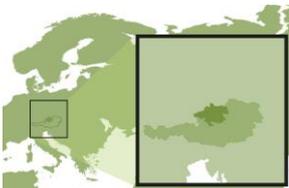




## Partner region profile – Upper Austria

Energy Transition Platform | May 2016

### Socio-economic facts



Upper Austria, Austria

**Population:** 1,437,251 (2014) | **Area:** 11,981 km<sup>2</sup>

**Landscape:** northern Calcareous Alps and plains

**GDP:** US\$64.2 billion (2014) | **GDP/capita:** US\$41,000

**Economic sectors:** 55% services | 40% industry: automobile, mechanical engineering, metal processing, manufacturing, chemicals, renewable energy technologies | 3% tourism | 2% agriculture

**Jurisdictional power:** decentralized

**Key departments:** Ministry of Economy, Labour, Energy, Tourism, Sports, Spatial Planning and European Affairs; Ministry of Integration, Environment, Climate and Consumer Protection; state energy agency OÖ Energiesparverband

At the beginning of the 20<sup>th</sup> century, the economy of Upper Austria was based on agriculture, which employed half of the working population. World War II and the development of heavy industry significantly changed the economic structure of the region. The overall employment in the industry sector rose, particularly in machinery, metal, steel and chemicals<sup>1</sup>.

These major industries kept growing after the war and were eventually nationalized to restructure the production process. The economy also diversified with start-ups forming in the field of electrical equipment and manufacturing. However, there was a severe crisis in the state-owned sector in the 1980s, which resulted in rising unemployment rates and privatization<sup>2</sup>.

<sup>1</sup> <http://epub.wu.ac.at/264/1/document.pdf>

<sup>2</sup> *ibid*

Since then, employment in heavy industries has declined while the service sector has grown significantly. The region, however, remains highly industrialized today – it is home to one quarter of all Austrian exports and industrial production<sup>3</sup>. The three cities of Linz (capital), Wels and Steyr form the industrial core region of Upper Austria.

### Energy system and energy policy

Upper Austria has been developing energy policy frameworks since the 1990s. The first significant energy concept was released in 1994 and provided a strategy for the period of 1994-1999. The targets were successfully achieved with the share of renewable energy in overall energy consumption rising from 25% to 30% by 2000<sup>4</sup>. The targets set out in the following energy strategy for 2000-2010 were achieved ahead of schedule – the number of biomass heating plants and solar power plants was doubled<sup>5</sup>.

In 2007, the government introduced the “Energy Future 2030” program setting targets to be achieved by 2030. With 39% of the overall final energy consumed in Upper Austria today coming from renewable sources, the region is positioning itself as a leader in the energy transition and energy technology.

<b>Energy resources (in ground &amp; production)</b>	Very small amount of oil and gas; hydro resources and biomass
<b>Energy mix: gross consumption by sources and sectors</b>	Sources: renewable energy (35%); oil (26%); natural gas (22%); coal (17%) <sup>6</sup> Sectors: transport (27%); production industries (25%); residential (22%); energy intensive industries (20%); services (6%)
<b>Renewable energy gross consumption</b>	35% of gross domestic energy consumption - of which biomass (17%); hydropower (13%); other (5%)
<b>Imports/exports</b>	Imports two third of domestic energy consumption
<b>Energy market structure (privatized/monopolized)</b>	Liberalization of electricity market since 2001

### Upper Austrian Energy Strategy 2030

The energy strategy, also known as “Energy Future 2030”, was released by the Upper Austrian Government in 2007. It builds upon previous regional energy strategies implemented in 1994 and 2000, as well as an energy efficiency program from 2010.

The strategy comprises key targets setting out the pace for a significant energy transition by 2030:

- generate 100% of the region’s electricity consumption from renewable sources;
- generate 100% of space heating from renewable sources;
- reduce heat demand by 39% (based on 2005 levels); and
- reduce the use of fossil fuels in transport by 41% (based on 2005 levels).

<sup>3</sup> <https://www.land-oberoesterreich.gv.at/49171.htm>

<sup>4</sup> [https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt\\_Praes/OOe-Energie-E.pdf](https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt_Praes/OOe-Energie-E.pdf)

<sup>5</sup> ibid

<sup>6</sup> <http://www.energiesparverband.at/english/energy-in-upper-austria/energy-in-upper-austria.html>



The implementation of the strategy will lower energy consumption by one third, reduce energy costs and bring greenhouse gas (GHG) emissions down by up to two thirds<sup>7</sup>. This energy transition will also drive an economic transition.

One part of the strategy is implemented through already existing EU directives such as the Biofuels Directive, together with 148 additional measures specifically developed to meet the targets. These include legal measures such as compulsory regulations and the removal of legal barriers, but also financial measures such as grants and information activities to raise awareness<sup>8</sup>. Currently the strategy is broadened to also include business and industry location aspects.

### Energy transition experience

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With existing high levels of renewable energy production and ambitious clean energy targets, Upper Austria is leading the way towards low carbon energy systems and is accelerating the energy transition.

After more than two decades of regional energy policies focusing on renewable energy and energy efficiency, renewable energy currently covers more than one third of the total primary energy demand, 80% of the electricity consumption and 60% of the total heating consumption<sup>9</sup>.

While the share of renewable energy in the total energy mix increased from 33% to 39% between 2005 and 2013, the consumption of fossil fuels decreased significantly. Upper Austria also successfully manages both the energy and the economic transitions – its economic growth (29% increase since 2005) is clearly de-coupled from the increase in energy demand (only 4% since 2005)<sup>10</sup>.

Building on these numerous successes, the region is now aiming to further increase the share of renewable energy sources, and is facilitating the energy transition through a range of initiatives. The Upper Austrian Energy Agency as well as the energy cluster “Ökoenergie-Cluster” provide considerable support to state governments and businesses respectively in implementing the policies, by creating an information hub for energy data and advice. Many producers of renewable heating technologies such as biomass boilers or solar collectors are located in the region and are part of the cluster.

The energy transition is also happening at different levels of government – the Energy Savings Communities program supports local communities in implementing their own local energy strategies<sup>11</sup>.

Despite a predominance of hydropower and biomass in renewable energy sources, solar thermal and solar photovoltaics are increasingly being used. The region is a leader in Europe, and has 0.9 m<sup>2</sup> of collector surface per inhabitant, against 0.062 m<sup>2</sup> on average in the EU.

The Government is also aiming to increase the energy efficiency of small and medium-scale enterprises without harming international competitiveness, as well as cutting GHG emissions and energy consumption from the most energy intensive industries.

#### Climate and energy targets:

Generate 100% of the state's energy for space heating and electricity from renewable sources by 2030

Reduce consumption of fossil fuels by up to 41% (2005 levels) within the transportation sector by 2030

#### Climate or energy plan:

[Energy Future 2030](#)

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<sup>7</sup> [https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt\\_Praes/OOe-Energie-E.pdf](https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt_Praes/OOe-Energie-E.pdf)

<sup>8</sup> [http://www.wsed.at/fileadmin/wsed/2008/Präsentationen/hlinger\\_zukunft.pdf](http://www.wsed.at/fileadmin/wsed/2008/Präsentationen/hlinger_zukunft.pdf)

<sup>9</sup> <http://www.energiesparverband.at/english/energy-in-upper-austria/energy-in-upper-austria.html>

<sup>10</sup> *ibid*

<sup>11</sup> <http://www.theclimategroup.org/what-we-do/network/the-state-of-upper-austria>



## Climate policy and instruments

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Thanks to the Upper Austria Energy Strategy, targets are in place for climate actions in different sectors. The region of Upper Austria has already achieved great progress in the reduction of GHG emissions; between 1990 and 2012 the population increased by 8.6% and the number of residential buildings by 44%; yet the GHG emissions in households were cut down by 41%.

## Contact

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### Sources:

Achievements in renewables and energy efficiency:

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Energy in Upper Austria: [https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt\\_Praes/OOe-Energie-E.pdf](https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt_Praes/OOe-Energie-E.pdf)

Energy Future 2030: <http://www.energiesparverband.at/english/energy-in-upper-austria/energy-in-upper-austria.html>

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