

European Union project "Digital accelerator of Latvia (DAoL)", SmartDEV BSR; SUSTAIN; Energy-efficient buildings, passive houses and zero-energy buildings are a step towards lower energy consumption, better living conditions and the achievement of climate goals. such as "Energy efficient heating system", "E-transport



Sources: Latvia's draft National Energy & Climate Plan, Eurostat (PEC2020-2030, FEC2020-2030 indicators and renewable SHARES), COM(2018)716 final (2017 GHG estimates) dimension, and on policies and measures in place to protect the energy system from emerging risks. In the internal market dimension, Latvia is well above the EU



Nearly Zero Energy Building (nZEB) in Latvia. a balance between taken energy from the energy grids and supplied back over a period of time indicating the idea of energy-efficient systems and insulation materials of building to lower heating and electricity demand combined with renewable energy systems like solar thermal and photovoltaic (PV





The nearly zero-energy city concept is currently at the frontier of energy self-sufficiency, which is based on the consumption of renewable energy resources in buildings [30,31]. The goal of this study is, therefore, to answer the following questions: ??? Is it possible to establish nearly zero-energy cities in Europe by changing the role of



A 2024 Accenture New Energy Consumer survey of 16,800 residential energy consumers across 18 countries to better understand current sentiment on energy affordability and the net-zero transition. Video testimonials from customers in six countries to shed light on their needs and wants.



On November 1 Latvia's largest wind energy producer Utilitas Wind opened the first utility-scale battery energy storage battery system in Latvia with a total power of 10 MW and capacity of 20 MWh in Targale, Ventspils region. This autumn, ???





To offset the energy demand, the building produces energy from a renewable energy source ??? the sun. A system of 12 solar panels connected to the utility grid is installed on the roof of the building. The increased energy efficiency is also ensured by high-efficiency lighting, heating, plumbing, ventilation, thermal insulation, etc. systems.



3 ? RIGA, Dec 17 (LETA) - In January-November 2024, Latvia generated 5,535.3 gigawatt-hours (GWh) of electric power, up 0.9 percent from the same period last year, according to an electricity market review released by Augstsprieguma Tikls (AST) transmission system operator. Hydroelectric power plants on the Daugava River generated 3,036 GWh of electric power, ???



In net-zero energy greenhouses (nZEGs), the energy requirements (both heat and electricity) are provided by renewable energies as well as storage units along with backup energy systems [18], [47]. According to the literature, the energy demand of nZEGs is mainly provided by solar power systems, including PV, PVT, and solar thermal collectors





A zero energy home is not just a "green home" or a home with solar panels. A zero energy home combines advanced design and superior building systems with energy efficiency and on-site solar panels to produce a better home. Zero energy homes are ultra-comfortable, healthy, quiet, sustainable homes that are affordable to live in.



Latvia"s& nbsp;2020 National Renewable Actions Plan targets a 40% share of energy generated from renewable sources in gross final energy consumption, 53% of heat consumption met by renewable sources and 60% of electricity demand met by electricity generate



Dr Phys. Sta??islavs Gendelis, a senior researcher at the Institute of Numerical Modelling, has carried out a statistical analysis of buildings with issued energy performance certificates in Latvia for the past five years. The performed analysis was published in the journal B?<<vin? 3/4 enieris (in Latvian ??? Civil Engineer) in the February 2021 issue. The most interesting [???]





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Historically, the energy system has been a key driver of social development and economic progress. However, due to the related emissions of greenhouse gases (GHG) and climate-related risks [1] a transition towards net-zero emissions is highly needed.To remain within the limits as set in the Paris Agreement it is indisputable that the decarbonization of the energy ???



Net Zero Roadmap: A Global Pathway to Keep the 1.5 ?C Goal in Reach Biofuels are used in all parts of the energy system: as replacement for oil-based fuels in transportation, to generate electricity, for heating buildings, or to provide heat for industrial processes. Latvia's transition to clean energy presents an important



<image>

Nearly-zero energy buildings, is a requirement introduced by the Energy Performance of Buildings Directive EU/31/2010 (revised in 2018). It means that all new buildings ??? as of 2020 - must have a high energy performance and very low-energy needs, covered largely by onsite and nearby renewable energy sources.



As part of the Low-Carbon Resources Initiative, EPRI and GTI Energy led an integrated energy system scenario modeling exercise to evaluate alternative technology strategies for achieving economy-wide net-zero emissions of carbon dioxide in the U.S. by 2050. This website provides a full-text report that describes the study and results.



Energy and Climate Modelling and Energy System Integration in Latvia 8 Executive summary With the new European Green Deal, climate and environment are at the top of the political agenda. The main objective of the European Green Deal is reaching a climate neutral Europe (that is, net-zero greenhouse gas emissions, GHG)) by 2050.



Blower door test results - "Nearly Zero Energy Building (nZEB) in Latvia" Skip to search form Skip to main content Skip to account menu. Semantic Scholar's Logo. Search 222,215,461 papers from all fields of science. Search. Sign In Create Free Account. DOI: 10.3846/ENVIRO.2014.263;

What is their role in clean energy transitions? Digital technologies have tremendous potential to help the energy system get on track with the net zero pathway. The path to 2050 also relies on emerging energy technologies that are not yet ready for widespread use, particularly in hard-to-abate sectors like heavy industry and long-range transport.



Net Zero Roadmap: A Global Pathway to Keep the 1.5 ?C Goal in Reach The sectoral breakdown of energy-related CO2 emissions depends on the structure of the economy and the energy system. Power plants generate emissions by burning fuels to generate electricity and heat. Latvia's transition to clean energy presents an important

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1,2Institute of Energy Systems and Environment, Riga Technical University, Azenes iela 12/1, Riga, LV-1048, Latvia Abstract ??? The development of renewable energy technologies (RET) depends on a

CCUS is an important technological option for reducing CO 2 emissions in the energy sector and will be essential to achieving the goal of net-zero emissions. As discussed in Chapter 1, CCUS can play four critical roles in the transition to net zero: tackling emissions from existing energy assets; as a solution for sectors where emissions are hard to abate; as a platform for clean ???



Starting from the year 2021 all new buildings will need to be zero energy therefore increased attention must be paid to ways how to reduce the energy consumption of buildings. economical estimation and payback time calculation of zero energy building constructions and engineer technical systems in Latvia. Keywords passive house, insulation