SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Energy in Ireland 2015 Report

Energy trends 1990 – 2014

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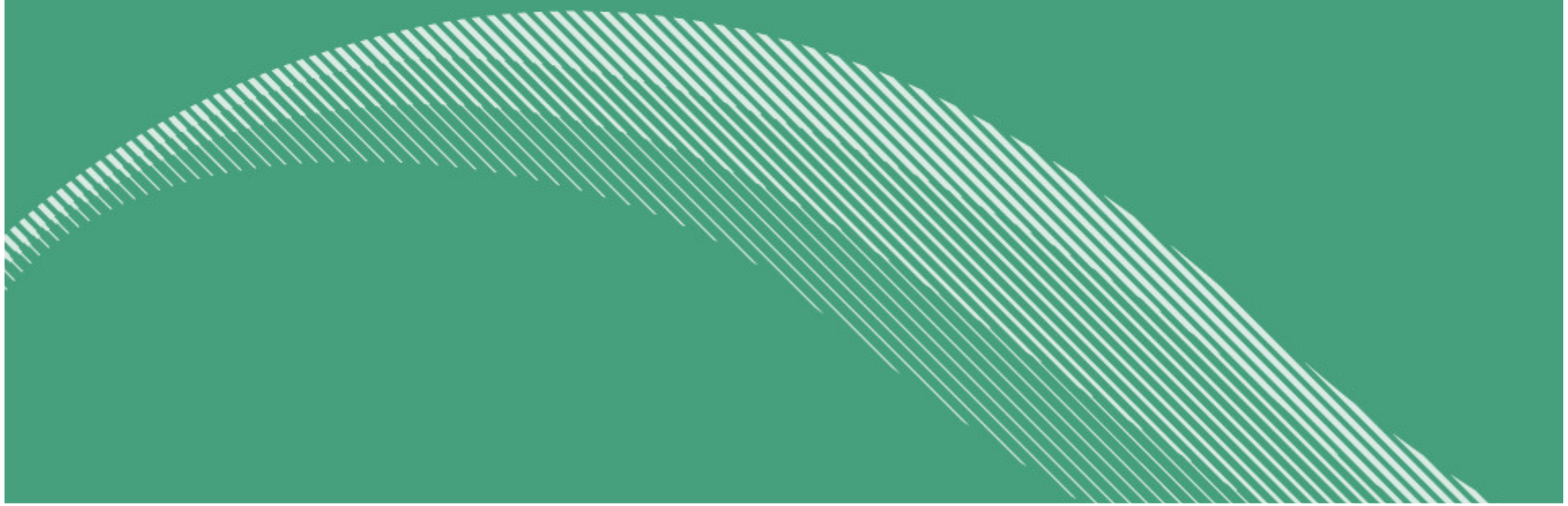
Overview



Overview

- General trends
- Progress towards renewable targets
- Electricity generation
- Solar Energy
- Summary

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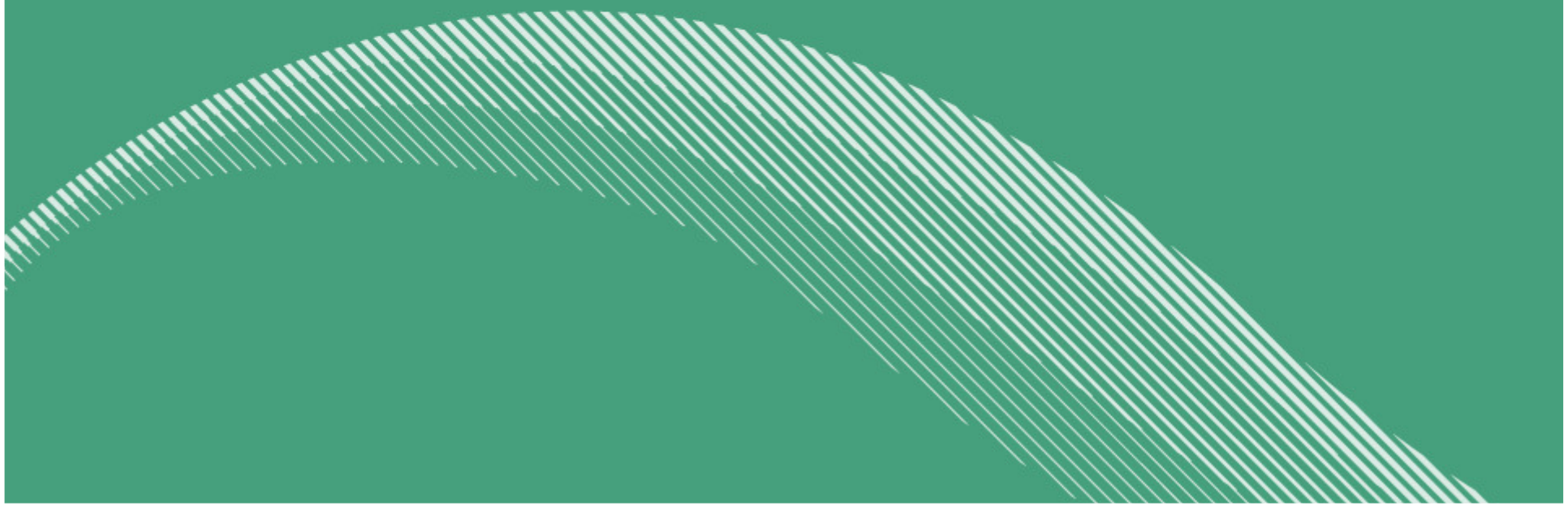
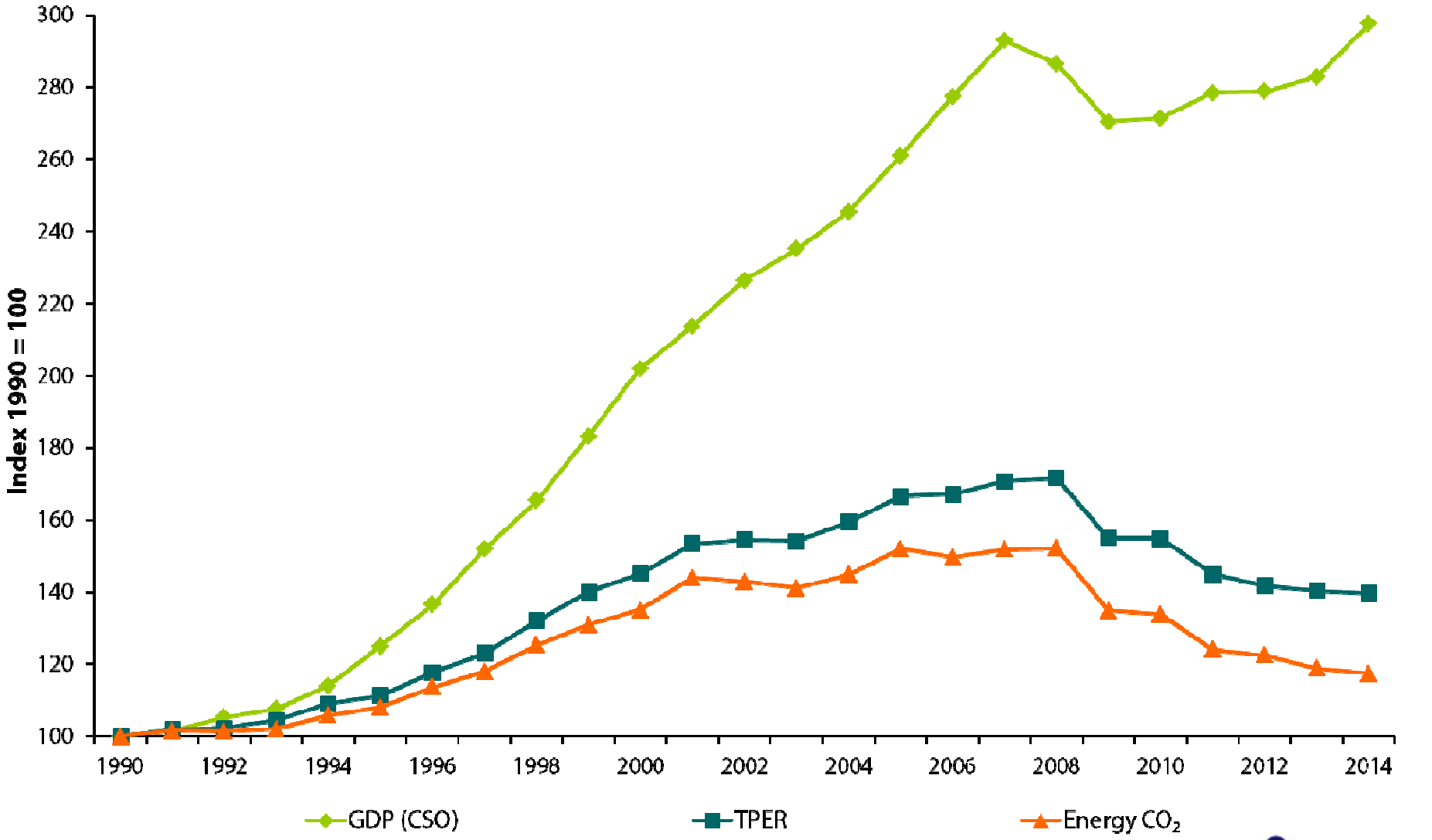
General Trends in 2014



Economy, Energy and Emissions Trends



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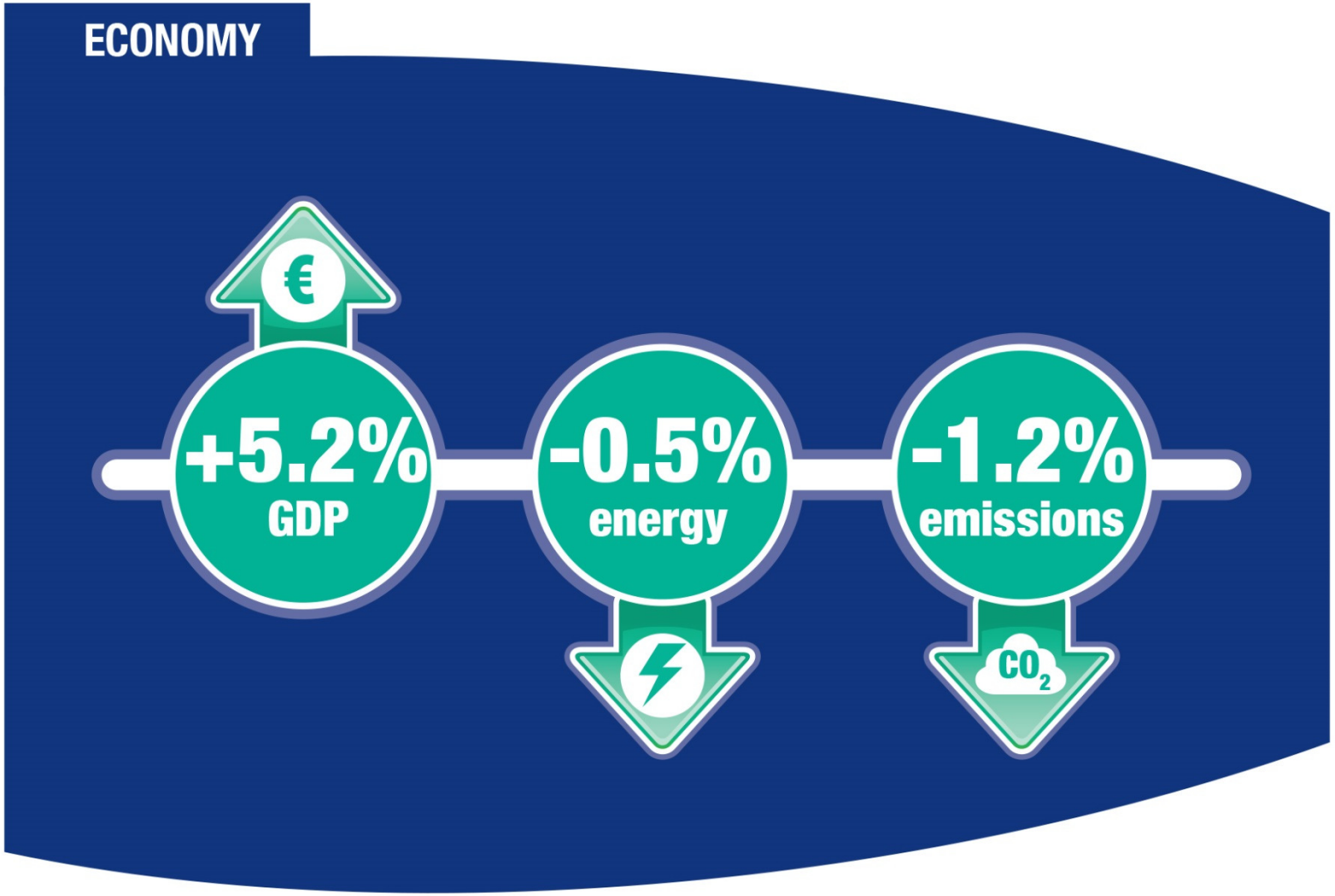
Economy, Energy and related Emissions 2014



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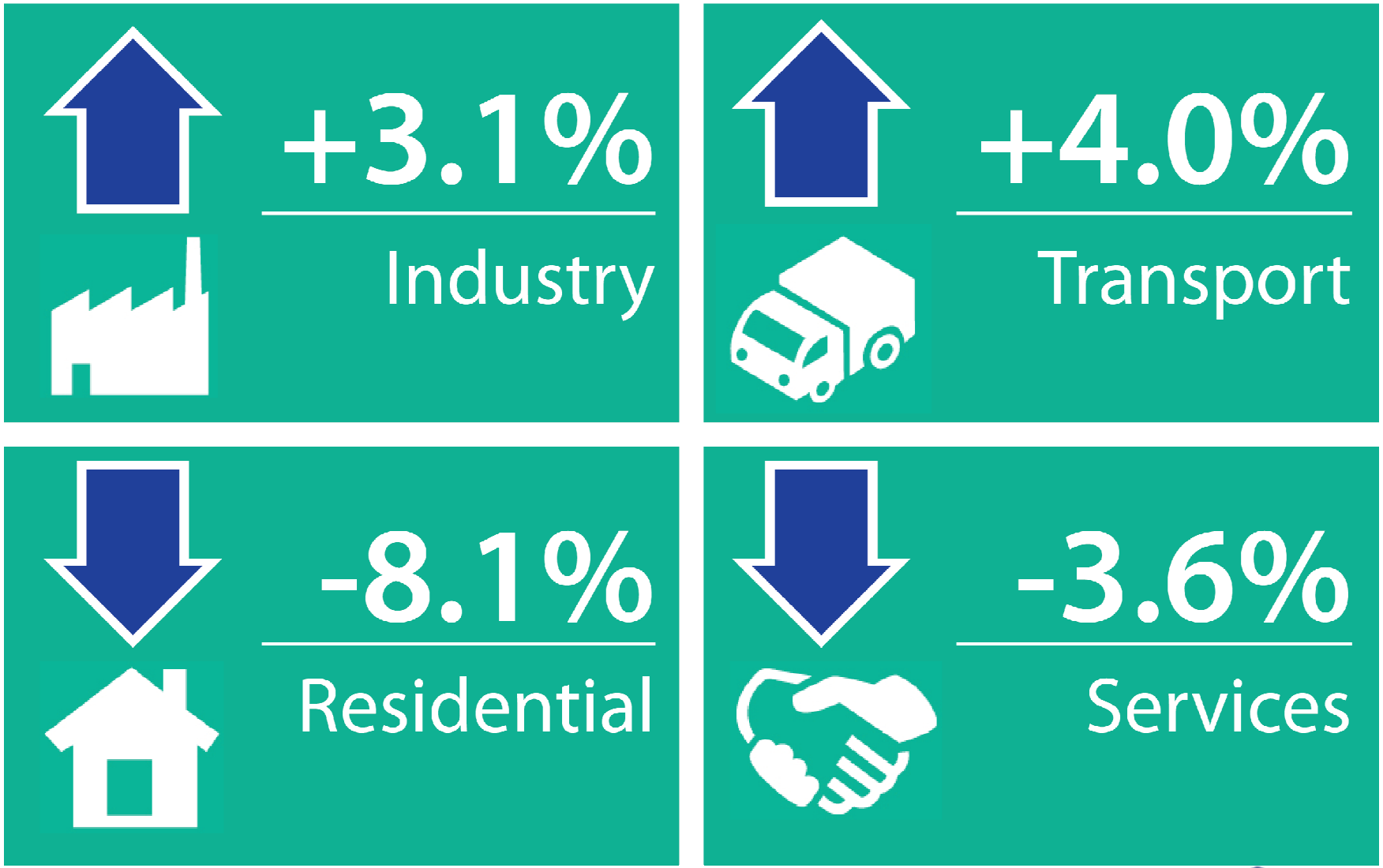
Sectoral Energy use change in 2014



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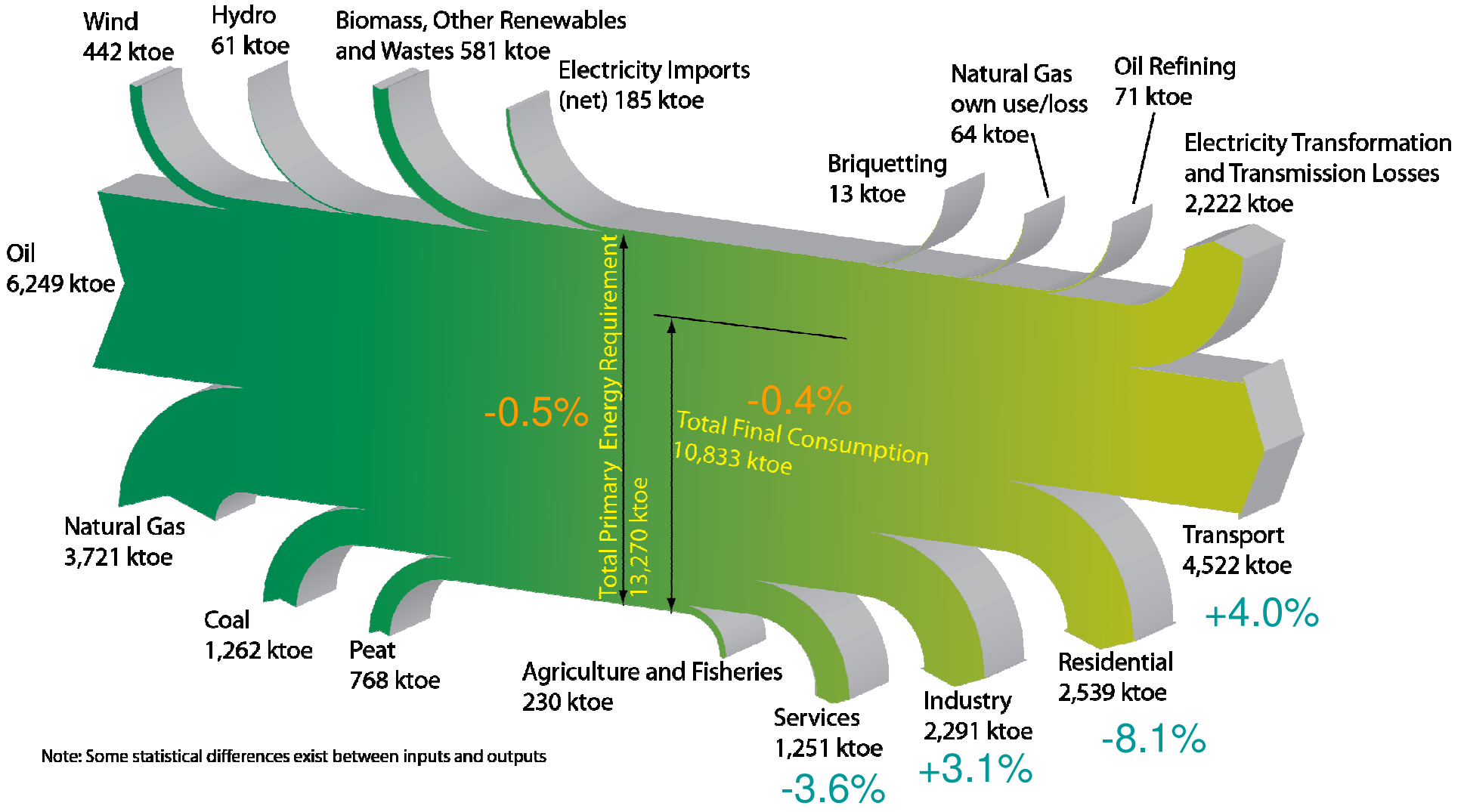
2014 Energy Balance



Note: Some statistical differences exist between inputs and outputs

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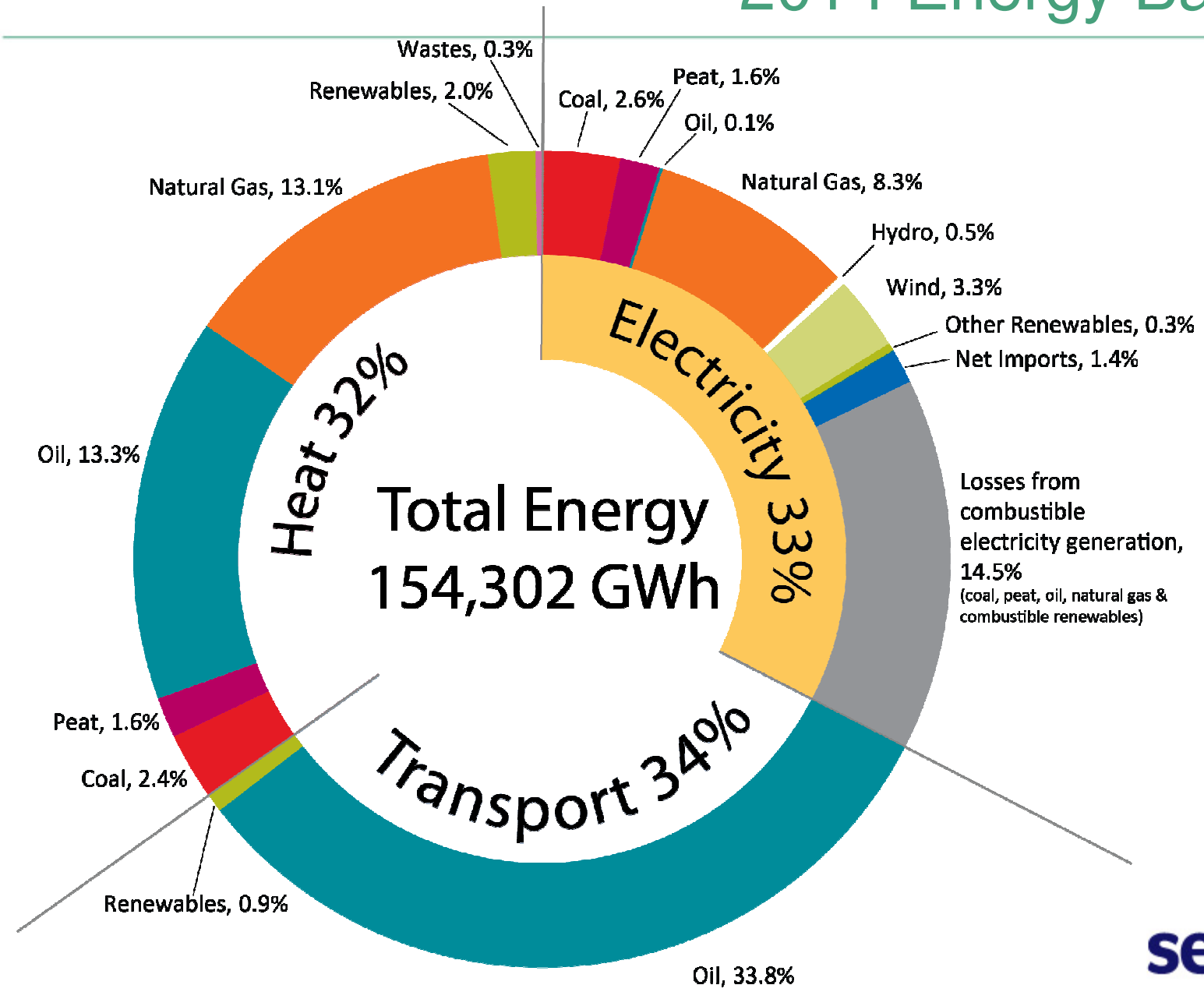
2014 Energy Balance



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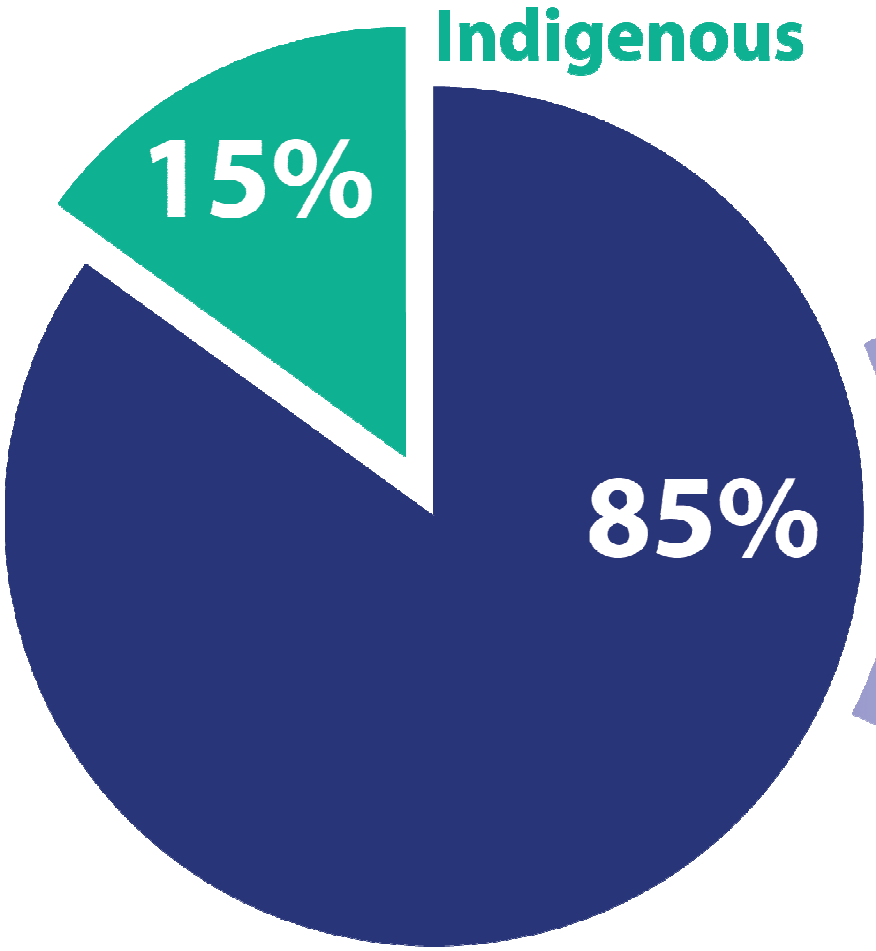
Import Dependency



€5.7 billion
Energy Import
Costs in 2014

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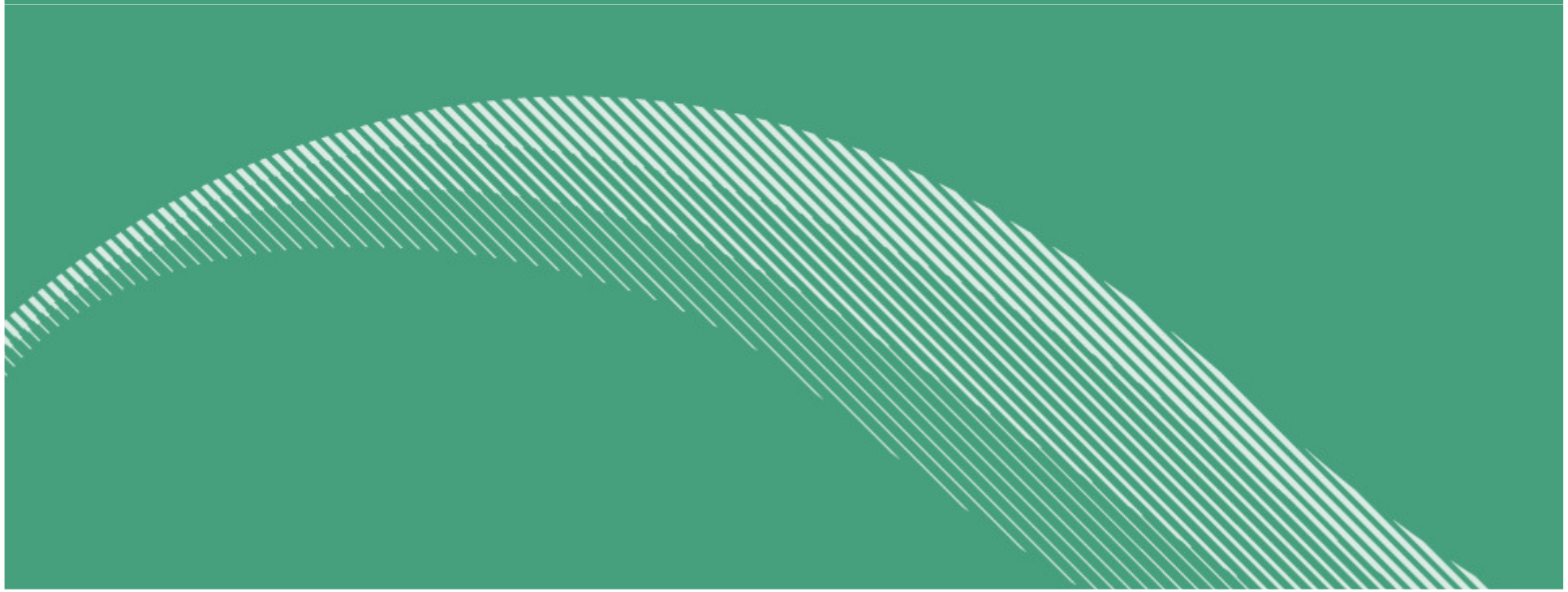
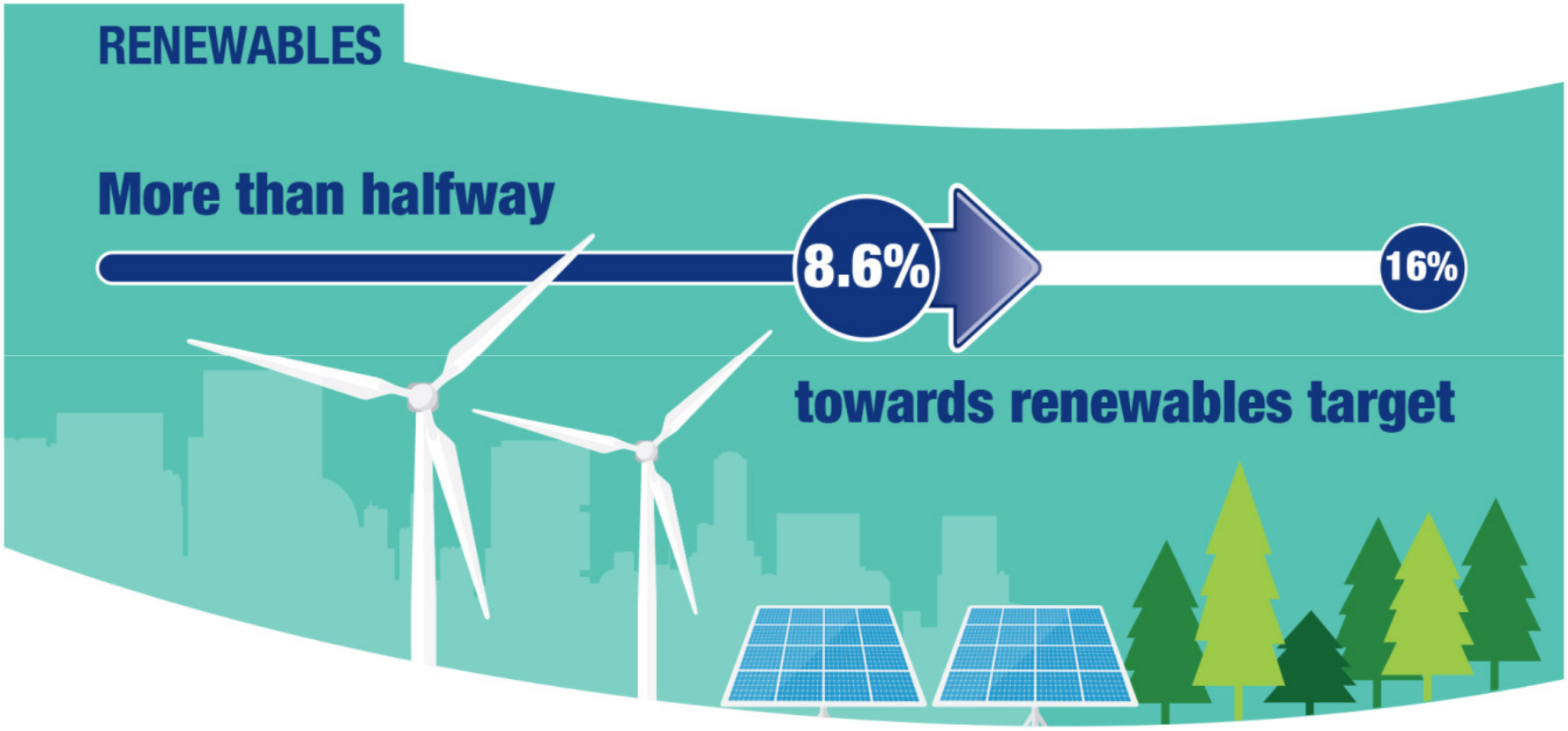
Progress towards renewable targets



Renewable Target



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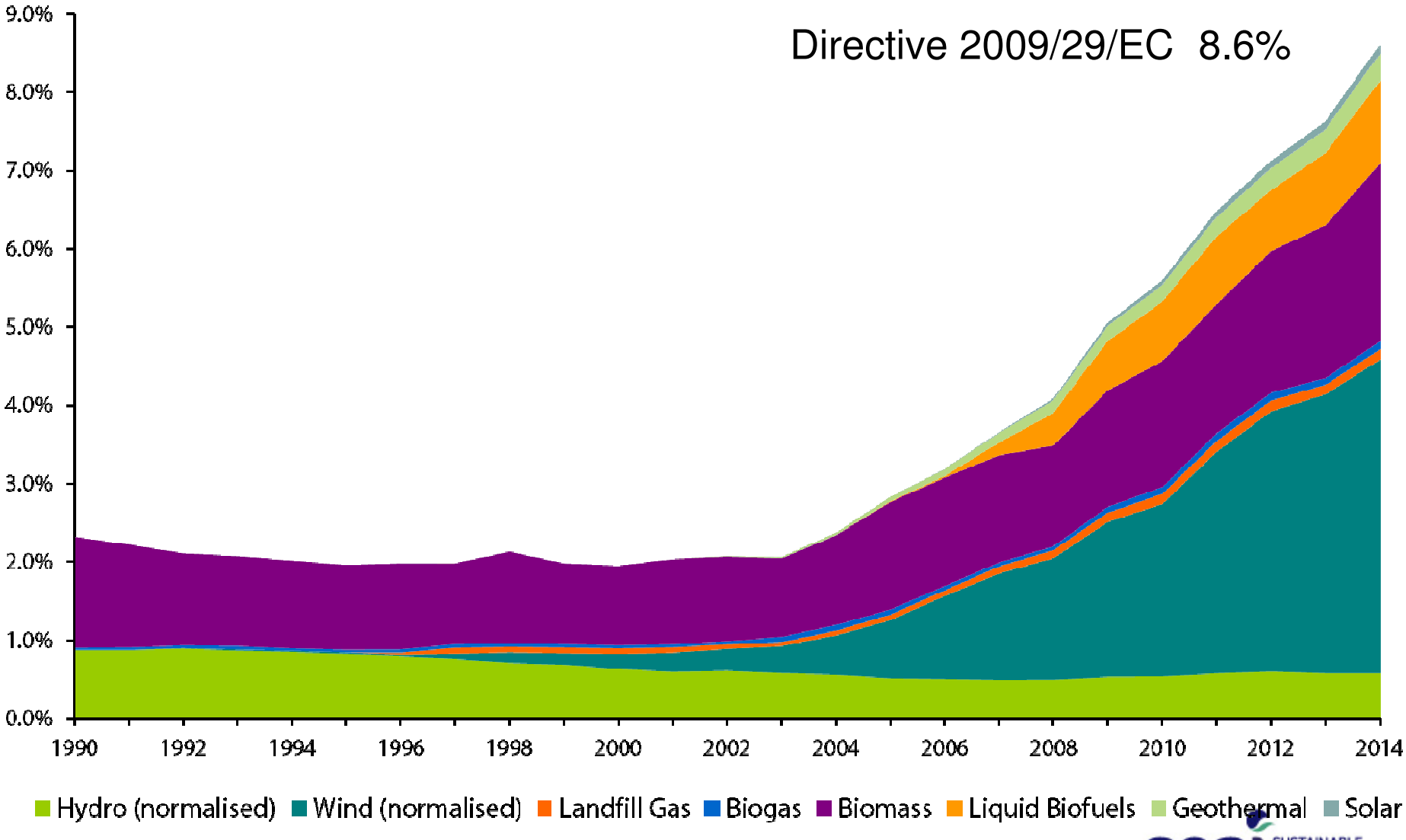
Renewable Contribution to Gross Final Consumption



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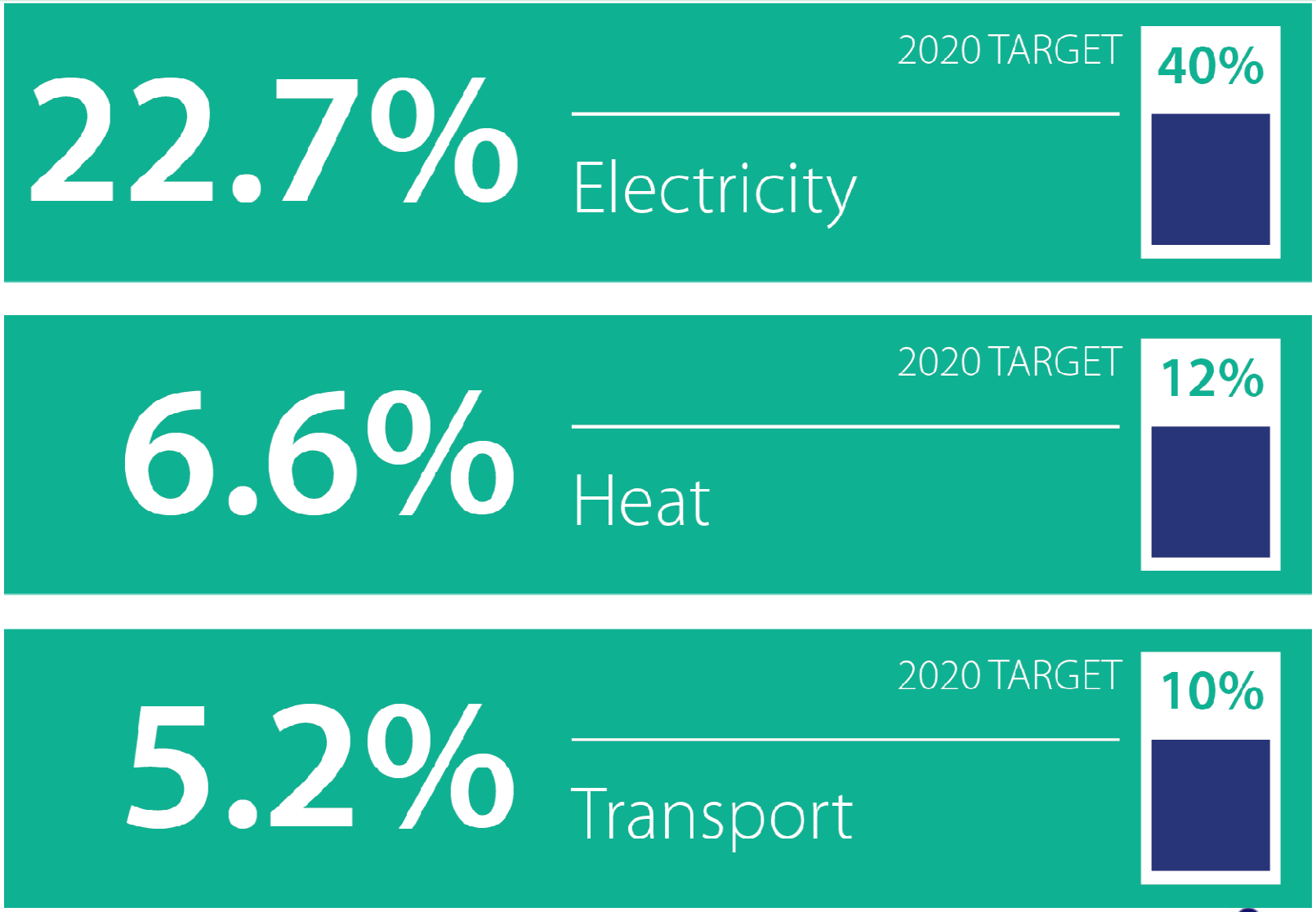
Progress towards renewable targets in 2014



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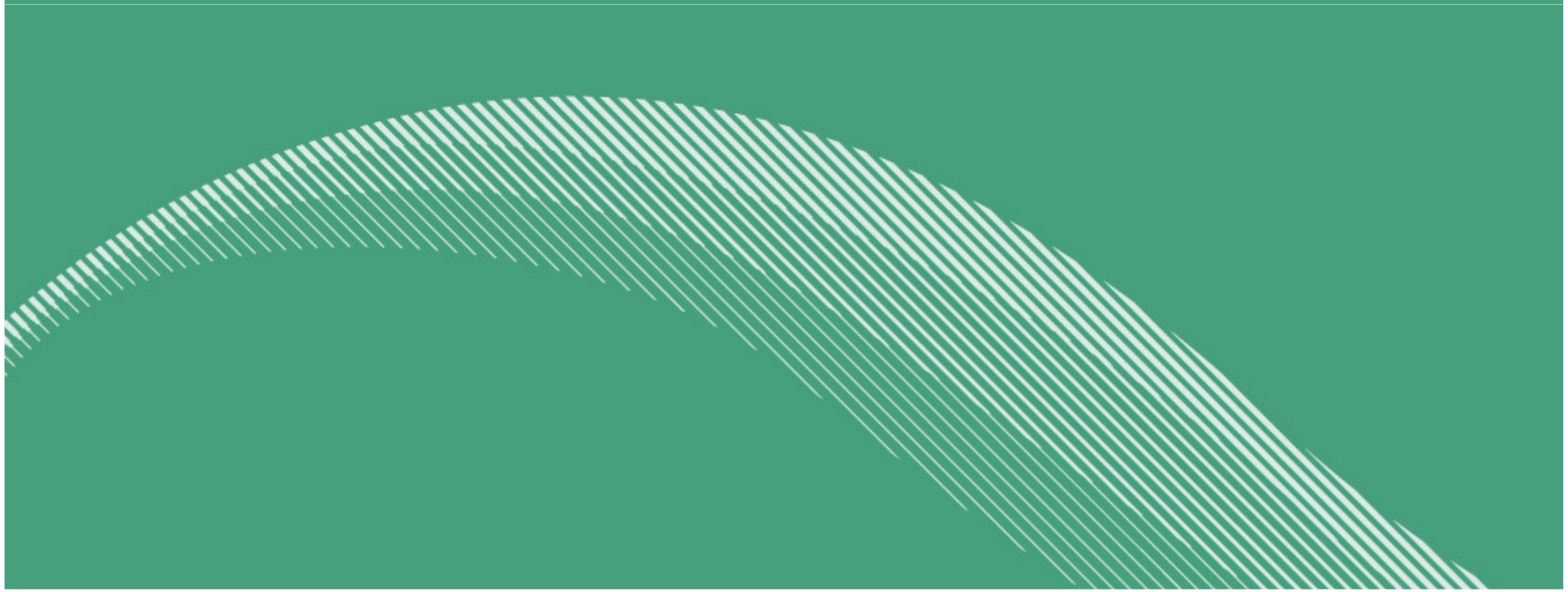
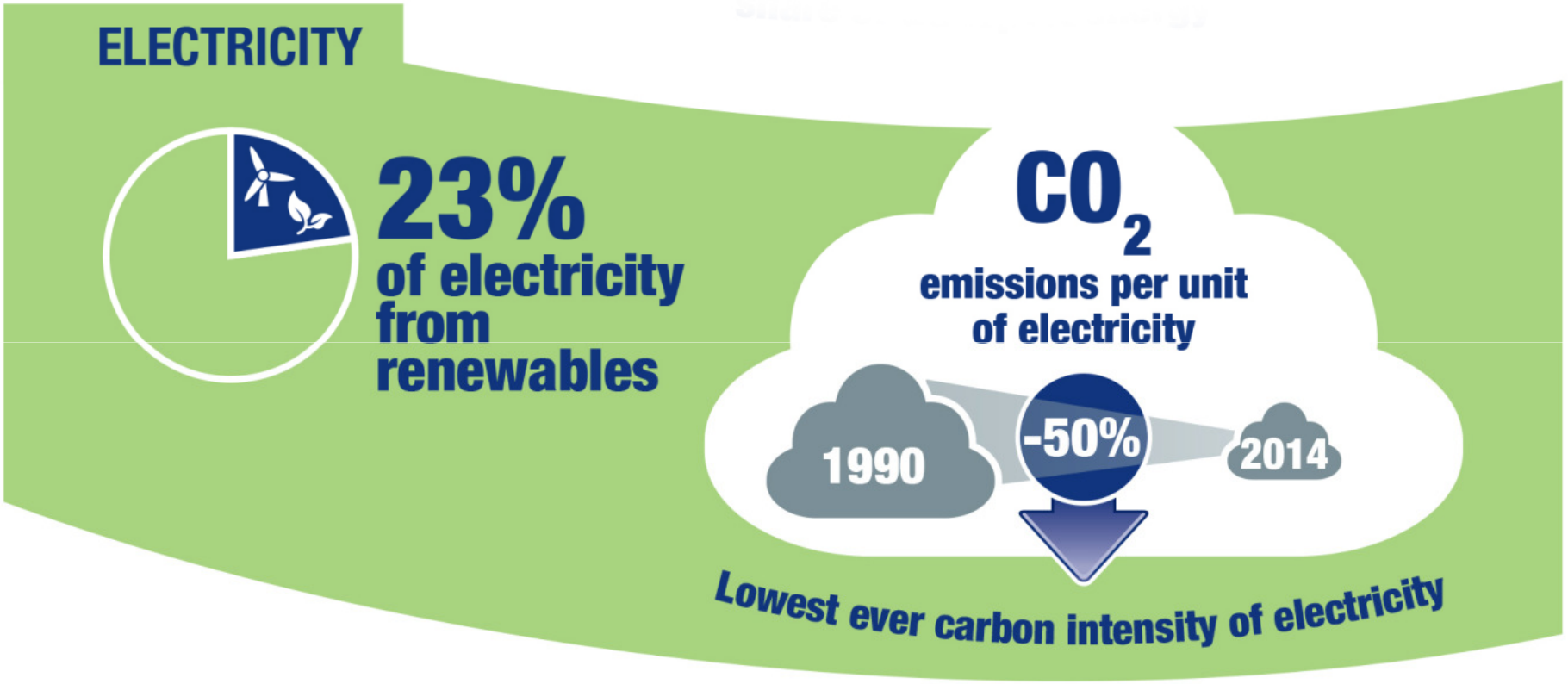
Electricity generation



Electricity Generation



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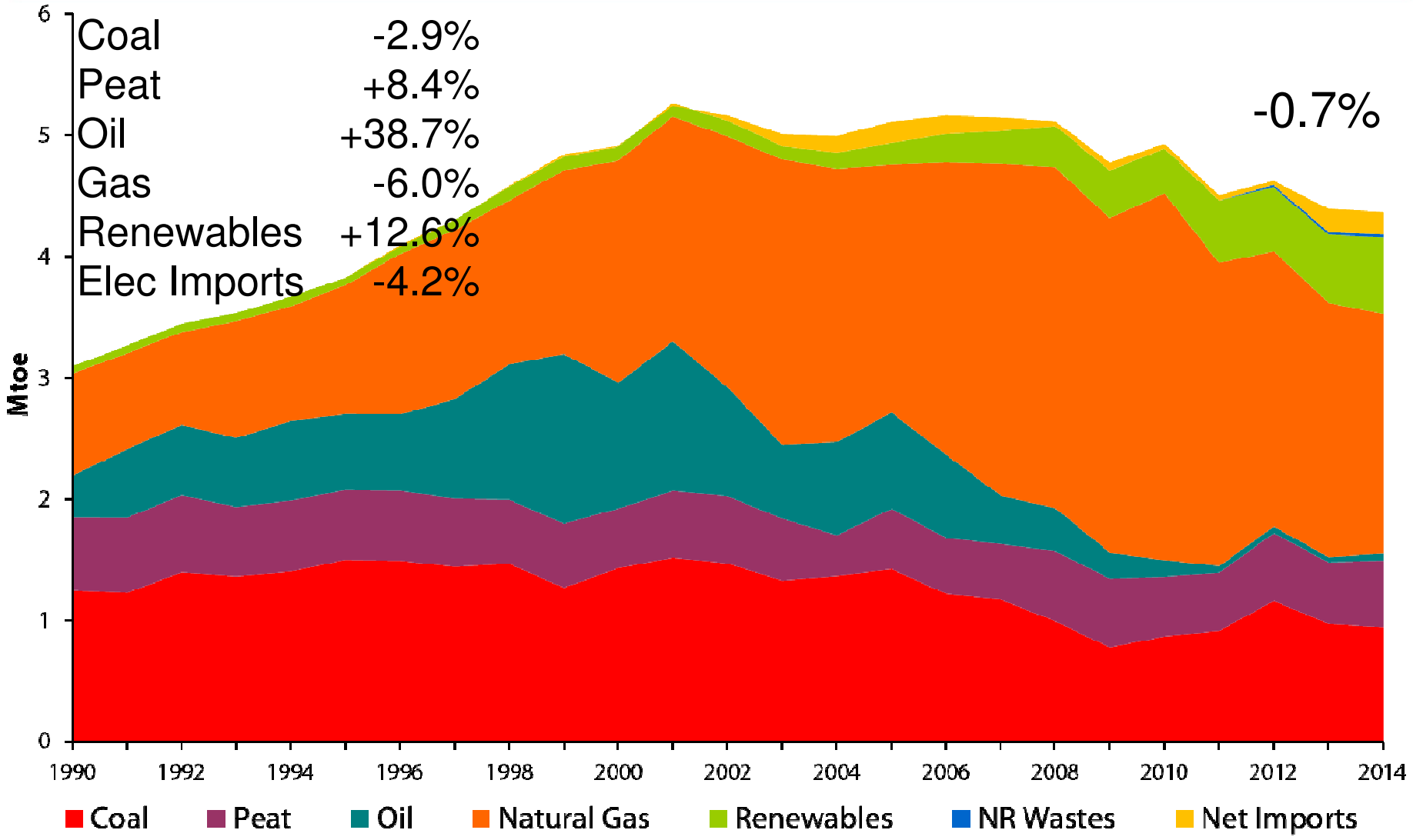
Electricity Generation Fuel Mix



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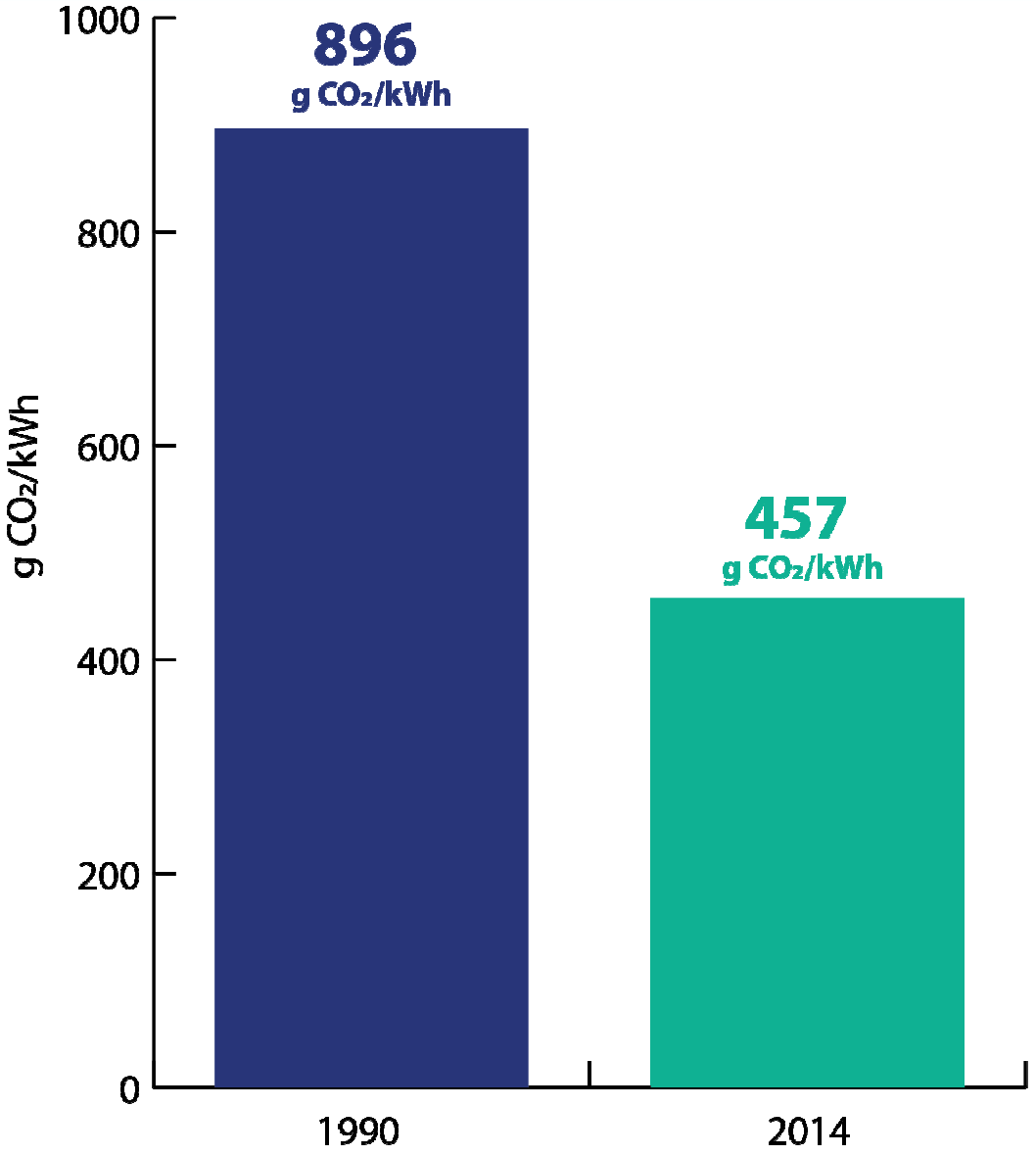
Electricity CO_2 Intensity



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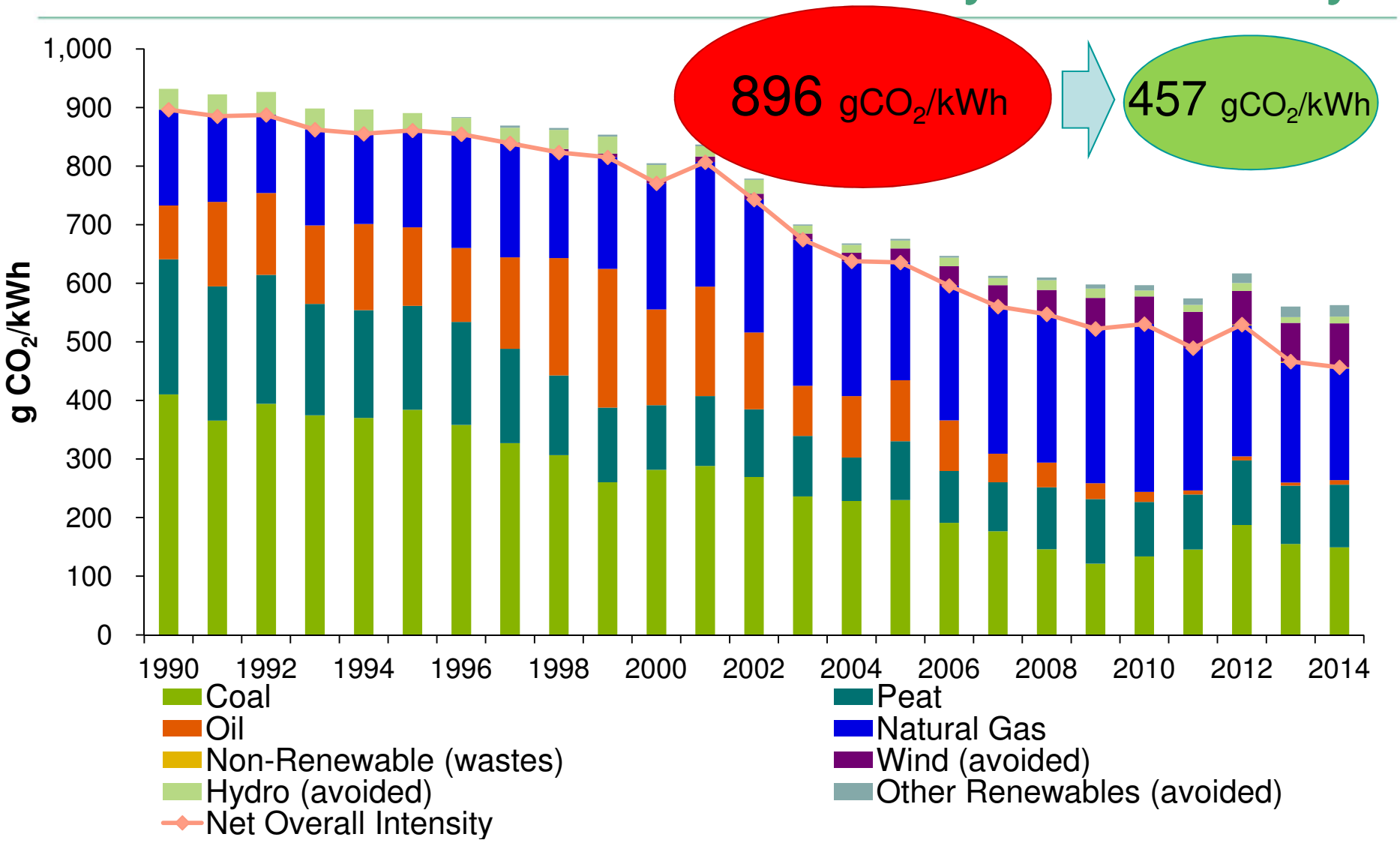
Carbon Dioxide intensity of Electricity



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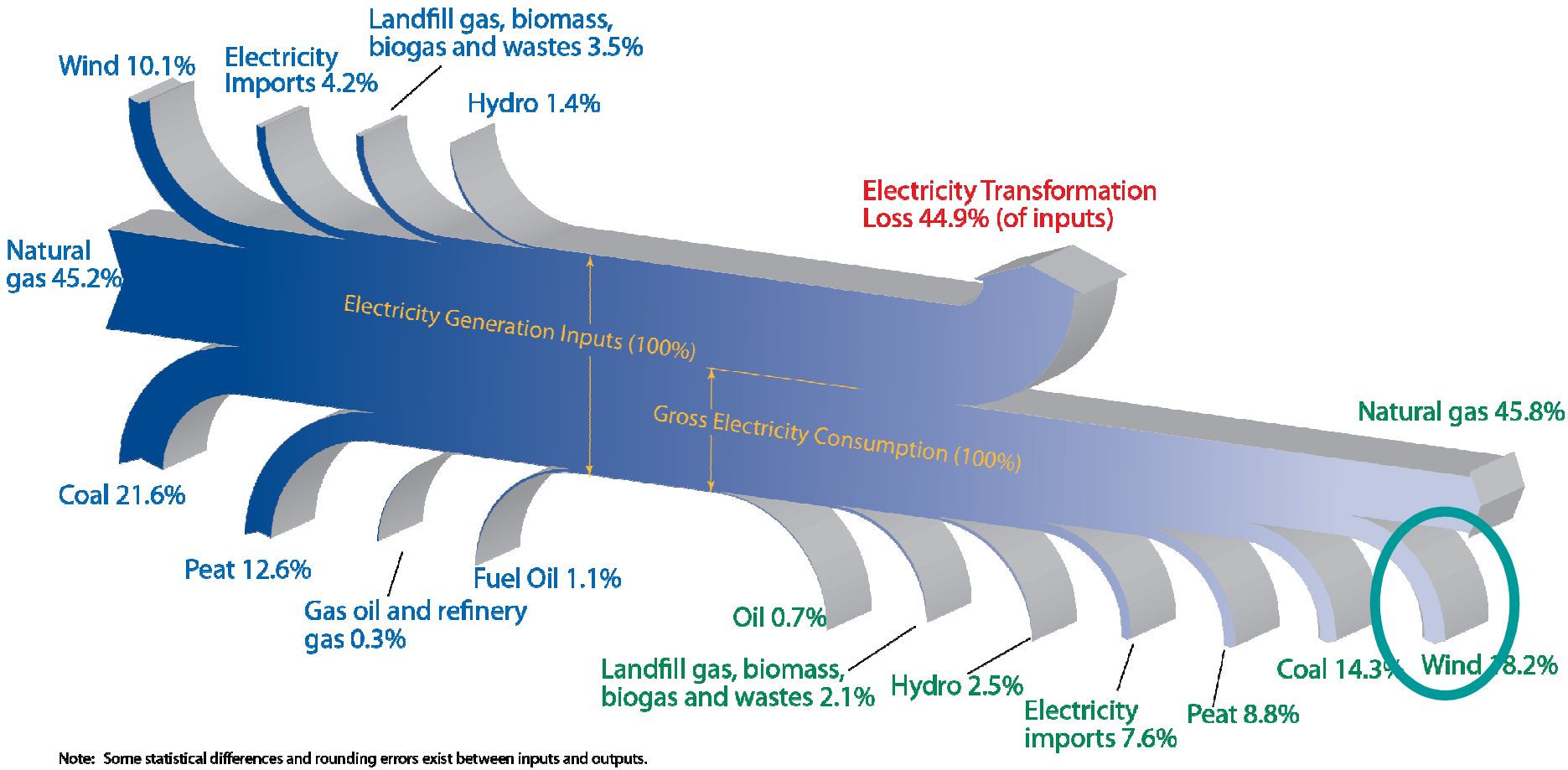
Gross Electricity Generation



Note: Some statistical differences and rounding errors exist between inputs and outputs.
Percentages of inputs on the left refer to percentages of total inputs.
Percentages of output, with the exception of electricity transformation loss, refer to percentages of gross electricity generated.

Renewables as % of gross electricity consumption = 22.7%
Renewables as % of gross electricity consumption (normalised) = 22.7%
CHP as % of total electricity generation = 7.4%

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Electricity Generation 2014

- Final consumption of electricity fell by 0.3% in 2014
- Primary fuel inputs fell by 0.7%, electricity demand fell by 0.3%
- Natural gas is the dominant energy input at 47% (but fell by 6%)
- Coal use fell by 2.9% following a 16.4% fall in 2013
  - 21.6% of fuel mix and 14.3% of electricity generated
- Renewables input to electricity generation increased by 12.6%
  - 14.5% of fuel mix and 22.7% of electricity generated
- CO_2 intensity at the lowest level ever
  - CO_2 intensity 457 g CO_2/kWh (approx. half of what it was in 1990)
  - Efficiency of electricity supply 49.1% (48.4% in 2013)

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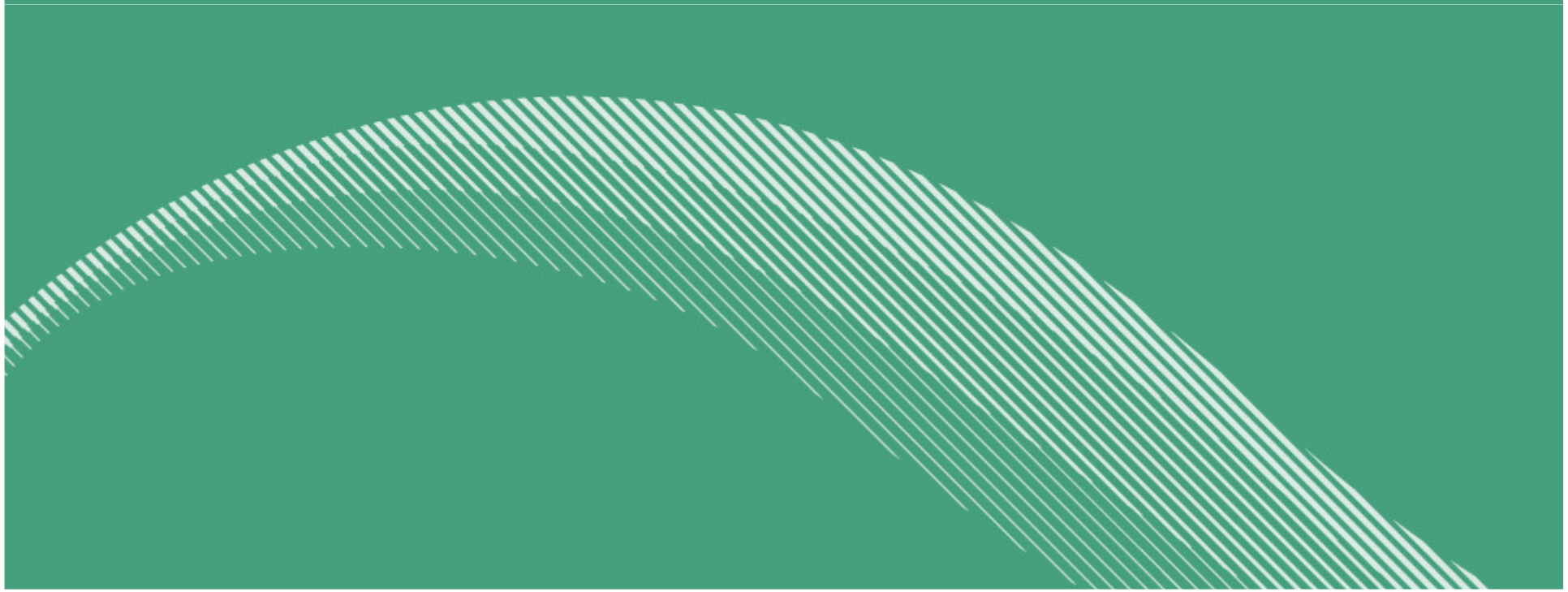
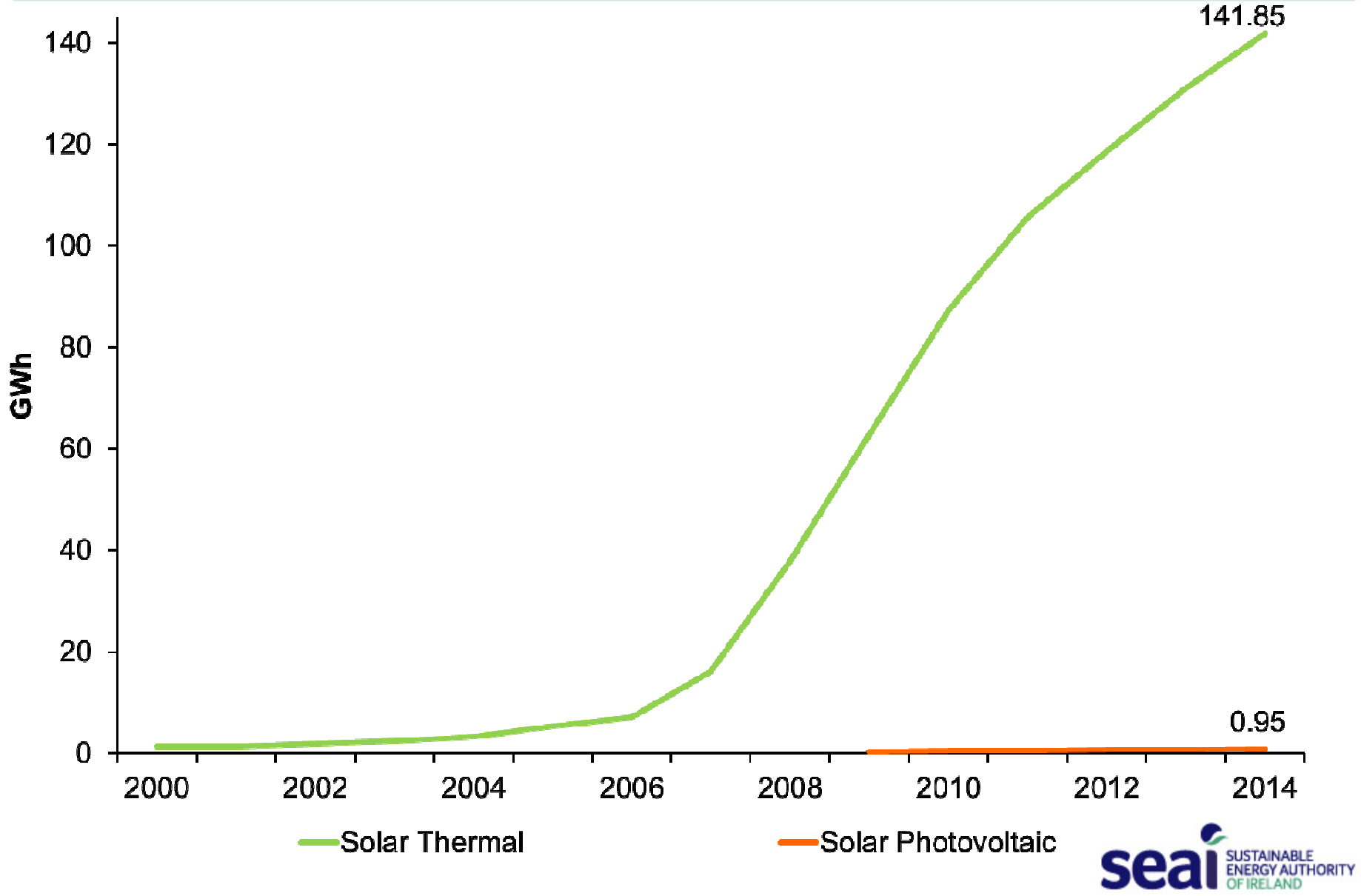
Solar Energy



Solar Energy



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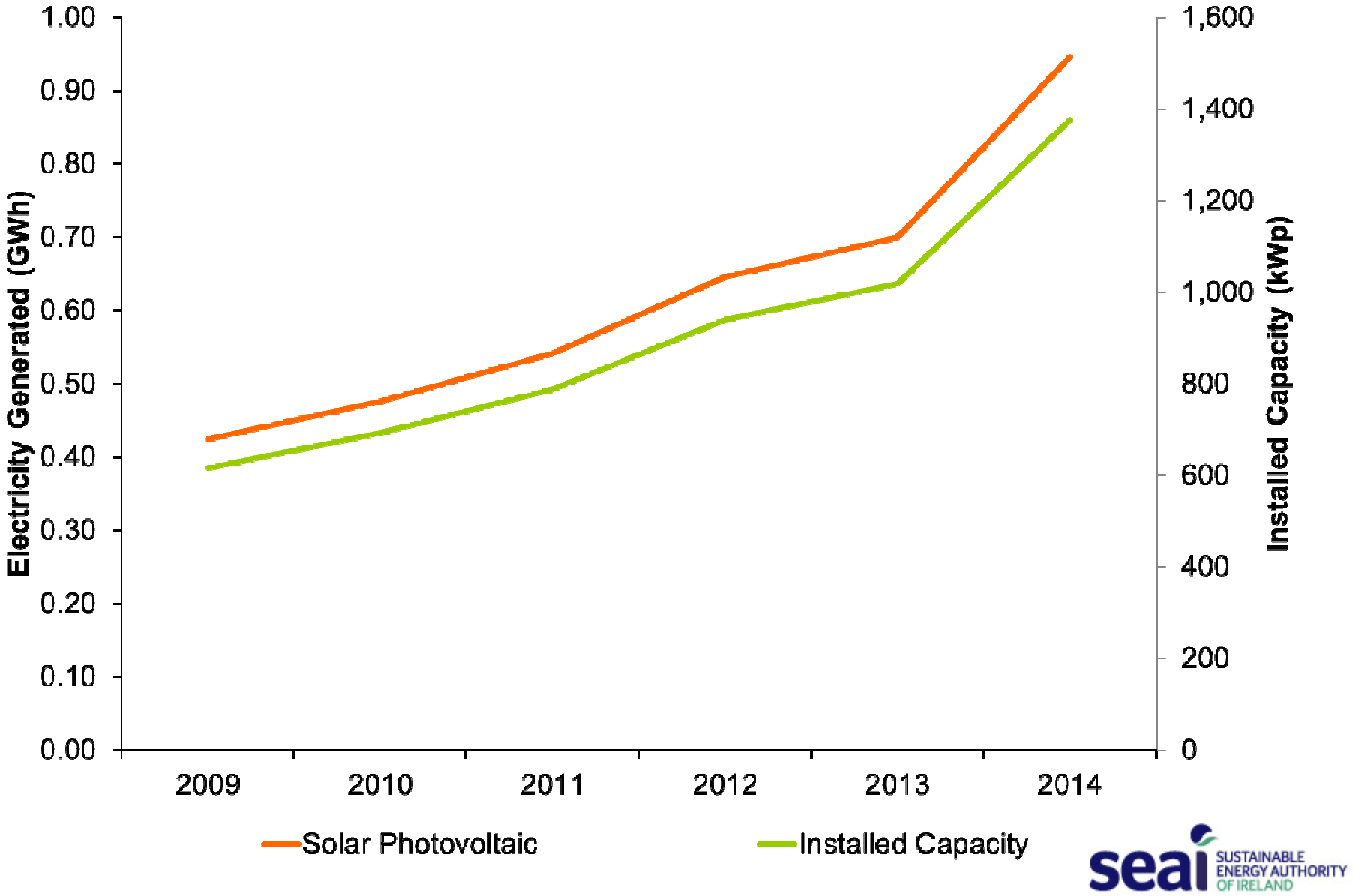
Solar Photovoltaic



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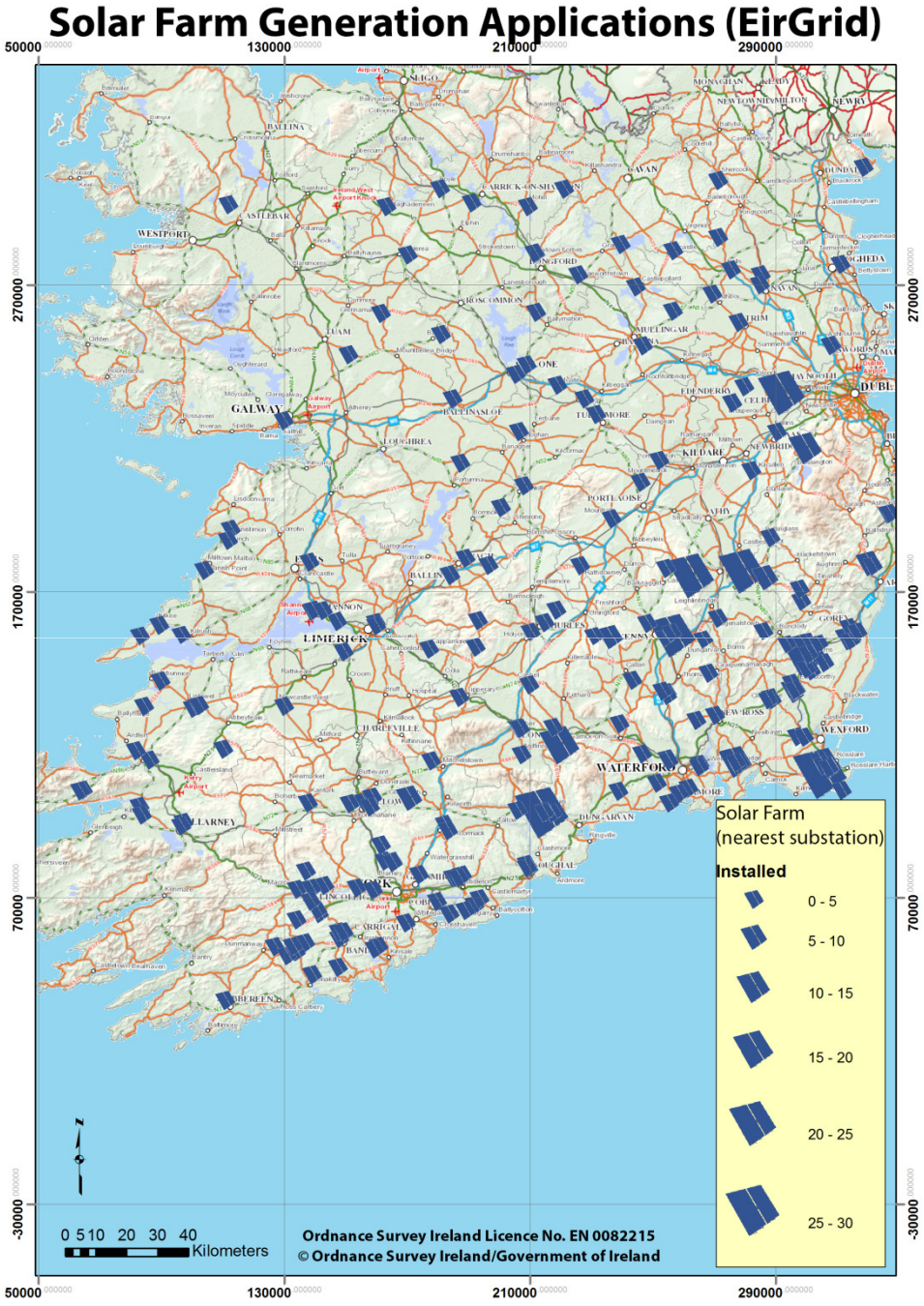

Solar Photovoltaic

Applications for Grid Connection up to 21st January 2016

- 239 sites
- 1,161 MW_p

  Maximum export capacity
- Majority in the 4 MW_p range

Applications mostly submitted in 2015

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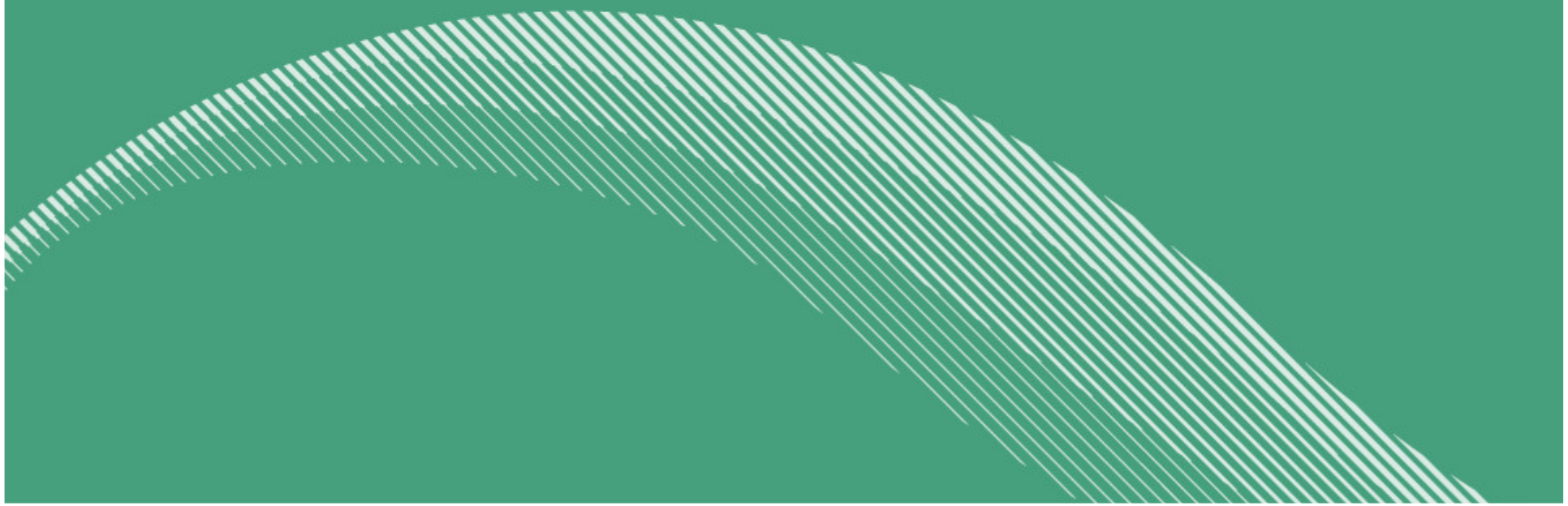
Summary



Summary

- 2014 saw a further decoupling of energy consumption – and related CO_2 emissions – from economic activity (GDP)
  - Economy grew by 5.2%
  - Overall energy use fell by 0.5%
  - Energy-related CO_2 emissions fell by 1.2%
- However:
  - Industry energy up by 3.1%
  - Transport energy up by 4.0%

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Thank you.

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