D-10557 Berlin
www.50hertz.com

**Elia Grid International (EGI)**
Germany
Heidestraße 2
D-10557 Berlin
www.eliagrid-int.com

**EGI Belgium**
Rue Joseph Stevens 7
B-1000 Brussels
www.eliagrid-int.com
We respond to the rapidly changing energy mix and constantly adapt our transmission grid, thus contributing fully to maintaining a high level of security of supply.

We ensure that the investments needed for a progressive energy transition are made on time and within budget, live up to the applicable quality standards and correspond to society's needs and choices.

**Elia Group investments 2017-2021 (Mio€)**

WE ENSURE A SECURE, RELIABLE AND EFFICIENT GRID

WE DELIVER THE TRANSMISSION INFRASTRUCTURE FOR THE FUTURE

WE DEVELOP THE SYSTEM AND MARKETS

WE COOPERATE TO STRENGTHEN OUR POSITION

WE HAVE OUR EYES WIDE OPEN FOR INNOVATION & GROWTH OPPORTUNITIES

WE DEVELOP THE SYSTEM AND MARKETS

We ensure that society's interests always come first. We understand what our customers and the market players need. We are committed to implementing the energy transition in cooperation with all market parties and through enhanced coordination with other system operators at national and European level.

Our aspirational values

- We are entrepreneurial
- We collaborate
- We are accountable
- We are agile

Our core values

- Safety always comes first
- Serving the community
- Targeting performance
- Making the energy transition happen

Today

Our electricity system is undergoing profound changes. Renewable energies are becoming more and more important. Energy generation is becoming increasingly decentralised. Consumers are becoming 'prosumers' thanks, among other things, to the advent of solar panels. Electric cars and heat pumps have also come onto the scene.

Tomorrow

Increasing digitisation, technical innovations and new economic models are making consumers more and more actively involved. They will generate more energy and store some of it. The electricity system is increasingly being managed in an international context as there are more interconnections.

**THE ENERGY TRANSITION**

**MAKING THE ENERGY TRANSITION HAPPEN**

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>813</td>
<td>815</td>
<td>831</td>
<td>696</td>
</tr>
</tbody>
</table>

**BETROUWBAARHEIDSGRAAD TRANSMISSIENET IN 2016**

99.9999 %