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# Slovenia at a Glance

eXtremOS

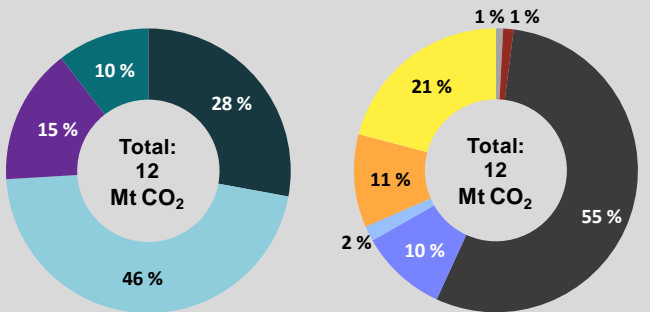
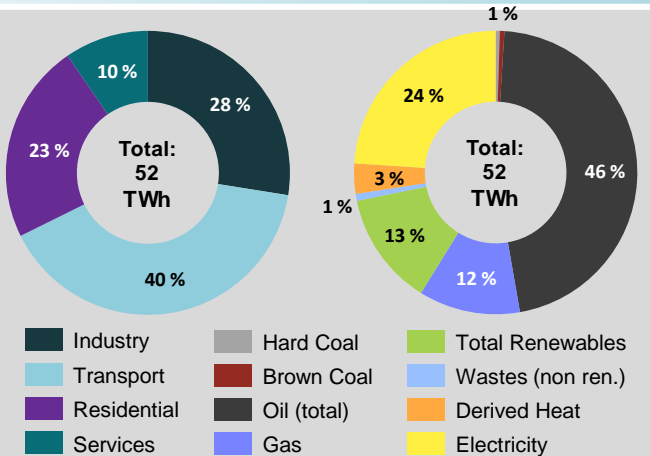


# Slovenia at a Glance



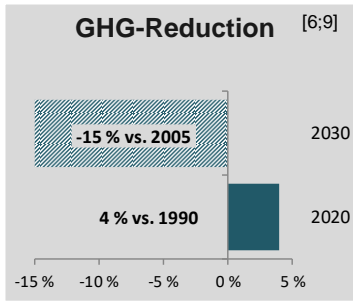
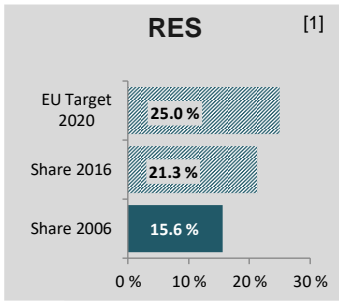
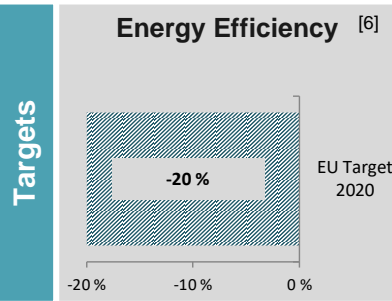
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Final Energy Consumption  
CO<sub>2</sub>-Emissions  
Key-Indicators



Based on 2014 data

Population <sup>2016,[5]:</sup>	2.1 million	Size <sup>[5]:</sup>	20 270 km <sup>2</sup>
Net EI. Consumption <sup>2016,[5]:</sup>	13 TWh <sub>el</sub>	Peak-Load <sup>[2]:</sup>	2.1 GW <sub>el</sub>
Trade-Balance <sup>[2]:</sup>	+6.2 TWh <sub>el</sub>	RES-Share EI. <sup>2016,[5]:</sup>	32.1 %
GDP per Capita <sup>[5]:</sup>	\$23 597	GDP per Capita-Ranking <sup>[5]:</sup>	38/185



**Current Topics**

- Increase in RES share due to increase in hydro power conflicts with areas under Natura 2000 scheme
- Slovenia has the highest share of areas under the Natura 2000 scheme; 38 % of total area

**Key Facts**

- Building sector is key factor for improvements in energy efficiency
  - Final energy consumption reduced by 30 % (vs. 2005)
  - 2/3 RES share
  - GHG emissions reduced by 70 % (vs. 2005)
  - Considering compensation measures outside Slovenia
- 84 % of heat generated for distribution system originated from CHP plants
- National targets:
  - No clearly defined targets
  - Improvements in efficiency and reduction in GHG emissions



# Slovenia's Electricity Sector

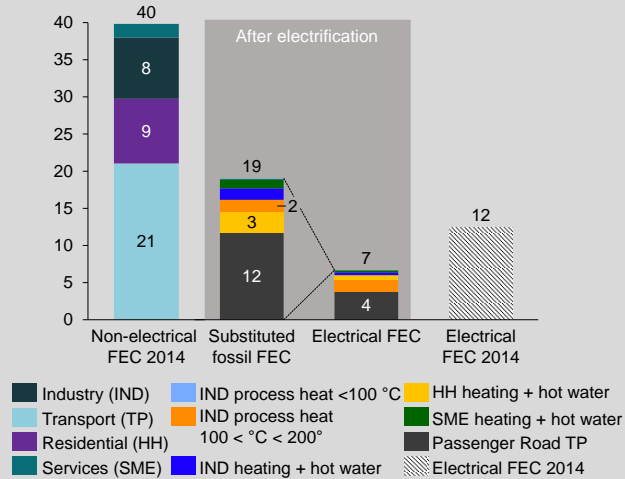


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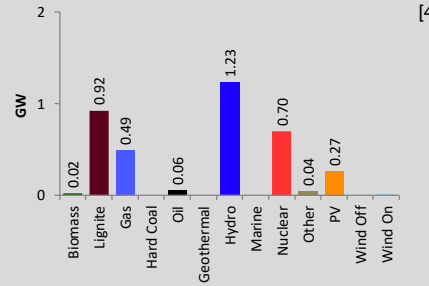
Electrification Potential

## "Low hanging fruits" case 2014

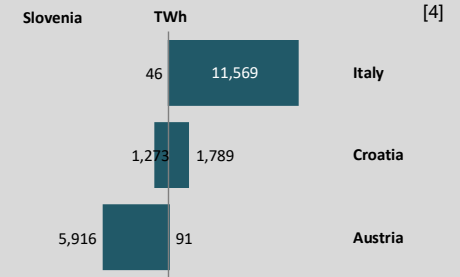
Final Energy Consumption (FEC) in TWh [own calculation]



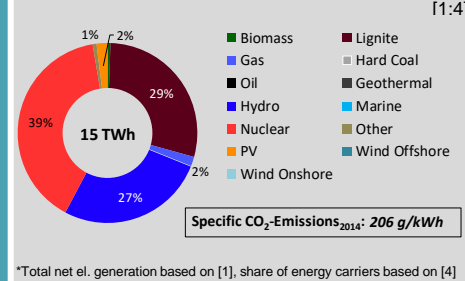
Installed Capacity



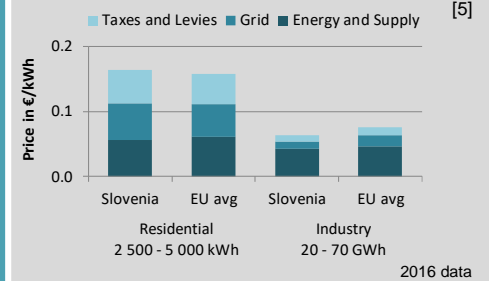
Import-Export



Net El. Generation



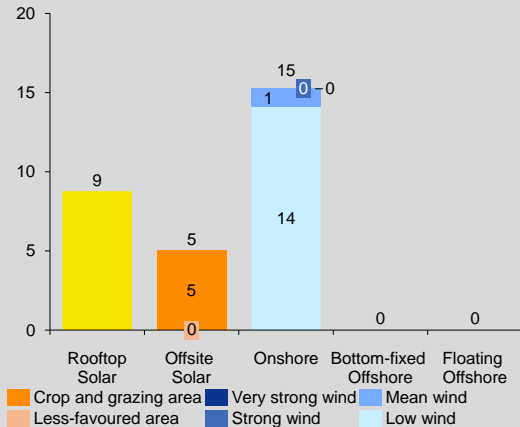
Customer Prices



vRES Potential

## Renewable Energies

TWh [own calculation; compare methodology slides]



## Wholesale Market

- Main Exchange: BSP-Southpool (SIPX) [2]

### Day-Ahead-Market (SIPX):

Year	SIPX
2017	6.8 TWh
Avg. Price	49.52 €/MWh

## Support Schemes

### Costs

- Tenders are independent of technology
- Two rounds, participation after time of installation

### Policies

- The RES-H building obligation obliges owners of new or renovated buildings to build energy efficient buildings and also to use RES as their main source of energy.
- RES-H infrastructure is promoted by the Ministry of Infrastructure and Spatial Planning via tenders.

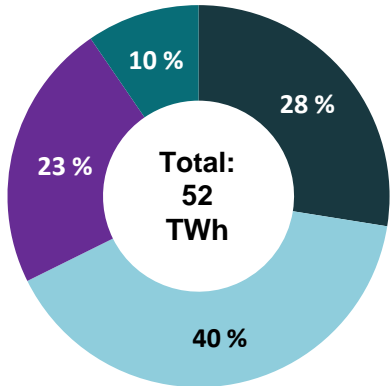


# Slovenia's Energy Consumption & Emissions by Sectors and Energy Carriers - 2014

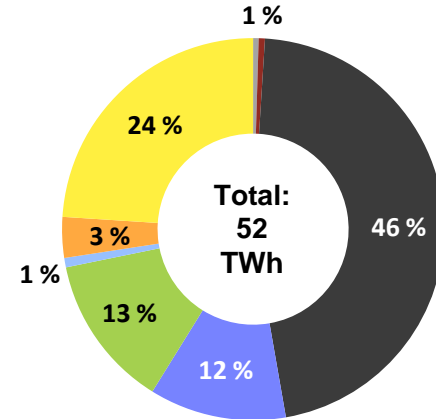


Final Energy Consumption

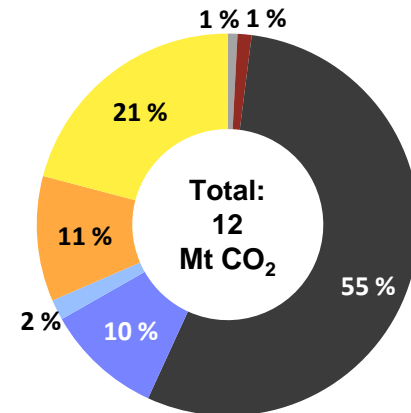
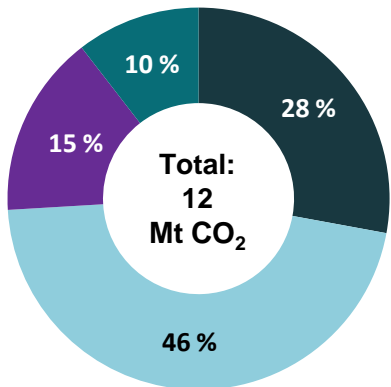
All Sectors



All Energy Carriers



CO<sub>2</sub> - Emissions



- Industry
- Transport
- Residential
- Services
- Hard Coal
- Oil (total)
- Total Renewables
- Derived Heat
- Lignite
- Gas
- Waste (non. ren.)
- Electricity



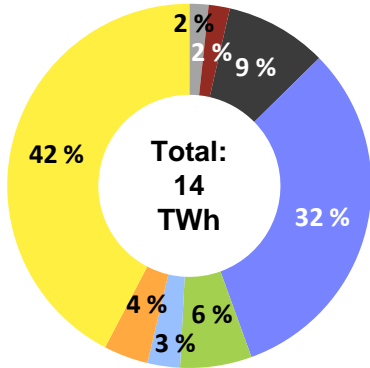
# Slovenia's Energy Consumption & Emissions by Sectors and Energy Carriers - 2014



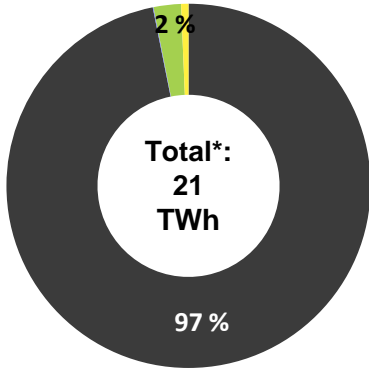
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Final Energy Consumption

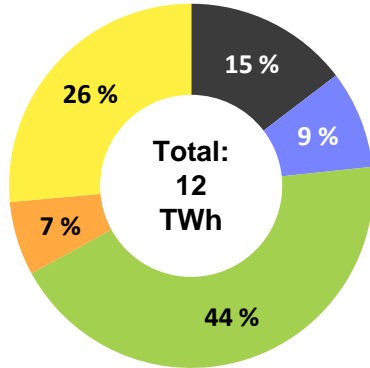
Industry



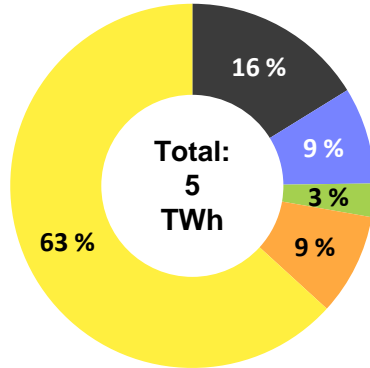
Transport



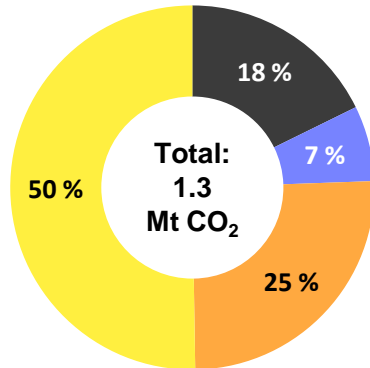
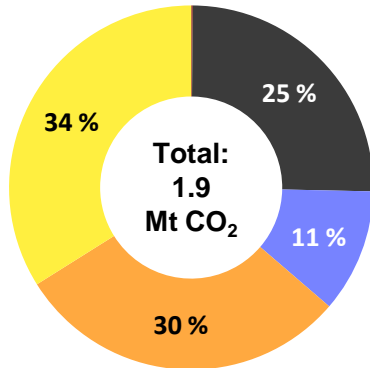
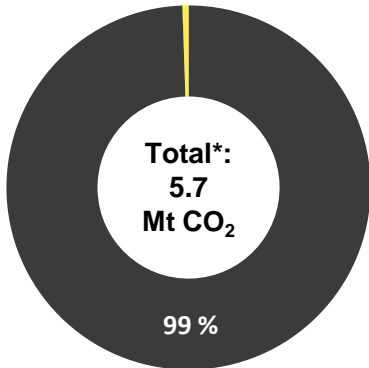
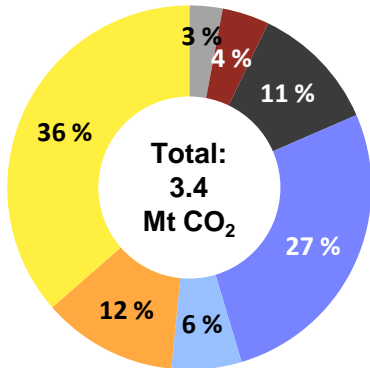
Residential



Services



CO<sub>2</sub> - Emissions



Hard Coal
  Lignite
  Oil (total)
  Gas
  Total Renewables
  Waste (non. ren.)
  Derived Heat
  Electricity

\*excluding international aviation



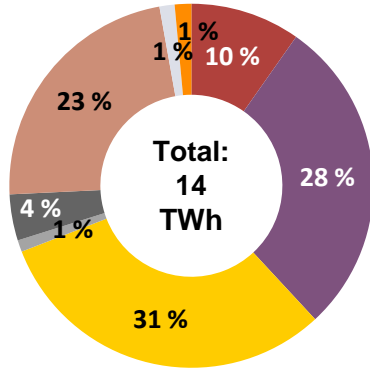
# Slovenia's Energy Consumption & Emissions by Application & Sectors - 2014



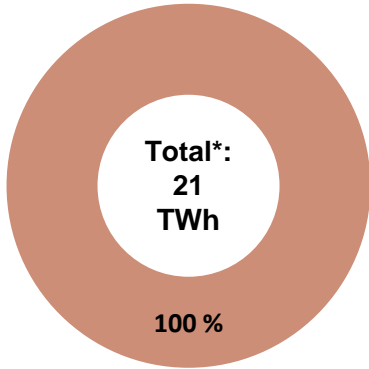
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Final Energy Consumption

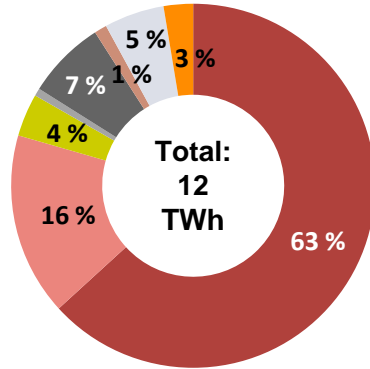
Industry



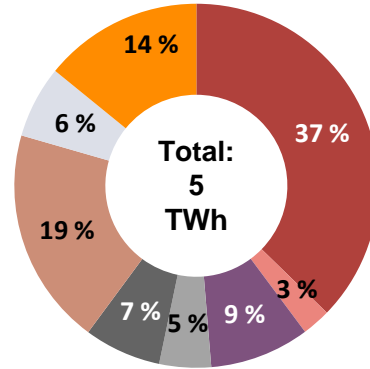
Transport



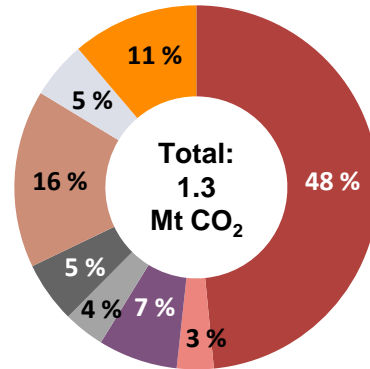
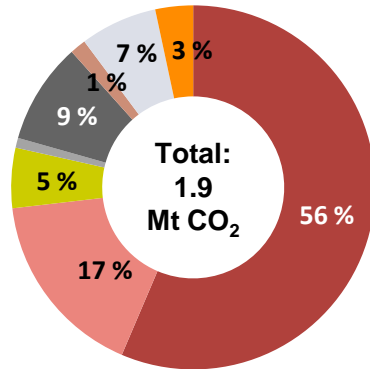
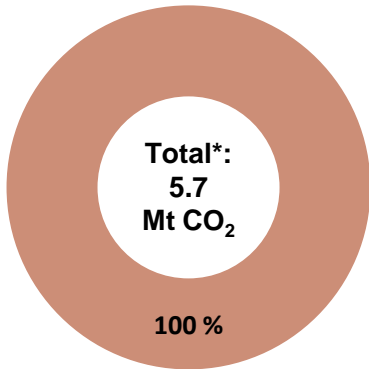
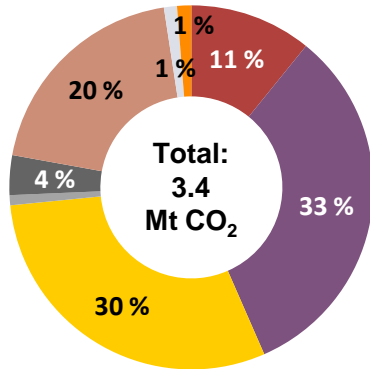
Residential



Services



CO<sub>2</sub> - Emissions



- Space Heating
- Process Heat < 500 °C
- Cooking
- Other Process Cold
- ICT
- Warm Water
- Process Heat > 500 °C
- Climate Cold
- Mechanical Energy
- Lighting

\*excluding international aviation



# Slovenia: Sources



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## Institutions

Ministry of Infrastructure		<a href="http://www.mzi.gov.si/en/areas_of_work/energy/">http://www.mzi.gov.si/en/areas_of_work/energy/</a>
TSO	Elektro-Slovenika, d.o.o.	<a href="https://www.eles.si/en">https://www.eles.si/en</a>
Regulator	Agencija za energijo	<a href="https://www.agen-rs.si/web/en">https://www.agen-rs.si/web/en</a>

## Sources

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[http://europa.eu/rapid/press-release\\_MEMO-16-2499\\_en.htm](http://europa.eu/rapid/press-release_MEMO-16-2499_en.htm)
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- [16] Institute for Global Environmental Strategies, 2006. IPCC Guidelines for National Greenhouse Gas Inventories - Energy - Stationary Combustion
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Industrial processes for publication

## Main Studies

- **Report on the Energy Sector in Slovenia for 2016** (Ministry of Infrastructure), <https://www.agen-rs.si/documents/54870/68629/Report-on-the-energy-sector-in-Slovenia-for-2016/de8cc94f-b3f6-4d32-8e79-ce3b0ec386f5>
- **Report on the Energy Sector 2016** (Energy Agency), <https://www.agen-rs.si/documents/54870/68629/Report-on-the-energy-sector-in-Slovenia-for-2016/de8cc94f-b3f6-4d32-8e79-ce3b0ec386f5>