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Critérios de pesquisa utilizados para elaborar a lista :

Ordenar Ordenar por data
Palavra-chave "energia solar"

16 Resultados

Data de criação : 29-03-2024

[Salt Batteries: Opportunities and applications of storage systems based on sodium nickel chloride batteries](#)

Tipo de publicação Análise aprofundada

Data 07-02-2023

Autor externo Michel ARMAND, Nagore ORTIZ-VITORIANO,
Javier OLARTE, Aloña SALAZAR, Raquel FERRET

Domínio de intervenção Indústria

Palavra-chave acumulador elétrico | AMBIENTE | armazenagem de energia | degradação do ambiente | eletrónica e eletrotécnica | ENERGIA | energia eólica | energia não poluente | energia renovável | energia solar | Europa | GEOGRAFIA | geografia económica | geografia política | gás de efeito de estufa | INDÚSTRIA | política ambiental | política energética | química | redução das emissões de gases | sal químico | Suíça

Resumo Sodium-Nickel-Chloride (Na-NiCl₂) batteries have risen as sustainable energy storage systems based on abundant (Na, Ni, Al) and non-critical raw materials. This study offers a general overview of this technology from its initial conceptualization, along with research and development perspectives and areas of use. Applications are for grid storage mainly due to the temperature of operation (275 – 350 °C). There is no critical issue on patent portfolio as the key IP is in the public domain. In addition, Switzerland is active in this technology with FzSoNick being a producer of commercial Na-NiCl₂

Análise aprofundada [EN](#)

[Solar energy in the EU](#)

Tipo de publicação Briefing

Data 30-08-2022

Autor WIDUTO Agnieszka

Domínio de intervenção Energia

Palavra-chave AMBIENTE | ENERGIA | energia não poluente | energia renovável | energia solar | estatística energética | independência energética | meio natural | neutralidade carbónica | política ambiental | política do ambiente da UE | política energética | política energética da UE | preço da energia | recurso renovável

Resumo The EU solar energy strategy proposed under the REPowerEU plan aims to make solar energy a cornerstone of the EU energy system. Boosting renewable energy is also an important part of the European Green Deal in the context of the green transition towards climate neutrality. Solar energy is affordable, clean and has been the fastest-growing energy source in the last decade. It can be used for electricity and heating, while also helping reduce EU dependency on energy imports by replacing them with domestic production. EU measures to boost solar energy include making the installation of solar panels on the rooftops of new buildings obligatory within a specific timeframe, streamlining permitting procedures for renewable energy projects, improving the skills base in the solar sector and boosting the EU's capacity to manufacture photovoltaic panels. Several challenges still need addressing, however. These include competition for land use with other sectors, technological issues, skills shortages and the need to prevent a new energy dependency on non-EU solar panel producers. The ambitious plan includes doubling the current level of solar photovoltaic capacity by 2025 and producing almost 600 GW by 2030. Achieving these goals will depend on continued commitment to renewable energy deployment, success in addressing a number of challenges, and the ability to unlock the full potential of solar energy in the EU, for instance, by boosting domestic solar production and the use of new technologies.

Briefing [EN](#)

Multimédia [Solar energy in the EU](#)

[Climate action in Lithuania: Latest state of play](#)

Tipo de publicação Briefing

Data 24-06-2021

Autor JENSEN LISELOTTE

Domínio de intervenção Ambiente

Palavra-chave alteração climática | AMBIENTE | biocombustível | degradação do ambiente | documentação | EDUCAÇÃO E COMUNICAÇÃO | ENERGIA | energia eólica | energia não poluente | energia renovável | energia solar | Europa | GEOGRAFIA | geografia económica | geografia política | gás de efeito de estufa | Lituânia | política ambiental | política energética | redução das emissões de gases | Regime de Comércio de Licenças de Emissão da UE | relatório | rendimento energético

Resumo The EU's binding climate and energy legislation for 2030 requires Member States to adopt national energy and climate plans (NECPs) for the 2021-2030 period. In October 2020, the European Commission published an assessment for each NECP. Lithuania finalised its NECP in December 2019. Lithuania generates 0.55 % of the EU's total greenhouse gas (GHG) emissions and has reduced emissions at a slower pace than the EU average since 2005. Most economic sectors showed emissions reductions in the 2005-2019 period, with the exception of transport, agriculture and the 'other emissions' sectors. The transport and agriculture sectors account for 52 % of Lithuania's total emissions. Energy industry emissions have fallen by 60 % since 2005, while emissions in the 'other emissions' category, which includes services and buildings grew by 24 %. EU effort-sharing legislation allowed Lithuania to increase its emissions by 15 % up until 2020. Lithuania stayed well below its 2013-2020 allowances and expects to over-achieve on the 2030 target of 9 % reductions relative to 2005, potentially achieving 21 % reductions. Lithuania's renewable energy share was 25.5 % in 2019. The country's 2030 target of a 45 % share focuses mainly on wind, solar and biofuels. Energy efficiency measures centre to a large extent on the building stock and transport sector with support schemes for industry and households.

Briefing [EN, LT](#)

[Climate action in Italy: Latest state of play](#)

Tipo de publicação Briefing

Data 10-06-2021

Autor JENSEN LISELOTTE

Domínio de intervenção Ambiente

Palavra-chave alteração climática | AMBIENTE | degradação do ambiente | documentação | EDUCAÇÃO E COMUNICAÇÃO | ENERGIA | energia eólica | energia não poluente | energia renovável | energia solar | Europa | GEOGRAFIA | geografia económica | geografia política | gás de efeito de estufa | Itália | política ambiental | política energética | redução das emissões de gases | Regime de Comércio de Licenças de Emissão da UE | relatório | rendimento energético

Resumo The EU binding climate and energy legislation for 2030 requires Member States to adopt national energy and climate plans (NECPs) covering the period 2021 to 2030. In October 2020, the European Commission published an assessment for each NECP. Italy's final NECP was sent in December 2019. Italy generates 11.4 % of the EU's total greenhouse gas (GHG) emissions and has reduced emissions at a faster pace than the EU average since 2005. Emissions decreased across all economic sectors in Italy over the 2005-2019 period, with the agricultural sector showing the lowest reductions. The transport and 'other emissions' sectors, including buildings, account for almost half of Italy's total emissions. Energy industry emissions fell by 42 % between 2005 and 2019, leaving the sector in third place in terms of its share of total emissions. Under EU effort-sharing legislation, Italy reduced its emissions by 13 % by 2020 relative to 2005, and the country expects to reach the 2030 target of 33 %. Italy achieved an 18 % share of renewable energy sources (RES) in 2019. The country's 2030 target of a 30 % share is focused mainly on wind and solar power. Energy efficiency measures centre to a large extent on the building stock and transport sectors with support schemes for industry and households. This briefing is one in a series covering all EU Member States.

Briefing [EN](#), [IT](#)

[Climate action in Croatia: Latest state of play](#)

Tipo de publicação Briefing

Data 10-06-2021

Autor JENSEN LISELOTTE

Domínio de intervenção Ambiente

Palavra-chave alteração climática | AMBIENTE | biocombustível | Croácia | degradação do ambiente | documentação | EDUCAÇÃO E COMUNICAÇÃO | ENERGIA | energia eólica | energia não poluente | energia renovável | energia solar | Europa | GEOGRAFIA | geografia económica | geografia política | gás de efeito de estufa | política ambiental | política energética | redução das emissões de gases | Regime de Comércio de Licenças de Emissão da UE | relatório | rendimento energético

Resumo The EU's binding climate and energy legislation for 2030 requires Member States to adopt national energy and climate plans (NECPs) for the 2021 to 2030 period. In October 2020, the European Commission published an assessment for each NECP. Croatia's final NECP is from December 2019. Croatia generates 0.7 % of the EU's total greenhouse gas (GHG) emissions and has reduced emissions at a slower pace than the EU average since 2005. The country's emissions intensity is significantly higher than the EU average, though it is on a steady downward trend. The transport sector accounted for over a quarter of Croatia's total emissions in 2019. The Croatian building stock is also responsible for a significant share of total emissions. Energy industry emissions fell by almost 40 % between 2005 and 2019, reducing the sector's share of total emissions by six percentage points. The Croatian economy is heavily reliant on energy imports. Diversifying supply and reducing demand is seen as key to the transition process. Under EU effort-sharing legislation, Croatia was allowed to increase emissions until 2020 but must reduce these emissions by 7 % relative to 2005 by 2030. Croatia achieved a 28.5 % share of renewable energy sources in 2019. The country's 2030 target of a 36.4 % share is focused mainly on photovoltaics, wind and biofuels. Measures to boost energy efficiency centre on building stock renovation and energy efficiency obligation schemes for energy suppliers. This briefing is one in a series covering all EU Member States.

Briefing [EN](#), [HR](#)

[Climate action in Germany: Latest state of play](#)

Tipo de publicação Briefing

Data 10-06-2021

Autor MORGADO SIMOES HENRIQUE ANDRE

Domínio de intervenção Ambiente

Palavra-chave Alemanha | alteração climática | AMBIENTE | bioenergia | degradação do ambiente | ENERGIA | energia eólica | energia não poluente | energia renovável | energia solar | Europa | GEOGRAFIA | geografia económica | geografia política | gás de efeito de estufa | política ambiental | política energética | redução das emissões de gases | Regime de Comércio de Licenças de Emissão da UE | rendimento energético

Resumo The EU's binding climate and energy legislation for 2030 requires Member States to adopt national energy and climate plans (NECPs) covering the period 2021 to 2030. Germany submitted its NECP in June 2020. In October 2020, the European Commission published an assessment for each NECP. A high proportion of Germans (63 %) expect national governments to tackle climate change. Germany accounts for 24 % of net EU-27 emissions of greenhouse gases (GHG). Since 2005, emissions have steadily decreased, following the average trend in the Union. The carbon intensity of the German economy is falling, also mirroring the EU pattern. Energy industries are the largest source of emissions, responsible for 29 % of total emissions. Under EU effort-sharing legislation, by 2020 Germany was required to reduce its emissions by 14 % compared with 2005. However, the country exceeded its allocated emissions from 2016 to 2019. Germany's current 2030 target under the Effort-sharing Regulation (ESR) is to reduce emissions by 38 % from 2005 levels. According to the Commission's assessment of Germany's NECP, with the new proposed measures the reduction will fall short of the target by 3 percentage points. In 2019, renewable energy sources accounted for 17.4 % of gross final consumption, just 0.6 percentage points short of the target set for 2020. Following a court ruling on 24 March 2021, which found that the Climate Change Act was not aligned with fundamental rights, the German government announced its intention to strengthen its commitment, aiming to achieve net-zero emissions by 2045.

Briefing [DE](#), [EN](#)

[What if we could engineer the planet to help fight climate change?](#)

Tipo de publicação Em síntese

Data 23-02-2021

Autor VAN WOENSEL Lieve

Domínio de intervenção Ambiente | Política de Investigação | Programação

Palavra-chave adaptação às alterações climáticas | AMBIENTE | aquecimento do clima | degradação do ambiente | ENERGIA | energia não poluente | energia solar | gás de efeito de estufa | investigação e propriedade intelectual | mudança tecnológica | nova tecnologia | política ambiental | PRODUÇÃO, TECNOLOGIA E INVESTIGAÇÃO | progresso científico | redução das emissões de gases | tecnologia e regulamentação técnica

Resumo Efforts to curb carbon emissions are falling short and geoengineering is again in the spotlight. Will governments end up tinkering with Earth's thermostat?

Em síntese [EN](#)

Multimédia [What if we could engineer the planet to help fight climate change?](#)

[Renewable energy in EU agriculture](#)

Tipo de publicação Em síntese

Data 23-11-2016

Autor TROPEA Francesco

Domínio de intervenção Agricultura e Desenvolvimento Rural | Ambiente | Energia

Palavra-chave AGRICULTURA, SILVICULTURA E PESCA | AMBIENTE | biomassa | custo de investimento | degradação do ambiente | desenvolvimento rural | ECONOMIA | EMPRESAS E CONCORRÉNCIA | ENERGIA | energia elétrica | energia eólica | energia não poluente | energia renovável | energia solar | gestão contabilística | indústrias nuclear e elétrica | política agrícola | política agrícola | política ambiental | PRODUÇÃO, TECNOLOGIA E INVESTIGAÇÃO | redução das emissões de gases | regiões e política regional | rendimento do agricultor | resíduo agrícola | sistema de exploração agrícola | tecnologia e regulamentação técnica

Resumo The agricultural sector accounts for almost 10 % of greenhouse gas emissions in the European Union, mainly for food production and transport. In recent years, European farmers have made efforts to significantly reduce this environmental footprint by increasing their consumption and production of renewable energy, which is derived from natural resources that are naturally replenished. While there is enormous potential for the production of renewable energy on farms due to the availability of wind, sunlight, biomass and agricultural waste, important barriers and challenges still remain.

Em síntese [EN](#)

[Solar Energy Policy in the EU and the Member States, from the Perspective of the Petitions Received](#)

Tipo de publicação Estudo

Data 10-06-2016

Autor externo Jenny WINKLER and Mario RAGAWITZ (Fraunhofer ISI)

Domínio de intervenção Ambiente | Energia | Indústria | Petições ao Parlamento Europeu

Palavra-chave assembleia | ATIVIDADE POLÍTICA | desenvolvimento sustentável | ECONOMIA | ENERGIA | energia não poluente | energia solar | Estado-Membro UE | finanças da União Europeia | GEOGRAFIA | geografia económica | INDUSTRIA | INTERCÂMBIOS ECONÓMICOS E COMÉRCIAIS | mecanismo de apoio | petição | política aduaneira | política e estruturas industriais | política económica | política energética | política energética | política industrial | política pautal | UNIÃO EUROPEIA

Resumo Upon request by the PETI Committee, the Policy Department on Citizens' Rights and Constitutional Affairs commissioned the present study in order to assess a series of petitions received in relation to solar energy policies in Member States and their compatibility with EU laws and policies. The petitions examined raise three main concerns, i.e. policy risk in support systems, self-consumption and industrial policy in EU Member States, notably Spain, Belgium, Germany and Italy. The analysis concludes that renewables' support policies should be stable and avoid frequent or retro-active changes; that the regulated extension of self-consumption is accompanied by measures to ensure that "prosumers" contribute to financing grid costs and other costs; and that industrial policy for renewables is stable and predictable.

Estudo [EN, ES](#)

[China's shift to clean energies](#)

Tipo de publicação Briefing

Data 05-05-2015

Autor GRIEGER Gisela

Domínio de intervenção Assuntos Externos

Palavra-chave AMBIENTE | China | direito da energia | diversificação energética | ECONOMIA | ENERGIA | energia eólica | energia hidroelétrica | energia hidráulica | energia não poluente | energia renovável | energia solar | financiamento e investimento | FINANÇAS | GEOGRAFIA | geografia económica | indústria energética | indústrias nuclear e elétrica | investimento estrangeiro | planeamento hidroelétrico | planeamento sectorial | política ambiental | política económica | política energética | política para as alterações climáticas | produção de energia | Ásia-Oceânia

Resumo The Chinese government's significant policy and financial support for the renewable energy sector confirmed China's world leadership in total installed renewable power capacity in 2013. For the first time China's new renewable power capacity exceeded its new fossil fuel and nuclear capacity. In 2013, China attracted more green investment than the EU28. With the rebalancing of its overall economy from an export-led to a more consumption-based growth model, the Chinese renewable energy sector is redirecting its focus from exports towards greater domestic use.

The adoption of the Renewable Energy Law (REL) in 2005 was an important turning point in China's evolving renewable energy policy. China's first regulatory framework for clean energy promotion laid the foundation for the provision of systematic support to the development of renewable energies. The 11th Five-Year Plan (2006-10) introduced a 10% target for non-fossil energy as a portion of total energy consumption for the first time. The 12th Five-Year Plan (2011-15) includes a non-fossil energy target of 11.4% and, more importantly, defines seven strategic emerging industries (SEIs) set to foster green growth and China's worldwide leadership in these sectors.

Despite this remarkably positive trend, the share of renewable energy in China's energy mix remains low, as growth in fossil fuel use continues to spur the country's plans for a high annual growth rate of about 7%. In 2011, fossil fuels and nuclear energy together still accounted for almost 93% of primary energy consumption, while renewable energies represented only around 7%. Although domestic deployment of renewable technologies is gaining momentum, overcapacity in the Chinese solar and wind industries, coupled with the slowdown in renewable energy investment in the EU and US, is pushing Chinese companies to venture into new markets.

Briefing [EN](#)

[Policies of the European Union with its Mediterranean Partners for the Management and Use of Natural and Renewable Resources: Towards Green Growth in the Mediterranean](#)

Tipo de publicação Análise aprofundada

Data 25-04-2014

Autor externo Caroline ORJEBIN-YOUSFAOUI (IPEMED, France)

Domínio de intervenção Ambiente | Assuntos Externos | Energia

Palavra-chave adaptação às alterações climáticas | AMBIENTE | construção europeia | cooperação energética | desenvolvimento sustentável | ECONOMIA | ENERGIA | energia eólica | energia não poluente | energia solar | GEOGRAFIA | geografia económica | geografia política | gestão das águas | gestão dos recursos | hidrocarboneto | indústria petrolífera | Líbia | meio natural | mercado da energia | países terceiros mediterrânicos | política ambiental | política de cooperação | política económica | política energética | política europeia de vizinhança | recurso renovável | recursos hídricos | RELAÇÕES INTERNACIONAIS | UNIÃO EUROPEIA | União para o Mediterrâneo | África

Resumo After drawing up an inventory of the energy and water resources of the South and East Mediterranean Countries (SEMCs) and presenting their political, economic and social challenges, this report takes stock of the European neighbourhood policies conducted following the Arab revolutions in these countries and offers a forward-looking vision in this area for the years to come.

Despite some success the initiatives led by the European Union in respect of its neighbourhood policy with the SEMCs in the area of the management of natural resources are not very effective owing to the lack of a shared vision between the countries in the region and a lack of strong political will on the part of the European Union. However, sustainable management of the energy potential and natural resources of the SEMCs could become the cornerstone of inclusive green growth in these countries.

A paradigm shift in Euro-Mediterranean relations therefore needs to take place in order to respond to the desire for economic and social change expressed by the populations following the 'Arab Spring'. Two aspects in particular must be addressed: support for greater energy efficiency and integrated management of natural resources, particularly water resources.

Análise aprofundada [EN](#), [FR](#)

[Solar energy development in Morocco](#)

Tipo de publicação Briefing

Data 08-05-2013

Autor CIRLIG Carmen-Cristina

Domínio de intervenção Assuntos Externos | Energia

Palavra-chave ENERGIA | energia eólica | energia não poluente | energia solar | financiamento e investimento | FINANÇAS | GEOGRAFIA | geografia económica | geografia política | Marrocos | política de cooperação | política energética | procura energética | projeto de investimento | rede energética | RELAÇÕES INTERNACIONAIS | rendimento energético | União para o Mediterrâneo | África

Resumo As the largest energy importer in the Middle East and North Africa (MENA), Morocco has tried to diversify its energy mix and ensure its energy security through increasing the share of renewable energy resources (RES) in this mix. EU-Morocco cooperation in the RES field – in solar energy, in particular – provides both partners with advantages and constitutes a potentially unifying project for the Euro-Med area.

Briefing [EN](#)

[Escalating EU-China trade row over solar panels](#)

Tipo de publicação Em síntese

Data 15-11-2012

Autor GRIEGER Gisela

Domínio de intervenção Assuntos Externos | Comércio internacional

Palavra-chave arbitragem comercial internacional | China | comércio internacional | concorrência | concorrência internacional | EMPRESAS E CONCORRÊNCIA | ENERGIA | energia não poluente | energia solar | entrave pautal | GEOGRAFIA | geografia económica | importação (UE) | INTERCAMBIOS ECONOMICOS E COMERCIAIS | medida antidumping | pilha fotovoltaica | trocas comerciais | Ásia-Oceânia

Resumo On 5 November 2012, China filed a WTO complaint against the EU, alleging that certain feed-in tariff programmes adopted to promote solar power generation are inconsistent with WTO rules. The EU lodged a similar WTO complaint against Canada which has been partly upheld according to a leaked interim report.

Em síntese [EN](#)

[Renewable energy investment: The BRICs and the EU](#)

Tipo de publicação Briefing

Data 08-03-2012

Autor NEEDHAM Christopher

Domínio de intervenção Assuntos Externos | Energia

Palavra-chave América | Brasil | China | combustível de substituição | ENERGIA | energia eólica | energia não poluente | energia solar | energia térmica | Europa | GEOGRAFIA | geografia económica | geografia política | independência energética | política energética | produção de energia | Rússia | Ásia-Oceânia | Índia

Resumo Renewable energy is a growth industry with a number of years of significant investment in new electricity generating capacity. The EU has placed focus and investment in increasing its renewable energy capacity in recent years, mainly in wind and solar power.

Briefing [EN](#)

[Proceedings of the Workshop on 'The Assessment of Potential and Promotion of New Generation](#)

[Renewable Energy Technologies' - Brussels, 22 March 2011](#)

Tipo de publicação Estudo

Data 15-03-2011

Autor externo Milou Beerepoot (Renewable Energy Division, International Energy Agency - IEA), Ruggero Bertani (Geothermal Business Development, Enel S.p.A.), Anthony Brenninkmeijer (HINICIO), Max Carcas (Pelamis Wave Power, Edinburgh), Luis Crespo (Protermosolar, Spain), Antonio Falcão (Technical University of Lisbon) and Arnulf Jäger-Waldau (EC Joint Research Centre, Ispra)

Domínio de intervenção Ambiente | Assuntos Económicos e Monetários | Energia | Política de Investigação

Palavra-chave análise económica | análise económica | avaliação tecnológica | ECONOMIA | ENERGIA | energia das ondas | energia geotérmica | energia não poluente | energia renovável | energia solar | investigação e desenvolvimento | investigação e propriedade intelectual | mercado da energia | política energética | PRODUÇÃO, TECNOLOGIA E INVESTIGAÇÃO | tecnologia e regulamentação técnica | tecnologia energética

Resumo The aim of the workshop was to assess the potential for the development and deployment of new renewable energy technologies in the field of solar power, ocean energy and geothermal energy. The invited speakers explored the main features of these technologies, their technological capacities, potential and limits, and their environmental impact. They also reviewed the economics of the sector, assessing both capital costs and electricity generation costs.

Estudo [EN](#)

Síntese [DE](#), [FR](#)

[Sustainable Energy Catalogue for European Decision-Makers](#)

Tipo de publicação Estudo

Data 02-10-2006

Autor externo Søren Gram (Danish Board of Technology, DBT)

Domínio de intervenção Ambiente | Energia

Palavra-chave AMBIENTE | bioenergia | biogás | desenvolvimento sustentável | ECONOMIA | economia de energia | ENERGIA | energia eólica | energia geotérmica | energia não poluente | energia renovável | energia solar | impacto ambiental | política ambiental | política económica | política energética | tecnologia energética

Resumo The purpose of this catalogue is to offer planners and decision-makers in EU member states an inspirational tool to be used during local or regional transition towards sustainable energy technologies. The catalogue may also be used by anyone else needing an overview of sustainable energy technologies and their current development level and future potential. It may also be used in education.

Estudo [EN](#)