



Country profile – Latvia

The section 'Key climate- and energy-related data' was prepared by the EEA. It includes the latest data available as of 31 July 2014

The section 'Climate and energy policy framework' was prepared by eclareon and Ecologic Institute, Germany. It includes the latest information on national policies and measures available as of 31 May 2014.

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Key climate- and energy-related data — Latvia

Key data on GHG emissions	2005	2011	2012	2013	EU 2012
Total GHG emissions (UNFCCC, Kyoto Protocol) (Mt CO ₂ -eq.)	11.1	11.1	11.0	10.9	4 544.2
GHG per capita (t CO ₂ -eq./cap.)	4.9	5.4	5.4	5.4	9.0
GHG per GDP (g CO ₂ -eq./PPS in EUR)	444	360	330	313	350
Share of GHG emissions in total EU-28 emissions (%)	0.2 %	0.2 %	0.2 %	0.2 %	100.0 %
EU ETS verified emissions (Mt CO ₂ -eq.)	2.9	2.9	2.7	2.6	1 848.6
Share of EU ETS emissions in total emissions (%)	25.8 %	26.2 %	25.0 %	24.2 %	40.7 %
ETS emissions vs allowances (free, auctioned, sold) (%)	- 29.9 %	- 36.7 %	- 45.1 %	- 50.4 %	- 14.1 %
Share of CERs & ERUs in surrendered allowances (%)	0.0 %	2.6 %	27.1 %	n.a.	26.4 %
Non-ETS (ESD) emissions, adjusted to 2013–2020 scope (Mt CO ₂ -eq.)	8.2	8.2	8.2	8.3	2 566.6
Key data on renewable energy	2005	2010	2011	2012	EU 2012
Share of renewable energy in gross FEC (%)			33.5 %	35.8 %	14.1 %
() = including all biofuels consumed in transport	(32.3 %)	(32.5 %)			
Share of renewable energy for electricity (%)	43.0 %	42.1 %	44.7 %	44.9 %	23.5 %
Share of renewable energy for heating and cooling (%)	42.7 %	43.8 %	44.8 %	47.4 %	15.6 %
Share of renewable energy for transport (%)			3.2 %	3.1 %	5.1 %
() = including all biofuels consumed (%)	(1.3 %)	(3.3 %)			
Key data on energy consumption	2005	2010	2011	2012	EU 2012
Primary energy consumption (Mtoe)	4.5	4.7	4.3	4.4	1 584.8
Primary energy consumption per capita (Mtoe/cap.)	2.0	2.2	2.1	2.2	3.1
Final energy consumption (Mtoe)	4.0	4.3	3.9	4.0	1 104.5
Final energy consumption per capita (Mtoe/cap.)	1.8	2.0	1.9	2.0	2.2
Efficiency of conventional thermal electricity and heat production (%)	83.3 %	82.8 %	82.3 %	81.9 %	50.0 %
Energy consumption per dwelling by end use	2005	2009	2010	2011	EU 2011
Total energy consumption per dwelling (toe/dwelling)	1.69	1.69	1.72	1.68	1.42
Space heating and cooling (toe/dwelling)	1.21	1.15	1.13	1.15	0.96
Water heating (toe/dwelling)	0.27	0.30	0.33	0.29	0.18
Cooking (toe/dwelling)	0.11	0.11	0.12	0.11	0.08
Electricity (lighting, appliances) (toe/dwelling)	0.10	0.13	0.14	0.13	0.20

Progress towards GHG targets (under the Effort Sharing Decision, i.e. non-ETS emissions)

2013 ESD target (% vs base year)	+ 9.5 %	2020 ESD target (% vs base year)	+ 17.0 %
2013 ESD emissions (% vs base year)	+ 1.0 %	2020 ESD projections WEM (% vs base year)	+ 18.5 %
		2020 ESD projections WAM (% vs base year)	+ 14.8 %

Based on approximated emission estimates for 2013, emissions covered by the Effort Sharing Decision (ESD) (i.e. in the sectors which are not covered by the EU ETS) are expected to be below the annual ESD target in 2013. Projections indicate that 2020 ESD emissions are expected to be below the 2020 ESD target, only if measures planned until 2013 are fully implemented.

Progress towards renewable energy targets

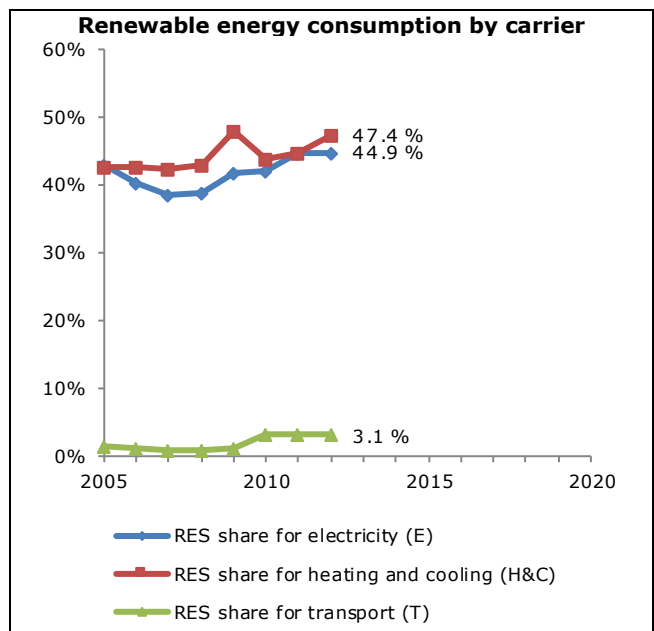
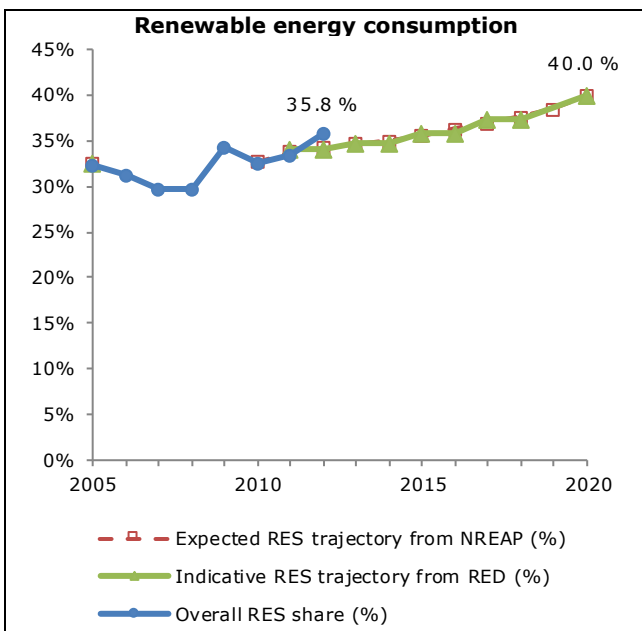
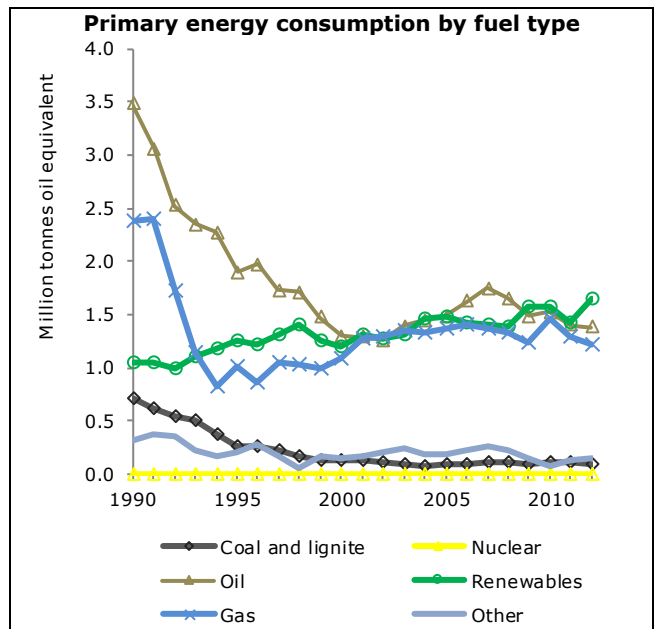
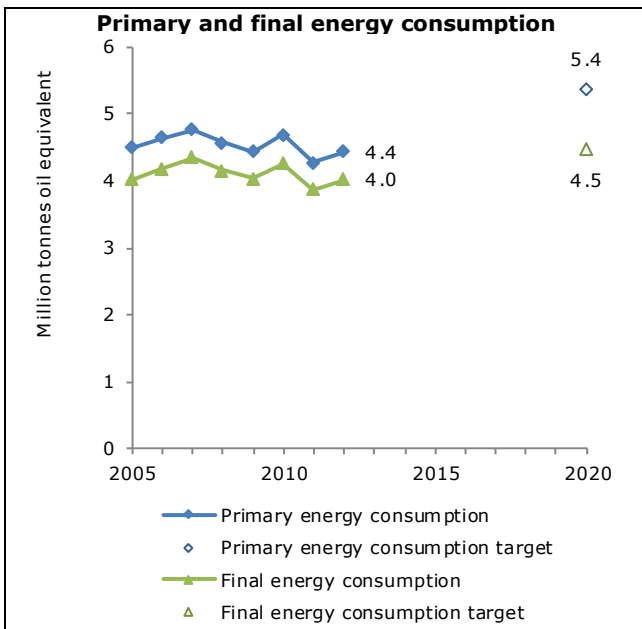
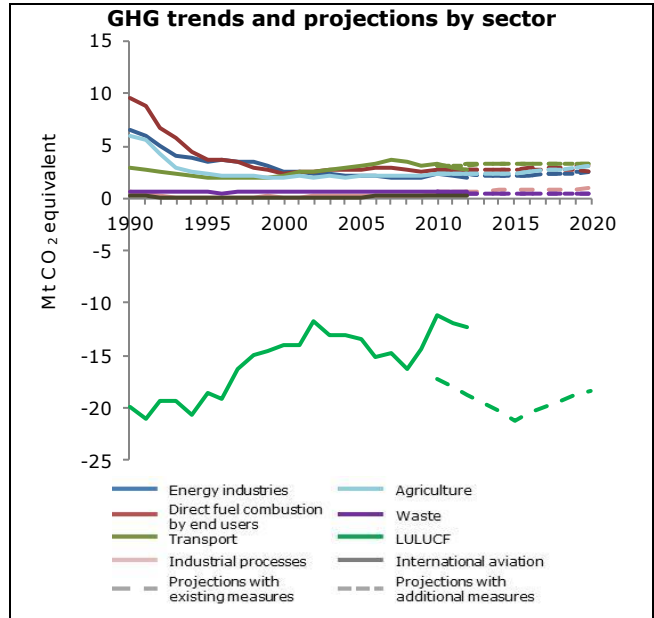
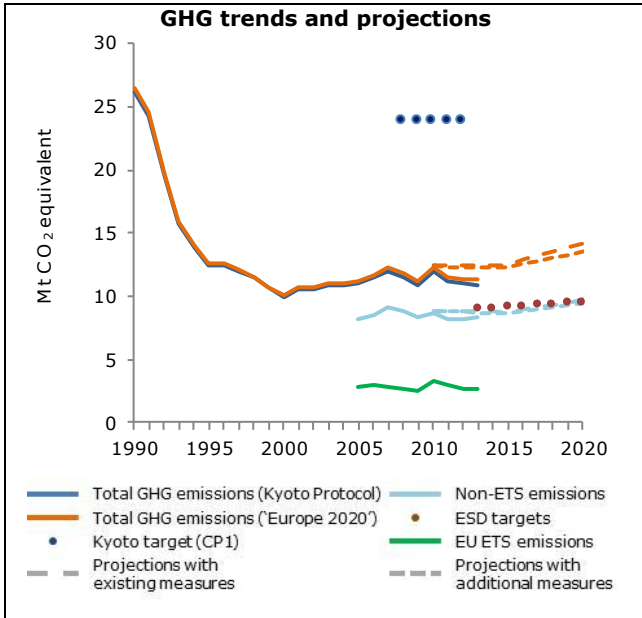
2012 RES share in gross final energy consumption (%)	35.8 %	2011–2012 indicative share from RES Directive (%)	34.1 %
2020 RES target	40.0 %	2012 expected share from NREAP (%)	34.3 %

The average share of renewable sources in gross final energy consumption for 2011–2012 was 34.7% (1.4 Mtoe), which is higher than the indicative RED target for 2011–2012 (34.1%). At the same time, the share of renewables in 2012 (35.8 %) is higher than the expected 2012 NREAP target (34.3 %). Over the period 2005–2012 the observed average annual growth rate in renewable energy consumption amounted to 1.3%. In order to reach its 2020 NREAP target, Latvia needs an average annual growth rate of 3.0% in the run-up to 2020. In absolute terms, this is equivalent to 3.1 times its cumulative effort so far.

Progress towards energy efficiency targets

Primary energy consumption:		Final energy consumption:	
2005–2012 average annual change	- 0.2 %	2005–2012 average annual change	+ 0.0 %
2012–2020 average annual change to target	+ 2.4 %	2012–2020 average annual change to target	+ 1.3 %

Between 2005 and 2012, primary energy consumption decreased and final energy consumption remained stable. Addressing the increase consumption from the energy sector, observed since 2007, could contribute to further reducing or stabilising primary energy consumption.



Climate and energy policy framework

Challenges and opportunities

A key concern in Latvia is security of its energy supply: the country continues to be highly dependent on energy imports such as Russian natural gas and it remains isolated from EU energy networks. Measures adopted to improve cooperation between the three Baltic countries and projects of regional scope constitute economically viable solutions for the regional energy market. Shifting to domestic renewable energy sources (RES) and an increase of energy efficiency in end-use to reduce overall energy consumption provide great opportunities to contribute to Latvia's energy supply security. Latvia assumes in its Energy Strategy 2030 that such approaches will have a positive impact on the overall Latvian economy, energy companies and energy consumers.

Latvia is one of the most energy-intensive Member States due to the high energy intensity of industry, transport and households. For example, the housing stock consumes 40–60 % more energy than necessary (EEO, 2013). Increasing the efficiency in energy end-use would help to increase energy security while at the same time improving the competitiveness of industry and providing opportunities for skilled workers in construction, plumbing and heating, insulation specialists and manufacturers as well as installers of energy-efficient products and appliances. This would increase the share of green jobs in Latvia, which currently amounts to less than 1 % of total employment (Green Jobs, 2012; EEO, 2013).

In the transport sector, emissions steadily decreased between 1990 and 2011. However, since 2005 the overall trend is negative and emissions have slightly increased. With one fourth of all of Latvia's emissions, the transport sector is the main greenhouse gas (GHG) contributor. The purchase of more efficient vehicles and more efficient driving is incentivised through an ownership tax based on the maximum gross weight for passenger cars and commercial vehicles. Shifting taxation to fuel consumption and greater investments in the public transport system would also help to reduce inefficient individual motorised mobility, thus also reducing transport emissions and air pollution. Furthermore, adopted measures making public transport services more attractive contribute to reducing emissions from transport and improve the cityscape.

Climate and energy strategies

Latvia has not yet implemented a comprehensive climate change strategy. However, a detailed energy policy framework covering the period from 2014 to 2020 is currently being developed by the Ministry of Economics. Latvia published an Energy Strategy 2030 in 2013. The Strategy outlines measures to ensure energy supply, competitiveness, energy efficiency and the use of renewable energy. Furthermore, Latvia has adopted an Energy Law and regulations regarding the production of electricity using renewable sources. Latvia has also set out its energy targets in Energy Development Guidelines 2007–2016 aiming to provide short-term strategies for the efficient distribution and use of energy. Addressed issues include the security of energy supply, diversifying energy sources and increasing the share of electricity from RES (IEA, 2013).

In March 2014, the government of Latvia approved amendments to the Electricity Market Law that postponed the planned opening of the end-user electricity market mainly because of concerns about possible resulting electricity price increases. Studies on the potential price increases and mitigation options are underway to support the decision process.

Renewable energy

Renewable energy plays an important role in Latvia with the most important sources being biomass for heat generation and hydropower in the electricity sector. The main renewable electricity support scheme, a feed-in tariff, is currently being revised. The amendments should create more transparency regarding subsidised energy production and reduce the risk of price increases for consumers. In addition, a new tax for companies receiving financial support for renewable electricity generation or combined heat and power plants has been introduced in January 2014. The tax rate for energy produced from natural gas is 15 % and a tax rate for energy produced from renewable sources is 10 %, while the rate applied to central heating systems is 5 %. The tax is a temporary one and is scheduled to be in place until 2018.

Latvia has introduced different tax benefits for heating and cooling from RES. Companies supplying biomass and biogas have to pay a reduced VAT rate. Biogas that is supplied to end users is taxable with the excise tax rate being reduced if the biogas is used for heating.

Energy networks

The European Commission recommended that Latvia should improve its cross-border interconnections to increase security of supply (European Commission). Two electricity interconnection projects and one underground storage facility modernisation and expansion project are to be developed, and the first stage of the projects were submitted to the European Commission's Connecting Europe Facility to get co-financing.

Energy efficiency

The promotion of energy efficiency is one of the priorities of Latvia. The overall budget for energy efficiency activities until 2015 is planned to amount to approximately EUR 500 million in total. The Energy Strategy 2030 highlights the importance of improving energy efficiency and focuses on, for example, the need to establish cost-efficient classes of mandatory construction standards for thermal efficiency of new and renovated buildings, as well as voluntary classes, including zero-consumption buildings, the need to promote the introduction of smart meters and the need to define rigid requirements for district heat supply systems. In addition, Latvia plans to develop a long-term energy efficiency strategy in 2014 and a detailed action plan for 2014–2016.

Energy **taxation** is among the lowest in the EU with exemptions applying to, for example, electricity used by households. The tax on liquid petroleum gas was increased in 2014. A reduced VAT rate of 12 % applies to district heating.

Latvia plans to introduce **obligations for energy market operators** and to support **combined heat and power**. The energy intensity of the **industrial sector** has decreased in recent years but is still above EU average. There are voluntary agreements with enterprises requiring energy audits, implementation of identified cost-efficient measures, obligations for action plans and information gathering. Certain non-fossil energy projects at industrial facilities are

subsidised. Support such as biomass heating technologies, cogeneration stations, photovoltaic systems and solar water heating systems is provided to industrial buildings to switch from technologies using fossil energy to RES. This measure also supports reconstruction or renovation measures that increase the facility's energy efficiency via more effective heat storage systems, lighting, and electricity management and control.

In the **building** sector, the Ministry of Economics has introduced the Building Energy Certification Rules in 2013 in accordance with the new Law on Energy Performance of Buildings, which establishes minimum energy performance requirements and certification for energy, heating and air conditioning. Latvia supports activities aimed at increasing energy efficiency in buildings through the Complex Solutions for Greenhouse Gas Emissions Reduction programme. Other schemes to support energy efficiency in buildings are the programmes Improvement of heat insulation of residential buildings and Improvement of heat insulation of social residential buildings.

Transport

Latvia incentivises the purchasing of more efficient vehicles and more efficient driving modes through an ownership tax based on the maximum gross weight for passenger cars and commercial vehicles. In order to minimise the differences between the rates of excise duties on fuels, the excise duty on liquid petroleum gas has been increased from EUR 128 per 1 000 kg to EUR 160 per 1 000 kg in January 2014. The additional revenues are meant to be used for energy efficiency and infrastructural measures. A registration tax applies to passenger cars and motorcycles and is based on carbon dioxide (CO₂) emissions. An additional natural resource tax is levied on every vehicle. However, taxes on transport fuels are well below EU average.

In order to increase the share of renewables in the transport sector, Latvia has implemented Regulation No. 648. It introduces a quota — i.e. a mandatory share of biodiesel to petrol and diesel. In 2014, the share of biodiesel is set at 6.5–7 %.

To support e-mobility, Latvia's Ministry of Environmental Protection and Regional Development extended the tender of the subsidy programme Climate Change Financial Instrument until 8 April 2014. The tender aimed to support electric vehicles and the charging infrastructure in Latvia. The overall budget of the programme is around EUR 5 million and the grants awarded to projects range between EUR 18 500 and 550 000

In 2013, the government decided that approximately EUR 10 million will be allocated to improve the bus, tram and trolleybus system to make the public transport system more attractive.

Agriculture

Latvia intends to support agricultural measures that preserve the environment and reduce GHG emissions from agricultural activities as part of its National Development Plan for 2014–2020. It aims to increase the area for agricultural purposes, increase productivity to achieve EU average outputs, and increase the share of land used for organic farming to more than 15 % by 2030 (EEA, 2013). Furthermore, it includes a variety of measures contributing to GHG emission reductions such as modernisation of agricultural holdings and a number of agro-environmental sub-programmes (UNFCCC, 2013). Latvia has also adopted the regulation Regarding Protection of Water and Soil from Pollution with Nitrates Caused by Agricultural Activity (2011) that determines the requirements and restrictions for the use and land application of different types of fertilisers, as well as the regulation Special Environmental Requirements for Performance of Polluting Activities in Animal Housing that prescribes environmental requirements for manure management in animal housing (UNFCCC, 2013).

Waste

Latvia has published the Latvian National Waste Management Plan for the period 2013–2020 in March 2013, which mainly aims at promoting recycling of municipal waste. In this context, Latvia also announced the introduction of a mandatory deposit system in 2015. The system will apply to beverages with reusable and disposable packaging made of glass, plastic and metal. The new system entails obligations for packagers, merchants and packaging reception centres (Cabinet of the Ministers, 2013). In addition, Latvia wants to establish a modernised waste management system.

Land use, land-use change and forestry

Regarding land use, land-use change and forestry (LULUCF), Latvia is implementing measures to renovate and expand forest drainage systems and to promote forest regeneration and afforestation (EEA, 2013). In 2011, CO₂ removals from LULUCF decreased by 22.8 % in comparison to 1990. Forest lands account for 93.7 % of the total CO₂ removal. No support is available for purposeful forest regeneration (except regeneration of degraded forest stands), which is among the most visible measures to improve national GHG balances in the LULUCF sector.

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