

Policy Brief

Latest Insights into Europe's International Energy Development Cooperation Portfolio

The 'European Consensus on Development' outlines the European Union's shared vision and general framework for action in development cooperation. It aligns European foreign assistance with the United Nation's 2030 Agenda and Sustainable Development Goals (SDGs). It is to be implemented in close coordination with other international commitments such as those under the Paris Agreement on Climate Change, and intended to foster a stronger, more sustainable, inclusive, secure and prosperous Europe.ⁱ The Union and its Member States (MS) are "committed to a life of dignity for all that reconciles economic prosperity and efficiency, peaceful societies, social inclusion and environmental responsibility."ⁱⁱ Energy is a pivotal development enabler. Access to reliable, affordable and sustainable energy can improve the quality of lives and promote and foster inclusive growth and job creation. Energy access enables improved health care, education, and access to water and food.ⁱⁱⁱ The purpose of this brief is to present an updated overview of the European Portfolio on Energy and to highlight EU ODA flows in the context of SDG 7. It identifies areas of potential improvement in monitoring and matching flows to address the multiple dimensions of SDG 7.

KEY FINDINGS

- ▶ The EU remains the largest donor of energy ODA and its support continues to increase. Total worldwide commitments, however, appear largely insufficient to achieve the estimated investment needs required to address the three facets of SDG7 by 2030: Energy access, renewable energy, and energy efficiency.
- ▶ Innovative private-sector instruments and better leveraging of investments are needed to realise SDG7. Despite the increased political effort to attract private-sector financing for sustainable energy, there is little empirical information available on private investments. The EU may consider advancing efforts in this area, complementing work by other partners and working with the OECD DAC to monitor this.
- ▶ Additional data collection and analysis is also required to measure the effectiveness of both public and private contributions.
- ▶ The EU and its Member States should combine efforts to promote a revision of the current OECD Development Assistance Committee Creditor Reporting System (DAC CRS) by adding the SDG7 indicators "renewables," "access" and "efficiency" as new evaluation criteria (or "markers"). This would enable the tracking of financial contributions to SDG7 targets within the OECD DAC's ongoing monitoring of energy-related ODA.
- ▶ European projects and programmes should undergo an evaluation along all objectives of the SDG7 target. The tagging of multiple dimensions of energy projects should be possible, for example to reflect progress in energy access and renewable energy advancement.

The European Energy ODA Portfolio

“Energy is the golden thread that connects economic growth, increased social equity, and an environment that allows the world to thrive.”

Former UN Secretary-General Ban Ki-Moon, 2015

The EU and its MS are committed to support the achievement of SDG7. They are pursuing three interlinked key objectives in the climate and energy domain: Providing energy access to those who still lack it; increasing energy efficiency and renewable energy generation; and contributing to climate change mitigation and adaptation efforts in line with the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC).

Numerous European initiatives are already under way towards these three objectives, such as the Africa-EU Energy Partnership (AEEP), Africa-EU Renewable Energy Cooperation Programme (RECP), Africa Renewable Energy Initiative (AREI), ElectriFi, Energising Development (EnDev), the EU-Africa Infrastructure Trust Fund (ITF) and Africa Investment Facility (AfIF).

The European Union Energy Initiative (EUEI), established in 2002 as a joint commitment by MS and the European Commission to promote the role of energy in development, commissioned a study titled ‘The European Portfolio on Energy in International Development Cooperation.’ Published in March 2017, it set out to identify the baseline contribution of the EU, its institutions and its Member States to SDG7 targets in the 2010-2014 period, and establish an inventory and updating system for coordination and joint programming.^{iv} The Development Assistance Committee Creditor Reporting System (DAC CRS) of the Organisation for Economic and Cultural Development (OECD) was the primary source of data collection for that study – and also for the updated portfolio data presented in this brief. Where the previous study offers a baseline against which to measure European commitments and activities towards the Sustainable Energy for All targets in 2010-2014, this Policy Brief looks at what changes were made in 2015, and how this helps pivot action and contributions towards the goals of SDG7, which came into force in 2016.

Ambitious climate commitments including such as the National Determined Contributions (NDCs) under the Paris Agreement require significant transitions in the electricity and transport sectors. The global donor community committed a total of €39.2 billion to projects with relevance for climate change between 2010 and 2015 according to DAC CRS data. Europe’s energy-related ODA represents a substantial share in the global contribution to climate change mitigation and adaptation: European donors contributed 46% of total commitments, with €18.1 billion.

As Figure 1 illustrates, aggregate funding of European energy projects with climate change mitigation as their principal objective amounted to a total of €12.4 billion, followed by projects which significantly contribute to mitigation with a total budget of €4.2 billion. €2.1 billion in total was dedicated to climate change adaptation from the global community, with the EU budget of €1.6 billion constituting the lion’s share (71%). Overall, funding is still well shy of the estimates required for already stated climate change mitigation and adaptation efforts. Investment flows to developing countries are estimated at around 46% of the total needed by 2030 for mitigation, and an additional \$28-67 billion is required for adaptation efforts.^v

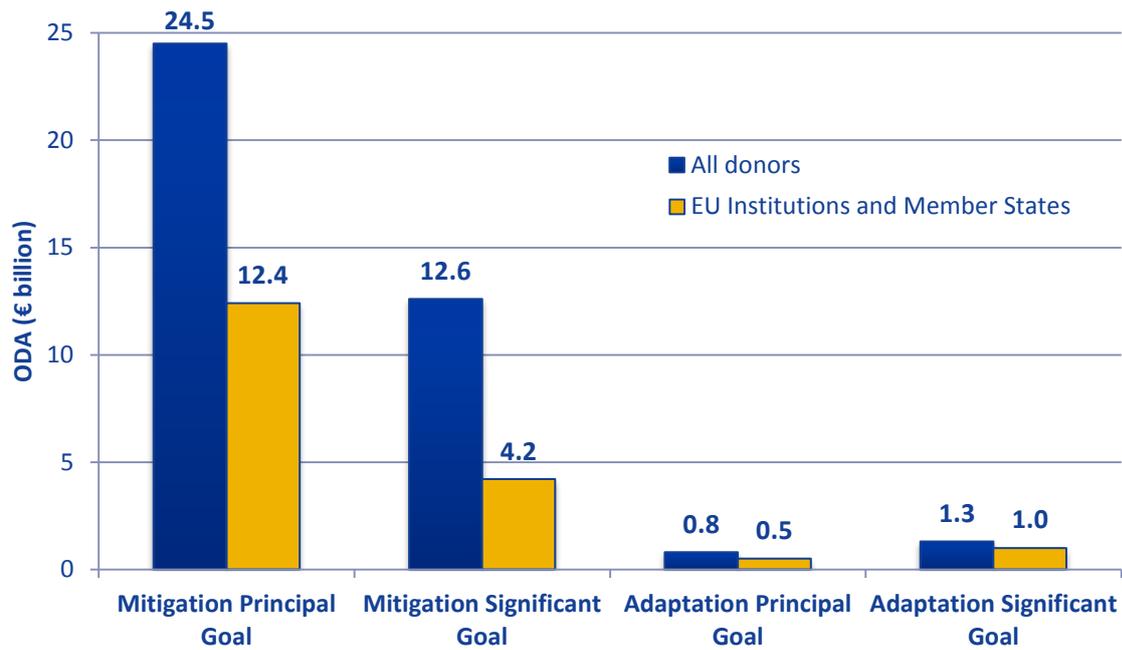


Figure 1: Energy ODA allocated to climate mitigation and adaptation activities.

Turning specifically to energy ODA, the aggregate baseline contribution of the EU institutions and its MS to SDG7 was €27.5 billion, in the period of 2010 to 2015. Europe thus remains the largest donor of energy ODA globally. Overall, European ODA spending from 2010 to 2015 was €352 billion and energy-related ODA constituted approximately 8% of total European ODA over this period. European contributions to energy-related development cooperation have shown an upward trend over the past 5 years, from €3.7 billion in 2010 to €5.5 billion in 2015.



Figure 2: Annual commitments of EU institutions and EU member states to energy-related ODA.

European energy-related ODA was dispersed across projects and programmes with four main purposes: Renewable energy; transmission and distribution, including energy conservation and efficiency; policy, research and training; as well as non-renewable energy, including non-renewables waste-fired power plants and district heating/cooling. The allocation of funds across these purposes has shown some variation over the years between 2010 and 2015. The most significant trend in 2015 is that funding for transmission and distribution reached €2.0 billion, the highest of any of the six years analysed. Renewable energy funding decreased from a high of €2.8 billion in 2014 to €2.0 billion in 2015, reflecting a small shift of funds towards energy efficiency and energy access.

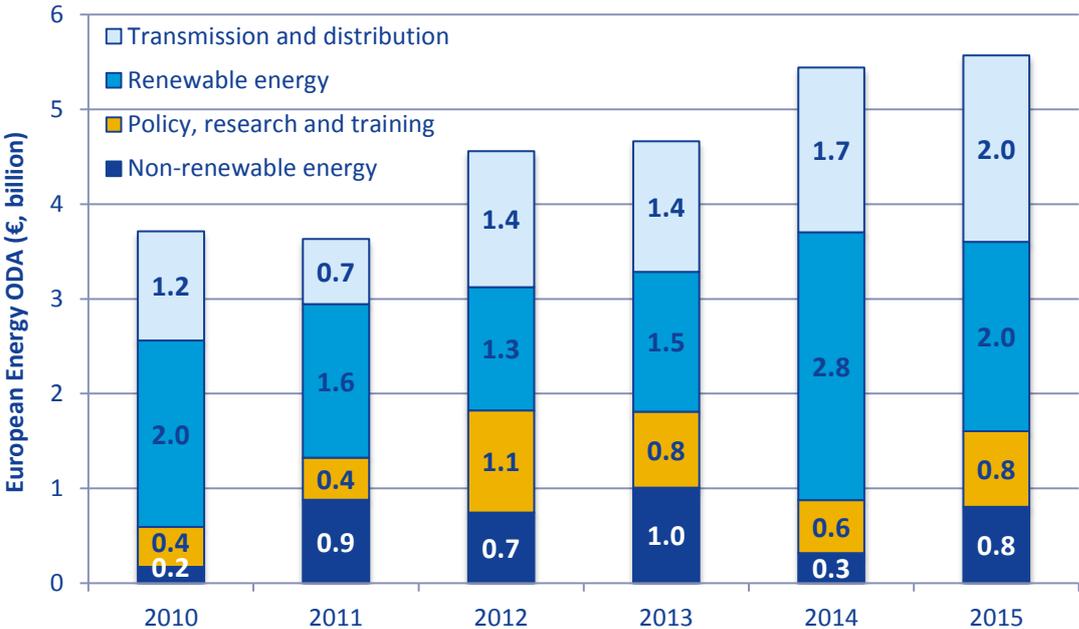


Figure 3: Fields of intervention of European energy ODA.

Loans have continued to be the primary method of providing energy financing (see Figure 4). On average, three quarters of European ODA were allocated as loans between 2010 and 2014; this increased further to 78% in 2015. Grant-based ODA ranked second with 21% on average between 2010 and 2014, decreasing to 18% in 2015. Equity increased from 3% to 4% from 2010-14 to 2015, while subsidies remained a relatively tiny component.

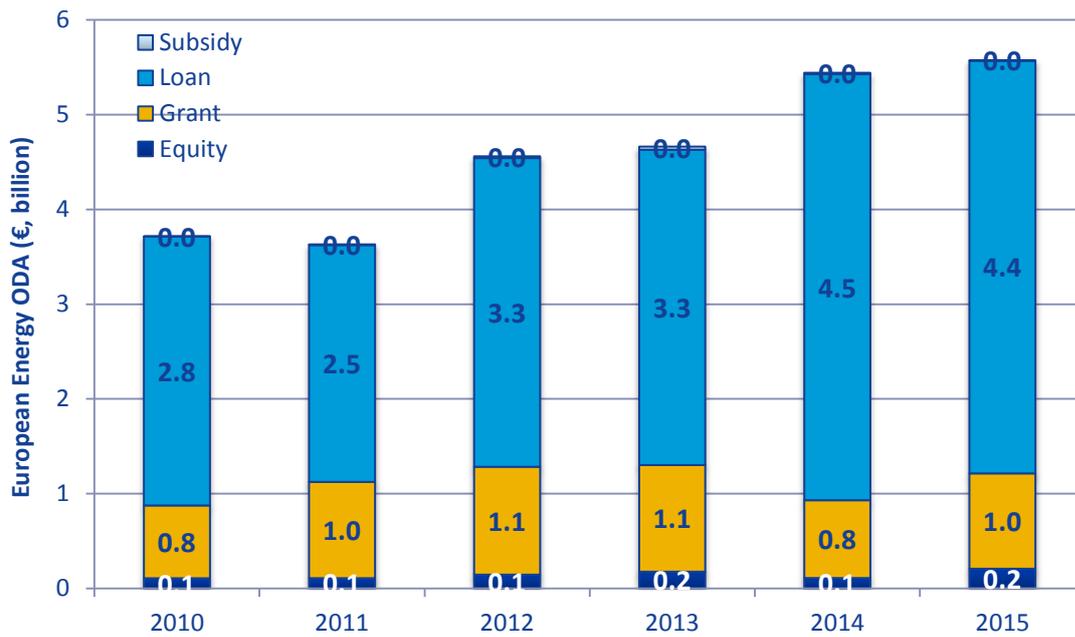


Figure 4: European energy ODA by type.

Figure 5 shows the regional recipients of European energy ODA. The African continent obtained 37% between 2010 and 2014, a share that further increased to 40% in 2015. It is followed by Asia which received 24% between 2010 and 2014; this increased most significantly to 38% in 2015. Non-EU European countries received 19% from 2010 to 2014, a portion that decreased to 14% in 2015. Latin and Central America received 12% and 7% respectively, while Oceania received 0.2% in both periods. Because some projects were implemented across multiple continents or are global in nature, a share of 8% (2010-14) and 1% (2015) could not be assigned to single regions in the respective time periods.

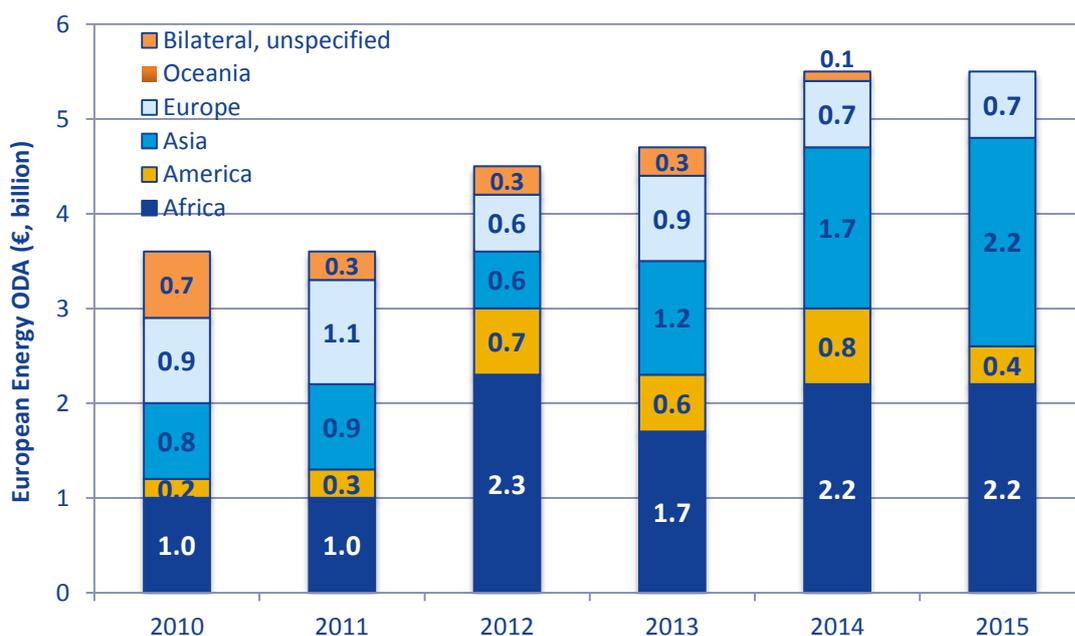


Figure 5: Distribution of energy-related ODA by recipient region.

As the initial EUEI study found, Europe currently directs most of its support to partner countries with comparably large markets – and, in fact, with energy access rates that are already relatively high. As Table 1 shows, most of the ten largest recipients of European energy ODA - receiving altogether 53% of the overall European energy-related ODA - are emerging economies and categorised as lower-middle-income countries or higher by the World Bank.^{vi} Kenya, India and South Africa are the only three countries of the ten with an existing electricity access rate lower than 90%.

Partner Country	Energy-related ODA (€)	Access to Electricity (%)	Population without Access to Electricity (million)
India	2,852,256,000	79	278.1
Turkey	1,921,897,000	100	0
Morocco	1,909,992,000	92	2.8
Egypt	1,610,314,000	100	0
Kenya	1,078,329,000	36	29.0
Ukraine	1,003,401,000	100	0
South Africa	979,460,000	86	7.8
Viet Nam	818,954,000	99	0.9
Indonesia	765,181,000	97	7.8
Serbia	744,772,000	100	0

Table 1: The ten largest recipient countries of European energy-related ODA (2010 to 2015)

Update on European Support for SDG7

The SEforALL knowledge hub, established by the World Bank’s Energy Sector Management Assistance Program (ESMAP) and the International Energy Agency (IEA), developed a Global Tracking Framework (GTF) for monitoring the progress of countries towards SDG7, distinguishing between energy access, renewable energy and energy efficiency.^{vii}

In 2014, the global electricity access rate was 85.3%, a modest increase from 85.0% in 2012 but a slowdown in increase from previous years. The renewable energy share in total final energy consumption rose to 18.3% in 2014, from 18.1% in 2012. This continued a slight acceleration observed since 2010. The energy intensity of the global economy decreased by 2.1% on average between 2012 and 2014, continuing an accelerating trend, but still not achieving the annual 2.6% decrease required to meet SDG7’s energy efficiency target.^{viii}

The annual investment required for achieving universal energy access by 2030 has been estimated at \$52 billion per year.^{ix} Achieving the goal of doubling energy efficiency from 1.3% to 2.6% by 2030 requires investment of \$650 billion per year. To realise the renewable energy target of 36% of total final energy consumption by that same year, investments of \$770 billion annually are required.^x In sum, the pace of global progress in the period 2012 to 2014 falls short of what is needed to reach the SDG7 objectives by 2030.

	Required Annual Investments Globally* (€ bn)	Actual Annual Investments Globally, in 2015* (€ bn)	Average Annual EU ODA** (2010-2015) (€ bn)
Energy Access	49	18	0.2
Energy Efficiency	609	207	0.4
Renewable Energy	721	265	1.6
Total	1 379	490	2.2

Table 2: Required and actual annual investments towards SDG7

* Converted using average 2015 exchange rate: 1 USD = 0.937 EUR^{xi}

** Note: These numbers were interpreted by creating analytical “markers” for three categories: *energy efficiency* (the text “energy efficiency” appears in the project title); *energy access* – if “access”, “electrification”, “rural” appear ; *renewable* – if “renewable” is in the title.

The EU and its Member States committed on average €4.6 billion of ODA annually to energy between 2010 and 2015. This consisted of €0.2 billion for energy access, €0.4 billion for energy efficiency and €1.6 billion towards renewable energy. There are a few important things to note in the consideration of these numbers. Firstly, total global investments constitute much more than just ODA. Domestic and private investments are also essential elements of the investment picture, and ODA needs to be used to leverage yet more such funding. One assessment finds that USD 43.5 billion of bilateral and multilateral climate finance mobilised \$16.7 billion of private sector finance in 2014, representing a ratio of 0.38.^{xii} Other studies find significantly higher ratios, up to 3.6 for every dollar invested.^{xiii} In this context, the total contribution of EU ODA might initially look small, but the ultimate impact might be much higher when leveraged funds are taken into account.

Secondly, when funding towards the three SDG7 objectives was assessed, only circa half of the €4.6 billion of European energy ODA could be allotted to one (or more) of the previously described ‘markers’ in the OECD DAC. This suggests that a) these markers cannot capture a number of projects that do contribute to one or more of the SDG 7 objectives; and/or b) the links are not explicit between the projects/programmes and SDG dimensions; and/or c) a sizeable portion of the energy ODA isn’t being invested with SDG 7 as a focus. Gaining further insight into investment objectives and categorisation of them should be a key priority for the EU in light of global SDG 7 efforts by improving the tracking of the ODA spending along the defined markers.

SDG7 emphasises a focus on infrastructure expansion and technology upgrading in least developed countries (LDCs), small island developing states (SIDS), and landlocked developing countries (LLDCs).^{xiv} Table 3 shows the contributions that have been made to these groups of countries through energy ODA.

Country Group	Average Annual Energy ODA Received from EU (€, billion)	Share of Total Annual Average EU Energy ODA (%)
Least Developed Country	0.46	10.0
Small Island Developing States	0.06	1.3
Landlocked Developing Countries	0.35	7.6

Table 3: Average annual EU energy ODA received by LDCs, SIDS and LLDCs (2010 to 2015)

The Future Portfolio and Monitoring

Current European contributions and the total level of energy ODA remain largely insufficient relative to the required investment levels needed for achieving SDG7 by 2030. Progress towards the three sub-targets of energy access, energy efficiency and renewable energy, is insufficient. Energy ODA therefore needs to be significantly ramped up and additional resources need to be leveraged from the private sector to achieve the goals set out.

Of the ten countries that received the largest shares of European energy ODA, seven have energy access rates greater than 90%. A redirection of funds towards the ‘high impact countries for energy access,’ i.e. those with large populations and low electrification rates, is urgently needed to ensure that support is directed to where it makes the most difference. An increase in funding towards decentralised generation could also markedly improve progress towards energy access given the geographies, (infra)structures and investment needs in these countries.

To understand the impact and success of ODA related to SDG7 it is important to monitor both the supply of ODA efforts and the achievements in renewable energy deployment, energy access and energy efficiency in the target countries. Several organisations already collect data on energy and development, informing monitoring and analysis in these fields. Two of the key sources that provide data on energy and ODA in general are the OECD DAC CRS and the open source platform AidData. CRS data is directly submitted by donors; AidData supplements the CRS data with information from other sources. Both databases offer the possibility to conduct statistical analyses on ODA and aid flows.

These available data sources, however, have shortcomings in providing relevant data on international cooperation in the energy sector that could be used to monitor efforts towards SDG7. Current data collection methods within the CRS do not allow for a clear identification of European ODA towards the three specific sub-targets of SDG7. Information is also lacking on private finance which has been leveraged through ODA, and on funding that is provided to multilateral organisations that support energy projects. Adding energy access, renewables and energy efficiency as indicators to the CRS should be a priority to increase knowledge, transparency and to showcase Europe’s leading role in investing into energy for development.

How successful energy ODA is in supporting progress towards SDG7 remains an important and largely under-researched issue. Additional analyses of existing data and a clearer distinction of SDG7 indicators can provide important insights for better targeting and coordinating energy-related ODA to meet the energy development goals the world community and Europe have set.

References

ⁱ Council of the European Union, 2017. “The new European consensus on development.”

ⁱⁱ Ibid, Outcome 4.

ⁱⁱⁱ EUEI, 2017. “The Employment Effects of Renewable Energy Development Assistance.”

^{iv} EUEI, 2017. “The European Portfolio on Energy in International Development Cooperation.”

^v United Nations Framework Convention on Climate Change, 2017. “Fact sheet: Financing climate change action Investment and financial flows for a strengthened response to climate change.”

http://unfccc.int/press/fact_sheets/items/4982.php

^{vi} World Bank, 2017. “World bank list of economies (June 2017).”

^{vii} International Energy Agency (IEA) and the World Bank. 2017. “Sustainable Energy for All 2017—Progress toward Sustainable Energy.”

^{viii} International Energy Agency (IEA) and the World Bank. 2017. “Sustainable Energy for All 2017—Progress toward Sustainable Energy.” World Bank, Washington, DC.

^{ix} IEA, 2017. “Energy Access Outlook 2017 – From Poverty to Prosperity.”

^x IEA, 2016 and IRENA, 2015 and 2016. “World Energy Outlook 2016”, “Synergies between Renewable Energy and Energy Efficiency: A Working Paper Based on Remap 2030” and “REmap—Roadmap for a Renewable Energy Future, 2016 Edition.”

^{xi} IRS, 2017. <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>

^{xii} OECD. (2015). Climate finance in 2013-14 and the USD 100 billion goal. Retrieved from

<http://www.oecd.org/environment/cc/OECD-CPI-Climate-Finance-Report.htm>

^{xiii} EUEI PDF, 2017. “Challenges and Opportunities for Policy Brief Blended Finance in European Energy Development Cooperation.”

^{xiv} United Nations, Sustainable Development Knowledge Platform. 2017. “Sustainable Development Goal 7.” <https://sustainabledevelopment.un.org/sdg7>

Imprint

Published by

European Union Energy Initiative
Partnership Dialogue Facility (EUEI PDF)



c/o Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
P.O. Box 5180, 65726 Eschborn, Germany

info@euei-pdf.org
<http://www.euei-pdf.org>

Authors

Dean Gioutsos and Alexander Ochs, SD Strategies
Paul Bertheau and Philipp Blechinger, Reiner Lemoine Institute

This Policy Brief has been drawn up by SD Strategies and RLI
on behalf of the EU Energy Initiative



With comments and contributions by

Fiona D. Wollensack, EUEI PDF

Place and date of publication

Brussels, December 2017

The **Partnership Dialogue Facility (EUEI PDF)** is an instrument of the EU Energy Initiative (EUEI). It currently receives contributions from the European Commission, Austria, Finland, Germany, Italy, the Netherlands and Sweden.

