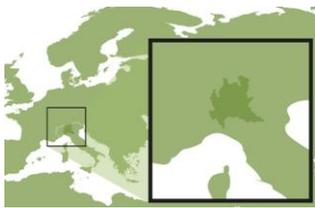




## Partner region profile – Lombardy

Energy Transition Platform | May 2016

### Socio-economic facts



Lombardy, Italy

**Population:** 10,001,496 (2014) | **Area:** 23,844 km<sup>2</sup>

**Landscape:** 4<sup>th</sup> largest Italian region, with mountains (Alps) and plains

**GDP:** US\$372 billion (2013) | **GDP/capita:** US\$37,600

**Economic sectors:** 64% services | 34% industry: metallurgy, chemicals, petrochemicals, pharmaceuticals, electronics | 2% agriculture

**Jurisdictional power:** decentralized

**Key departments:** Department of Environment, Energy and Sustainable Development

At the beginning of the 20<sup>th</sup> century, the economy of Lombardy was mainly based on industry and agriculture. Its position as a strong and heavily industrialized region was further established after World War II and the economic boom that followed, with particularly strong growth in automobile and steel production.

During the post-war period, the population of Milan grew from 1.3 million in 1951 to 1.7 million in 1967 due to a wave of domestic migration from rural areas of Southern Italy.

The end of the 20<sup>th</sup> century saw a transformation of the economy: from a heavily industrialized one to one dominated by knowledge-intensive industries and services<sup>1</sup>. Although the textile, automobile and steel industries have declined, Lombardy is still home to mid-size specialized machinery-building, engineering firms as well as chemicals and petrochemicals industries.

<sup>1</sup> Higher Education in Regional and City Development, Lombardy Italy 2011, OECD

Today, Lombardy is the most populated and prosperous region of Italy and its economy represents one-fifth of the national economy<sup>2</sup>. Small and medium enterprises dominate the market, and 40% of the firms of the region are based in Milan and the surrounding areas<sup>3</sup>.

The region is also known for its innovative leadership, with 10 science and technology clusters as well as 31% of the Italian patents recognized by the EU being registered in Lombardy<sup>4</sup>.

### Energy system and energy policy

The new Regional Environmental Energy Program adopted in June 2015 will support the region in the transformation of its energy system. Although the region is still heavily reliant on gas, it is also the biggest producer of hydroelectric power in Italy, thanks to its favorable geography, combining the high mountains of the Alps and large rivers. Hydropower accounts for almost a quarter of the electricity mix<sup>5</sup>.

<b>Energy resources (in ground &amp; production)</b>	Hydropower, waste and biomass
<b>Energy mix: consumption by sources and sectors</b>	Sectors: residential and commercial (39%); industry (33%); transport (26%); agriculture (2%)
<b>Renewable energy consumption</b>	9% of energy consumption: hydropower, bioenergy, solar power Contributes to 15% of national renewable production
<b>Imports/exports</b>	Imports most of its energy; only 8% comes from region's inland sources
<b>Energy market structure (privatized/monopolized)</b>	Liberalization of the electricity market in 1999

### Regional Environmental Energy Program (PEAR)

The region of Lombardy adopted the PEAR in June 2015, an instrument of strategic planning that sets out targets for energy savings and the development of renewable energy sources.

The program complies both with European Directives and national requirements. The national mandatory quota requires Italy to have a 17% share of renewable energy sources in the final energy consumption by 2020.

According to the plan, new buildings and buildings undergoing extensive restructuring must comply with "Nearly Zero-Energy Building" standards. An instrument specifically focusing on that topic, the Regional Registry of Building Energy, is already in place to help meet that target.

Additional guidelines to improve energy efficiency are included, such as a proposal to enable a fund Energy Service Company (Esco) to promote the activities of companies working towards high levels of energy efficiency.

The plan also targets technologies, such as energy storage systems for residential solar photovoltaic panels. It provides support to municipalities for the renovation of public lighting as well as to the private sector to increase the use of energy control and management systems. Finally, it supports the deployment of particular renewable energy sources, such as biomass.

<sup>2</sup> <https://www.oecd.org/fr/sites/eduimhe/49008527.pdf>

<sup>3</sup> <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/lombardy>

<sup>4</sup> <http://www.investinlombardy.com/lombardy/lombardy-region>

<sup>5</sup> <http://www.theclimategroup.org/what-we-do/network/lombardy>



Additionally, the plan will contain a database collecting energy data or regulatory information, such as permits, building certificates and renewable energy plans.

Finally, one key characteristic of the program is its cross-sectoral approach, where all economic sectors contribute equally to reach the targets, regardless of their contribution to greenhouse gas (GHG) emissions or energy consumption.

### Energy transition experience

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The region of Lombardy is deeply committed to achieving its ambitious climate and clean energy goals through a broad set of actions, including energy efficiency, de-carbonization of electricity, sustainable mobility and the green economy.

Renewable energy sources constitute 9% of the total energy production of the region, and contribute to 15% of the national renewable energy production – which is the highest contribution of all the Italian regions. Although hydropower is the main renewable energy source, the region is planning to develop biomass as well as solar power.

Another area of focus in the energy transition is sustainable mobility. A dedicated program is being prepared that will identify specific actions, such as support for the development of electric mobility, the integration of new forms of sustainable mobility (e.g. car-sharing) and the application of free-flow solutions on the motorway network.

### Climate policy and instruments

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The region of Lombardy has taken several mitigation and adaptation actions to reduce GHG emissions and tackle climate change. The Regional Development Program from 2013 recognized that climate change is a cross-sectoral issue and established a five-year program building on regional policies targeting all sectors and all levels of government.

A Regional Plan for Climate Change Mitigation addressing cross-sectoral issues is currently also under preparation.

#### Regional plan of action on air quality (PRIA)

The plan was implemented in 2013 to prevent and reduce air pollution emissions. Its strategic objective is to achieve levels of air quality that reduce negative impacts on and risks to the human health and the environment.

#### Regional Climate Change Adaptation Strategy (2013)

Lombardy was the first region in Italy to adopt a global plan to analyze climate disruption through a regional adaptation strategy. A new Regional Plan for Adaptation to Climate Change, making reference to the old strategy, is currently under preparation.

### Contact

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To find out more, please contact **Anne-Sophie Dörnbrack**, States & Regions Policy Manager (Energy Transition): [adoernbrack@theclimategroup.org](mailto:adoernbrack@theclimategroup.org) | +44 (0)20 7960 2977

#### Sources:

[Regional Environmental Energy Program \(Italian\)](#)

[Regione Lombardia, Annex to Under2MOU \(English\)](#)

#### Climate targets:

Reduce GHG emissions by 20% by 2020 (2005 levels); 40% by 2030

Cut energy consumption by 10% by 2020 (2005 levels)

Increase the use of renewables to 15.5% of total energy production by 2020

#### Climate plan:

[Regional Environmental Energy Program \(PEAR\)](#)

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