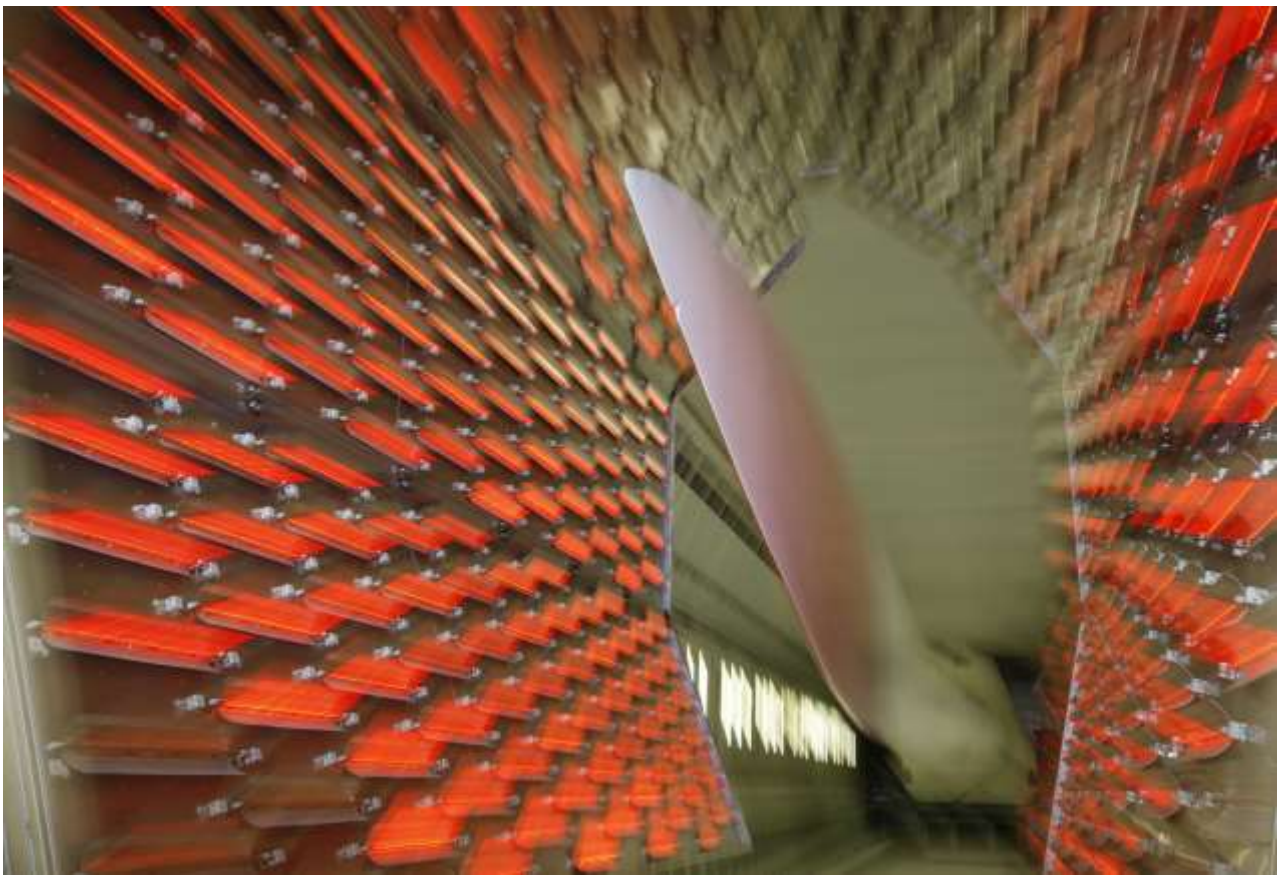
Germany: A laboratory for the energy transformation of the 21st century?

A Clean Energy Wire Workshop

14-16 March 2016
Berlin – Großräschen – Cottbus – Wahlsdorf/Dahme, Germany

in combination with the Berlin Energy Transition Dialogue



Rotor blade manufacturing at a Nordex plant in Rostock, Germany

The programme: Who? What? When?

Monday, 14 March 2016

Independent arrival of participants in Berlin and check-in at Alexander Plaza Hotel
Location: Rosenstraße 1, 10178 Berlin

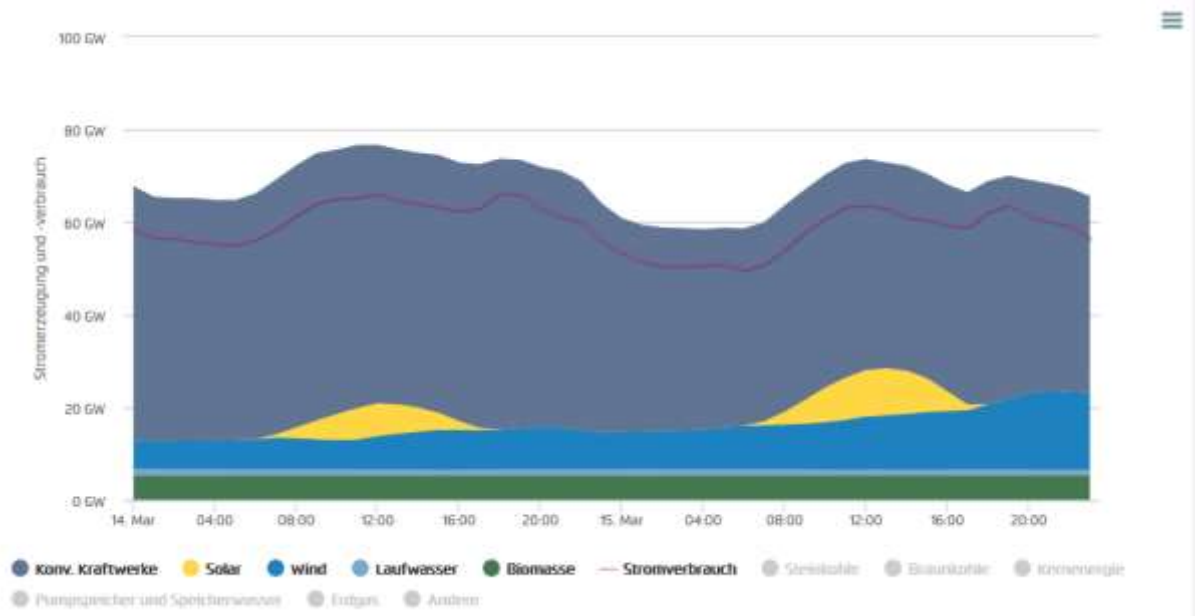
18.00 *Welcome drinks and opening dinner*
Welcome by Sven Egenter, Executive Director Clean Energy Wire
Location: Alexander Plaza Hotel

19.00 **The German Energiewende and decarbonisation of energy and transport: An overview of the status, the stakes and the politics**

A

Presentation and discussion with Dr Barbara Praetorius, Deputy Executive Director Agora Energiewende and Christian Hochfeld, Executive Director Agora Verkehrswende
Location: Alexander Plaza Hotel

Overnight stay at Alexander Plaza Hotel, Berlin



Power generation and domestic power consumption (red line) in Germany on 14/15 March 2015, visualisation by Agora Energiewende

Tuesday, 15 March 2016

8.00 *Check-out of Alexander Plaza, transfer to Federal Ministry for the Environment, Nature Protection, Building and Nuclear Safety*

9.00 **A pioneer with heavy baggage? German climate policy between ambitions for 2050 and today's emissions**

B

Federal Ministry for the Environment, Nature Protection, Building and Nuclear Safety
Presentation and discussion with

- Ursula Fuentes, Head of the Climate Policy and Climate Policy Strategy Unit
- Meike Söder, Legal Issues of Climate and Energy Policy and Emissions Trading Unit
- Malin Ahlberg, Unit for General Policy Issues of European Energy and Climate Policy, New Market Mechanisms

Location: Köthener Straße 3, 10963 Berlin

11.00 **The grid: Is the backbone of the renewables-based energy system growing fast enough? How divisive is the issue of grid expansion – at home and across Europe?**

C

Presentation and discussion with Antonella Battaglini, Chief Executive Officer, Renewables Grid Initiative
Location: Krausenstraße 8, 10117 Berlin

12.30 Lunch break
Location: Krausenstraße 8, 10117 Berlin

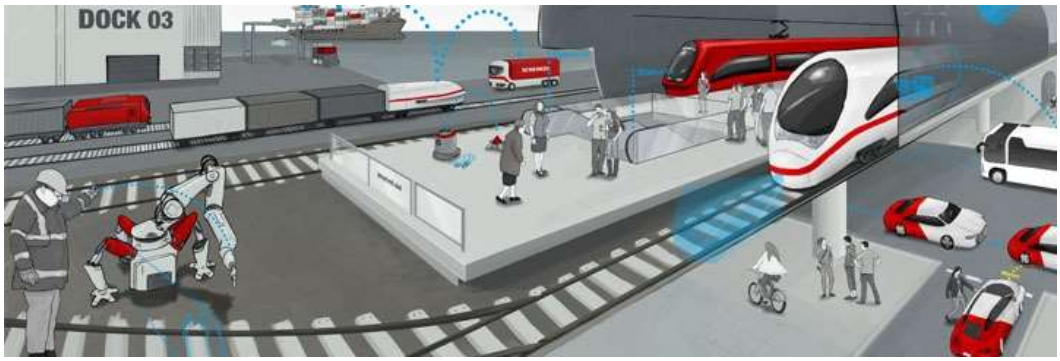
13.15 *Transfer to InnoZ at EUREF Campus, Torgauer Straße 12-15, 10829 Berlin*

14.00 **Pioneering mobility solutions at the intersection of transport, energy, and ICT technology: On-site visit to the InnoZ Innovation Centre for Mobility and Societal Change**

D

- Presentation and discussion with Professor Andreas Knie, Executive Director
- Presentation of the Connected Mobility Demonstrator by Vipul Toprani
- Presentation of the Innovation Landscape by Max Power

Location: InnoZ at EUREF Campus, Torgauer Straße 12-15, 10829 Berlin



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16.00 *Bus transfer to Lusatia*

17.30 *Arrival and check-in at SeeHotel Großräschen, Seestraße 88, 01983 Großräschen*

18.00 Dinner

19.30 **The Lusatia region: on the way to a post-mining future? Confronting the challenges of structural change and phasing out coal**

E

Panel discussion with

- Maik Bethke, Head of the Cottbus Chamber of Commerce and Industry Branch Office
- Professor Peter Droege, Chair for Sustainable Spatial Development at the University of Liechtenstein, President of EUROSOLAR European Ass. for Renewable Energy
- Gerd Lippold, Member of the Saxony State Legislature for Alliance 90/The Greens
- Simone Wendler, Chief Reporter at Lausitzer Rundschau newspaper

Moderators:

- Carel Carlowitz Mohn (moderator), Director Media Programmes Clean Energy Wire
- Sebastian Zoepp, CEO Spreeakademie (Knowledge & Innovation Management for Regional Development)

Location: IBA-Studierhaus Großräschen (Conference centre of IBA International Building Exhibition), Seestraße 84-86, 01983 Großräschen

Wednesday, 16 March 2016

Check-out of SeeHotel Großräschen

8.00 **Employment, emissions and regional development: How lignite mining shaped Lusatia**

F

Visit to the Welzow-Süd open-pit lignite mine with:

- Thomas Burchard, spokesperson of Klinger Runde regional environmental network
- Rüdiger Siebers, Chairman of the General Works Council of Vattenfall Europe Mining and member of IG BCE energy and mining trade union

Location: on-site visit by bus

© dena

9.30 *Bus transfer to Cottbus*

10.30 **Power-to-gas as an storage option for renewable energy: Modelling the future energy system**

G

Visit to the H2 Research Centre at the Brandenburg Technical University BTU Cottbus-Senftenberg, meeting with Dr Ulrich Fischer, Head of the Research Centre

Location: BTU Cottbus – Senftenberg, Fakultät für Maschinenbau, Lehrgebäude 3 F, Siemens-Halske-Ring 9, 03046 Cottbus

12.30 *Bus transfer to Wahlsdorf/Dahme, followed by lunch break*

13.45 **Decentralised citizen power: Making the Energiewende work at the village level. The case of the Wahlsdorf energy cooperative**

H

On-site visit to an energy cooperative feeding heat from an agricultural biogas plant into a local district heating network, meeting with:

- Frank Pätzig, Director of the Municipal Administration at Dahme/Mark and Board Member of the energy cooperative

Location: Wahlsdorf/Dahme

16.00 *Bus transfer to Berlin*

18.00 Time for individual meetings

19.00 **Putting the energy transition into an international perspective**

I

Presentation of the new REmap 2030 – A Renewable Energy Roadmap (under embargo)
Media briefing with Adnan Z. Amin, Director-General of the International Renewable Energy Agency

Location: Bundesverband Solarwirtschaft (German Solar Association), Französische Straße 23, 10117 Berlin

20.30 *Concluding dinner of the CLEW Media Workshop*
Location: Restaurant NÖ!, Glinkastraße 23, 10117 Berlin
Overnight stay at Hotel Hackescher Markt, Große Präsidentenstraße 8, 10178 Berlin

Thursday/Friday, 17/18 March 2016

Berlin Energy Transition Dialogue 2016. For further information and accreditation details, please see the official conference website.

Overnight stay at Hotel Hackescher Markt, Große Präsidentenstraße 8, 10178 Berlin

From A to I:

Background info on the programme items

A

Agora Energiewende is one the leading energy policy think tanks in Germany. Established in 2012 by the European Climate Foundation and Stiftung Mercator, it undertakes and commissions research on the Energiewende. Its council, under the chairmanship of former UNEP Director and former German Environment Minister Klaus Töpfer, brings together key stakeholders and decision makers to forge a broad consensus on the policy framework for the Energiewende. Agora Energiewende is a sister organisation of the Clean Energy Wire.

Dr. Barbara Praetorius is the Deputy Executive Director and Head of the Germany Team at Agora Energiewende. She is an energy economist by training. Before joining Agora Energiewende, she was head of the Strategy and Key Policy Issues division of the German Association of Local Public Utilities (VKU), from 2008 until 2014. From 1992 to 2008 she was Senior Researcher and Project Lead in the Energy, Transport, Environment division at DIW Berlin (the German Institute for Economic Research).

- Agora Energiewende's website in English and German: http://www.agora-energiewende.de/en/
- "Understanding the Energiewende": FAQ by Agora Energiewende http://www.agora-energiewende.de/en/topics/-agothem-/Produkt/produkt/220/Understanding+the++Energiewende/

Agora Verkehrswende is a newly established think tank on transport and mobility. Set up in 2016, it is part of the same organisational structure as Agora Energiewende and the Clean Energy Wire, and like them Stiftung Mercator and the European Climate Foundation fund its work.

Christian Hochfeld is the Executive Director of Agora Verkehrswende and an environmental engineer by training. Before taking on his role at Agora, he worked for the Deutsche *Gesellschaft für Internationale Zusammenarbeit* (GiZ), the official German development agency. At GiZ, his roles included serving as a Senior Advisor for sustainable transport in the Department for Water, Energy and Transport. From 1996 until 2010, he was a member of the Executive Board of Öko-Institut, one of Germany's leading environmental policy think tanks.

B

The **Federal Ministry for the Environment, Nature Protection, Building and Nuclear Safety (BMUB)** was established in 1986, in the aftermath of the Chernobyl nuclear disaster. Social Democrat Barbara Hendricks is head of the ministry. Following the formation of the present government, the ministry lost responsibility for energy policy to the Ministry of Economic Affairs but gained competency for building. The environment ministry is also in charge of co-ordinating the federal government's climate policy. Former ministers include Klaus Töpfer (former head of UNEP) and Angela Merkel.

➲ BMUB's website in English and German:
http://www.bmub.bund.de/en/

C

The **Renewables Grid Initiative** is a collaboration of NGOs and transmission system operators (TSOs) from across Europe. It promotes transparent, environmentally sensitive grid development to facilitate the energy transition and continued, steady growth of renewable energy. RGI was launched in 2009. Its partners include TSOs like Elia (Belgium), RTE (France), 50Hertz (Germany), Red Eléctrica (Spain), Statnett (Norway), Swissgrid (Switzerland), TenneT (Germany and the Netherlands), Terna (Italy) and NGOs like BirdLife Europe, Climate Action Network (CAN) Europe, Fundación Renovables (Spain), Germanwatch (Germany), Legambiente (Italy), Natuur&Milieu (Netherlands), the Royal Society for the Protection of Birds (UK), and WWF International.

Antina Sander is the RGI's Deputy Executive Director, having joined RGI in March 2012. In 2011, Antina completed an MSc in Environmental Management and Policy at Lund University, Sweden, where she wrote her master thesis on grid expansion and public acceptance. The thesis, "From 'Decide, Announce, Defend' to 'Announce, Discuss, Decide'", won first prize at the "Ökostrom für Alle!" awards in 2012.

➲ RGI website, in English:
http://renewables-grid.eu/about/rgi.html

D

The **InnoZ Innovation Centre for Mobility and Societal Change** (Innovationszentrum für Mobilität und gesellschaftlichen Wandel) connects key players from industry, research, and government in order to pioneer mobility solutions at the intersection of transport, energy, and information and communications technology (ICT). It aims to integrate potential end users into both the development and the testing of prototypes under real-life conditions, and to transfer its research findings into clients' everyday operations and/or their market entry. InnoZ was founded in 2006 as a joint venture of Deutsche Bahn Mobility Logistics AG (German Rail), T-Systems International GmbH, the Berlin Social Science Centre (WZB), and the Federal German Aeronautics and Space Research Centre (DLR). Siemens AG became a joint owner in May 2013. It has some 70 staff and offices in Berlin, Munich, Frankfurt and London.

Professor Andreas Knie is the founder and Executive Co-director of InnoZ. He studied political sciences and wrote a social science dissertation on the history of the diesel engine. Knie is a professor of sociology at the Technical University Berlin; he also does social science research at the Berlin Social Science Centre (WZB). Knie sees the financial and technical hurdles of introducing electric mobility as an opportunity to establish a new urban, post-fossil culture of mobility. He believes the German Energiewende should be seen as a challenge of bringing together decentralised smart grids and low-carbon transport technologies.

➲ InnoZ website, in English and German:
http://www.innoz.in

E

The **Lusatia** region, southeast of Berlin, is the second largest lignite-mining region in Germany, with a total annual production of approx. 60 million tonnes. The region spans the federal states of Brandenburg and Saxony, bordering Poland to the east and the Czech Republic to the south. It is home to the Sorbs, a Slavic ethnic minority. Lignite is extracted from four open pit mines and burned in five thermal power plants, including the Jänschwalde plant – the third most polluting industrial site in the European Union and Germany's second largest single emitter of CO_2. Some 8,000 people are employed in Lusatia's lignite mining industry, down from about 80,000 at the time of German unification in 1990, when the region was one of the industrial heartlands of the German Democratic Republic. Still, the lignite industry remains a backbone of the local economy, offering above-average wages with very high levels of trade union membership.

The entire industry is owned and operated by state-owned Swedish energy company Vattenfall, which is presently in the process of selling its assets under plans to decarbonise the company's operations. Vattenfalls' sales plans, the plunge of wholesale electricity prices and the incompatibility of lignite power generation with Germany's climate policy objectives, have sparked a fierce debate over a phase-out of lignite mining in Lusatia. While the state governments of Brandenburg and Saxony and the energy and mining trade union IG BCE insist lignite will be needed for decades to come as back-up for fluctuating power supply from renewables, NGOs, think tanks and the Federal Environment Ministry are promoting a systematic phase-out to be concluded around 2030 or 2040.

➲ Feature article on Lusatia lignite mining published by Energy Post:
http://www.energypost.eu/curse-lignite-long-term-underdevelopment-germanys-second-largest-mining-region/

The **IBA Studierhaus** is a spatial planning academy and the legacy of the International Building Exhibition IBA Fürst-Pückler-Land that took place in Lusatia between 2000 and 2010. The IBA exhibited and promoted new approaches to urban and spatial planning, aimed at the transformation of a region marked by decades of industrial-scale mining.

➲ IBA Studierhaus' official website, in English and German:
http://www.iba-see2010.de/en/index.html

F

The **Welzow-Süd mine** is one of four open pit lignite mines still in operation in Lusatia. Annual production is approx. 20 million tonnes of lignite. The lignite produced in Welzow-Süd has a water content of ca. 56 percent. In operation since 1959, 17 villages had to be resettled to make space for the mine.

With the support of the Brandenburg state government, Vattenfall is presently applying for permits to extend the mine. This would mean an additional 200 million tons of lignite could be mined, starting in 2025, extending supply capacities of the Schwarze Pumpe power plant beyond the year 2040. If the permits were granted, more than 800 people would have to be resettled. Several NGOs including Greenpeace have filed lawsuits against the mine extension.

➲ Vattenfall information on mining operations in Lusatia, in English:
http://corporate.vattenfall.com/press-and-media/news/2014/lignite-in-numbers/

G

The **H2 Research Centre** at the BTU Brandenburg Technical University is a research laboratory and innovation test centre. It is part of the "Power-to-Gas Strategy Platform" of the German Energy Agency, *dena*. Through its Strategy Platform, partners from business, associations and science pool their diverse expertise and experience. The core objective is to establish power-to-gas as a reliable, cost-efficient and large-scale multi-purpose option by 2020/2025, with at least 1,000 megawatts of electrolysis-based power storage installed in Germany.

➲ dena publication on power-to-gas technology, its present state of development and future applications in Germany, in English: http://www.powertogas.info/fileadmin/content/Downloads/Brosch%C3%BCren/dena_PowertoGas_2015_engl.pdf

➲ Official website of the Institute of Power Generation at BTU Cottbus, in German: http://www.kwt-cottbus.de/de/

H

Wahlsdorf is a village with 300 inhabitants in the rural Fläming area, located halfway between Berlin and Lusatia. The village is not connected to the gas grid. The Wahlsdorf energy cooperative was established in 2012 with the aim of using heat generated by a local biogas plant – operated by the local cattle-breeding estate – to heat a former manor house, owned and operated by the municipality as a youth hostel. With the help of the regional DKB Bank, plans were extended to provide heat to more than 70 private homes and small companies in the village. The construction of a local district heating grid allowed households to switch off oil-fired heating boilers in their basements. Total investment in the project was 1.6 million euros.

➲ Overview of Energiewende data in the municipality of Dahme/Mark, in German: https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0ahUKEwjr57KFuYHLAhWHPQ8KHQulDdYQFggnMAI&url=http%3A%2F%2Fwww.teltow-flaeming.de%2Fde%2Fdateien%2Fpdf%2F12-waermegenossenschaft-wahlsdorf-energietag-2015.pdf&usg=AFQjCNEiq7LFpz-6qd58NEEr5OFX205L4g&cad=rja

I

The International Renewable Energy Agency (IRENA) is an intergovernmental organisation based in Paris promoting the widespread adoption of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy. It serves as a platform for international cooperation and a repository of policy, technology, resource and financial knowledge on renewable energy.

Adnan Z. Amin is a Kenyan diplomat and Director-General of the International Renewable Energy Agency since 2010. Amin previously served in various positions at the United Nations Environment Programme UNEP, and became Director of the UNEP New York office in 1997. Earlier assignments included research work at the Institute of Development Studies at the University of Sussex in the UK, and at the World Bank.

➲ Official IRENA website with information on the REMap 2030 roadmap, in English: http://www.irena.org/remap/

Organisational details

What are the costs?
CLEW will cover all costs of the media workshop on 14, 15 and 16 March, including food and on-the-ground travel. CLEW will also cover the cost of accommodation during the workshop and the Berlin Energy Transition Dialogue (four nights at a hotel from 14 to 18 March).

What languages will be spoken?
Presentations during the workshop will be either in English or in German. English-German simultaneous translations will be provided.

What about travel arrangements?
Travel *during* the workshop will be organised by the Clean Energy Wire. We ask participants to make their own bookings for travel *to and from Berlin*.

By arrangement, we can pay a travel allowance of up to 300 euros for travel within Europe, and of up to 700 euros for travel from further afield. In this case, we will reimburse participants individually on presentation of original invoices/tickets.

How will the combination of the Clean Energy Wire (CLEW) workshop and the Berlin Energy Transition Dialogue work in practice?
The Berlin Energy Transition Dialogue 2016 is a major international forum where policy makers discuss the political and economic challenges of decarbonising the energy sector. The first such meeting since the Paris Climate Conference, this two-day high-level conference will bring together foreign, energy and environment ministers from around the world – representing "the willing and the able" frontrunner states of decarbonisation – among other participants. The German Foreign Office organises the conference in cooperation with the German Renewable Energies Association.

Participants in the CLEW workshop wishing to attend the Berlin Energy Transition Dialogue 2016 must arrange their own accreditation to the conference (press registration).

For more information, please contact:

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About the **organiser**

Clean Energy Wire

The transformation of the energy system of the world's fourth largest economy has entered a new phase. Rapid growth of renewable energy and the broad consensus to phase out nuclear power have opened up new opportunities, created fresh challenges and increased the project's complexity. The country's so-called Energiewende not only changes markets and business models but also reaches deep into society and well beyond Germany's borders.

The Clean Energy Wire provides well-researched, fact-based and unbiased information as well as support for international journalists reporting on the energy transition. We are convinced that quality journalism plays a key role in productive domestic and international debates, which are essential for the successful transition to a low-carbon economy.

The Clean Energy Wire is committed to the highest standards in journalism. Our charter sets out the principles that govern our own work.

As an independent non-profit and non-partisan organisation, the Clean Energy Wire can offer its services free of charge thanks to its funders, Stiftung Mercator (stiftung-mercator.de) and the European Climate Foundation (europeanclimate.org).

www.cleanenergywire.org