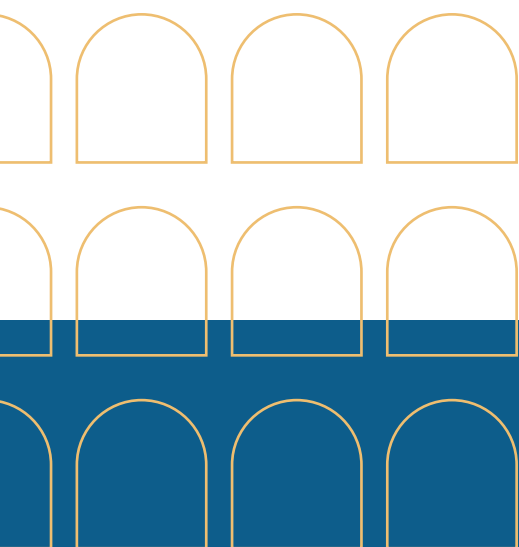


ANNUAL REPORT 2021

FLORENCE SCHOOL OF REGULATION ENERGY & CLIMATE



#FSR_Energy

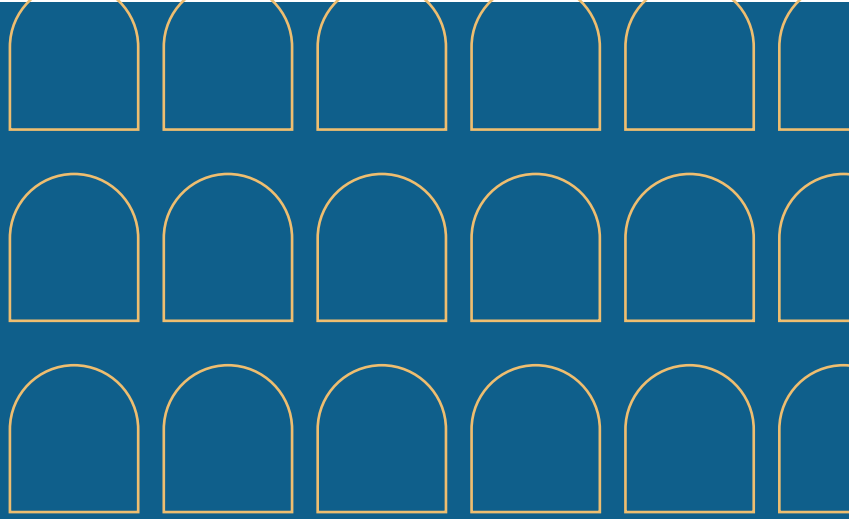


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clickable links

How can we transform energy systems, ensuring clean energy for all? Can we make the right regulatory decisions in a highly complex economic and political environment?

FSR Energy & Climate addresses the challenges facing the energy transition through applied research, innovative training and policy dialogue.

fsr.eui.eu



FSR pillars

RESEARCH

The school carries out multidisciplinary research with the purpose of developing economically, legally, and socially-sound regulation and policy.

TRAINING COURSES

Designed by an international faculty of academics and the main experts in the field, our courses are designed to meet the educational needs of professionals at all levels.

POLICY EVENTS

Our events bring together the world of academia and practice to offer a vast range of opportunities for open discussion and practice sharing.



TELL US WHAT YOU DREAM

2021 HIGHLIGHTS



Message video

Jean-Michel Glachant, FSR Energy Director



46

online events

3686

participants

12

policy workshops

1100

professionals
worldwide

1000

energy academics

159

virtual sessions over
3 days

- The School organised 46 online events attended by 3686 participants, 12 policy workshops attended by 461 participants and 19 training courses attended by more than 1100 professionals worldwide.
- The FSR restyled the format of the online series connecting our community worldwide, and advancing knowledge for a more sustainable and resilient energy future.
- The FSR is leading the Dissemination Package of the European Commission Horizon 2020 funded project, OneNet, aiming at developing the key instruments for a European approach to energy flexibility.
- The FSR is media partner of the International Association for Energy Economics' first Digital Conference, engaging with 1000 energy academics and professionals in 159 virtual sessions over 3 days.
- The FSR joins forces with the Italian Regulatory Authority, ARERA, to deliver the first joint course on Gas regulation
- The FSR is the first academic entity in Europe offering a course on "renewable and low-carbon gases" (hydrogen, biogas, biomethane and synthetic methane)
- The FSR awarded 7 scholarships through the 5th edition of the Ana Aguado Scholarship Award in collaboration with BEA, E.DSO, ENTSO-E, and Eurelectric; 8 scholarships for the 3rd edition of the Lights on Women Scholarship. In November 2021, the School launches the FSR Annual Scholarships to promote diversity, equity and inclusion in the energy field.
- The FSR re-designed its online course portfolio (now featuring "community" courses and "class" courses) and adopted new standards and guidelines for internal quality assurance, with the aim of improving the participants' learning experience.
- The Handbook of Electricity Markets edited by Jean-Michel Glachant (FSR), Paul Joskow (MIT), and Michael Politt (Cambridge) is published in November 2021.
- FSR Energy Director Jean-Michel Glachant elected President of IAEE and Director of FSR Climate Simone Borghesi elected President of EAERE
- FSR is working on a Lights on Women dedicated platform, whose objective is twofold: to solidify FSR ever-evolving policy on the issues of gender balance and inclusivity in the workplace and to give a spotlight and a voice to women professionals working in the energy, climate and sustainability sectors.

In November 2021, the FSR concluded a Knowledge Partnership Agreement with ACER.



SECTION 1

TRAINING



TRAINING COURSES

Our courses are designed and continuously updated to meet the educational needs of energy professionals at all levels. The courses are developed with the support of an outstanding international training faculty, which includes professors from top universities as well as high-level experts in energy regulation, policy-making, and industry.

We offer different types of training courses: Online (Class and Community), Residential, Blended (online & residential) and Tailor-made training (TMT) courses at all levels of knowledge. There are three levels:

Level 1 – Highlights: it gives participants an introduction to the topic with the newest updates from the field.

Level 2 – Fundamentals: it gives a comprehensive overview of the topic. Participants will dive into the significant elements of the field, thoroughly studying the concepts and refining their accrued knowledge together with peers and instructors.

Level 3 – Specialised Training: it takes an in-depth look at a specific topic of the field. These are advanced courses that require a solid background and provide you with a deeper understanding of the subject. Participants are encouraged to take an active role in the course activities as well as apply the specialised information to practical cases.

Countries of origin of our training



Training participants in number



Total 1144

Tailor-Made Training
Online community
Online class
Residential



TAILOR MADE TRAINING

Tailor Made Training for INEA

January 2021 | Online training

This course addressed the promotion of renewable energy sources and their integration in the energy sector with an emphasis on electricity. After an introduction to the main economic and technological aspects of RES and their status in the EU, the course provided an overview of the European policy on RES, from its emergence in the late 1990s to the recent discussion on the Green Deal. Building on this framework, significant attention was devoted to the various instruments available to policymakers and which have been typically implemented to support RES uptake in the EU. For each of the main policy tools, a description was provided, highlighting its main advantages and drawbacks. Auctions were discussed in detail to show how they can be used – and have been used – to promote competition and improve cost-effectiveness in the use of public resources. Concrete experience from two jurisdictions complemented the general description of this instrument, which has gained centre-stage in the past few years.

UNESCAP Training for ASEAN Electricity Regulators and Utilities on Regional Electricity Trading and Market Integration

April – May 2021 | Online training

This FSR tailor-made training aimed at creating the capacity among HAPUA and AERN members, as well as for other relevant actors in the ASEAN region, to take an informed decision on the most appropriate electricity trading and market integration model, also taking into account the need for consistency with the Sustainable Development Goals (SDGs), including the targets for renewables deployment. In this respect, the general objective of the training was twofold. Firstly, to provide the beneficiaries with the basic tools to evaluate different solutions for multilateral regional electricity trading and market integration, by presenting different solutions adopted in other parts of the world – including Europe, the US, Central America, Southern Africa – and discussing their respective benefits, challenges, requirements, pros and cons. Secondly, to assess the role of national electricity regulators in supporting and governing regional electricity trading and market integration, highlighting the required institutional and statutory enhancement with respect to the current situation.

Tailor Made Training for the European Bank of Reconstruction and Development

June – July 2021 | Online training

This tailor-made course was designed to respond to the request of the European Bank for Reconstruction and Development (EBRD) for training in the renewable energy area, with a specific focus on the economic and regulatory aspects. Its aim was to complement the EBRD's team expertise in contractual and project finance aspects. To meet the learning objectives, the course covered the economics of renewables, the fundamentals of national and regional wholesale electricity markets, renewable support and the integration of renewables, and the contractual framework and Power Purchase Agreements for renewables

Tailor Made Training for Baker Hughes

20 October 2021 | Residential training

This training explored the EU policy approach in addressing environmental concerns and climate change issues, which concretely translated into the publication of a number of energy and climate regulatory initiatives in recent years. In the first part of the course, participants had a chance to understand how the EU Green Deal and the main climate policies could shape the future energy sector and what the implications for the industry would be. In the second part, we opened a window on a very topical debate at the moment in Europe: the recent shift from natural gas towards hydrogen and renewable or decarbonised gases and the possible impact of this policy shift on gas infrastructure. We concluded with a dedicated focus on methane emissions and their place in international climate strategies, a topic which has been gaining importance in recent years and is now the focus of important global initiatives.

Tailor-made training course for the United Nations Economic and Social Commission for Asia and the Pacific on regional power system integration transmission capacity calculation and pricing, smart grids and cybersecurity

November – December 2021 | Online training

This tailor-made course was designed to respond to the request of the Economic and Social Commission for Asia and the Pacific to promote energy connectivity as an essential strategy to support the achievement of the SDG7 targets and to support efforts to decarbonise the region's power grids. Its aim was to complement the ESCAP's mandate to strengthen ASEAN's efforts in developing a common understanding of the role of utilities and energy regulators in the context of power system connectivity, in line with UNESCAP's Regional Road Map on Power System Connectivity. To meet the learning objectives, the course covered regional electricity market integration, cross-zonal capacity calculation and transmission charges and smart grids and related cybersecurity issues.



ONLINE COMMUNITY TRAINING



Electricity

The Regulation of the Power Sector

8 April – 17 July 2021 | Online

This 14-week course gave an overview of the fundamental concepts of power sector regulation from an engineering, economic and regulatory perspective. This online course highlighted the connection between strategic governance of the power sector and economic growth. It also provided the participants with the fundamentals for working in power sector regulation, whether in a regulatory commission, in a regulatory department within a company or as a policymaker. Led by world-class experts, the course provided the students with a comprehensive understanding of the main concepts and ideas behind sector regulation from an engineering, economic and regulatory perspective.

Evolution of Electricity Markets in Europe

21 September – 18 November 2021 | Online

This 9-week training provided insights on how European electricity markets have evolved from the onset of liberalisation until where we are today. The first generation of EU electricity network codes was an important cornerstone of this training, together with the debate around the second generation of network codes following the adoption of the Clean Energy Package (CEP). In addition, the course covered how the CEP enhances the role of DSOs and the link between electricity markets and consumers, whether individually as prosumers, or via intermediaries such as aggregators, energy communities, or others.

Organised by FSR in cooperation with ENTSO-E, the European Commission and ACER.



Energy Policy

The EU Green Deal

3 May – 24 June 2021 | Online

This 8-week FSR online Training on the EU Green Deal covered the fundamentals of energy and climate policy as reformulated in the context of the EU Green Deal. The course focused on the Green Deal measures related to climate and energy policy. Its aim was to make it easier for a wider audience of stakeholders, energy professionals, and academics to enter into the ongoing processes launched by the EU Green Deal and develop an understanding of the wide impact of the Green Deal on EU climate and energy policy.



Gas

EU Gas Network Codes

25 February – 22 April 2021 | Online

This 8-week online course focused on the implementation of the EU Gas Network Codes (NC) and on the important effort required from many participants of the market and sound competence and specialised resources. It aimed at providing participants with comprehensive knowledge about the EU Gas Network Codes thanks to experts actively involved in their development – national TSOs and ENTSOG.



Global

Regulation for Sustainable Development Goal 7

17 May – 31 October 2021 | Online

This 5-month online course analysed the multi-dimensional approach to energy access, by emphasizing the role of regulation in bringing actionable solutions to these problems. This training provided the learner with insights on how to design the appropriate policy and regulatory framework needed to achieve Sustainable Development Goal 7. Learning outcomes included: understanding the interdependence of the tools available to address energy access including the technologies (traditional, clean and smart), finance, business models and regulatory instruments; and the wider impact energy access has on health, education and on overall socio-economic development.

Regulatory Delivery – Special Edition in Portuguese

12 April – 24 May 2021 | Online

This 7-week course shared optimal governance models experienced in Europe for the energy transition while comparing them with innovative initiatives in South America, Asia, and Africa. During the course, participants reviewed increasingly complex infrastructure regulation due to public policies promoting liberalisation, decarbonisation and digitalisation. This year, we held a special edition of the training course completely taught in Portuguese.



ONLINE CLASS TRAINING



Electricity

Executive Course to Master Electricity Markets

1 March – 14 June 2021 | Online

The 5th edition of the course was redesigned to fit a new interactive online format. The course gathered a group of senior practitioners to discuss and share experiences about both the economic and political forces that drive the debate on the evolution of power and carbon markets to enable and support the decarbonisation of the power sector. The course had a very interactive approach and discussed current policy debates on the implementation of the Clean Energy Package and the challenges associated with the new Green Deal, the introduction of capacity mechanisms, scarcity pricing, the reforms of bidding zones, as well as the reform of renewable support mechanisms and the European Emission Trading Scheme.



Energy Policy

Annual Training on the Regulation of Energy Utilities

05 October 2020 – 24 June 2021 | Online Training

The 20th edition of Annual Training has been re-designed into a 9-month online course. The new programme focused on the fundamental principles of the regulation of the power and gas sectors through theory and practice, learning from European leaders, former regulators, leading academics and industry specialists and practitioners. Every other week, participants discussed and learned from a different instructor via two interactive live classes, a Q&A session, and a master class led by a leading expert (around 35 live sessions in total). The course was designed to ensure students had close and personalised interaction with the instructors.

Introduction to Fundamentals of Energy Regulation

12 – 29 April 2021 | Online training

This course comprehensively explained both the theory and practice of the key aspects of the EU electricity and gas regulation, across the energy cost chain from wholesale markets through to networks and retail issues. The training course was specifically designed for participants from National Regulatory Agencies, European Institutions and other public authorities looking for an introduction to, and a comprehensive overview of EU energy regulatory principles and practice. Attendees were provided with a clear understanding of the economic and legal frameworks of the European energy regulation, including an explanation of the main institutions and participants involved.

Organised by FSR and the Council of European Energy Regulators (CEER)

Summer School on Energy Systems for Young Researchers: Hydrogen and electricity in the future energy system

28 September – 1 October 2021 | Online training

The second edition of the FSR Summer School on Energy Systems for Young Researchers focused on hydrogen and electricity in the future energy system. The training analysed the role of different energy vectors, notably hydrogen and electricity, in a sector-coupled energy system and the policy and regulatory issues that they raise. During the four days of the school, lectures presenting the economic, policy and regulatory aspects were complemented by lectures dedicated to modelling and research skills. In this way, participants gathered a general overview of current developments in the European energy policy and the importance of integrating different energy end-uses and vectors to achieve the energy transition. Participants also had the opportunity to learn how to explore relevant regulatory and policy issues from concrete modelling exercises and exemplary applied research and to present their current research on the topic, receiving accurate feedback from peers and the course faculty.

Organised by FSR and the Fraunhofer Cluster of Excellence “Integrated Energy Systems”.



Gas

Clean Molecules for the Energy Transition

14 – 25 June 2021 | Online training

The Clean Molecules for the Energy Transition course from the Florence School of Regulation explored the debate around clean molecules and their uptake in strategic areas, a topic which has become an important EU policy and regulatory focus. The 2-week training offered a comprehensive overview of the development of renewable and low carbon gases in the EU and global context: relevant case studies, topical discussions and panel debates were presented by leading professionals. The class was composed by different professionals following the debate on the decarbonisation of the energy system who were interested in having a deeper understanding of the future role of gas and its support to the energy transition.



Climate

Summer school on Economic Foundations for Energy and Climate Policies

6 September – 10 September 2021 | Online training

The main objective of the School was to provide PhD students in Economics with high-level academic training on the micro-economic foundations of energy and climate policies. The School was also aimed at supporting the development of a PhD-student network for students interested in the topic, and connect them with top academics in the field. The school was organised in seven sessions of teaching by prominent academics, two sessions with policy makers, and two sessions for students' research presentations. The teaching was of a 'learning by doing' style based on instructors' papers that are considered frontier in the field, where students can see applications of methodologies and models that they have previously learned. The 26 accepted applicants were sent papers in advance for preparation for the School and had short slots to present their research (or research proposal).

Organised by FSR Climate (EUI), Universidad Carlos III, DIW Berlin, Technical University Berlin, Universidad Autónoma de Madrid, University College London and Université Libre de Bruxelles

RESIDENTIAL TRAINING



Gas

FSR-ARERA Joint Training on Gas Regulation (Focus: Italy)

3-4-5 November 2021 | Residential training

The joint training from the Florence School of Regulation (FSR) and The Italian Regulatory Authority for Energy, Networks and Environment (ARERA) provided a high-level perspective on the fundamentals of gas regulation in Europe before zooming in more closely on the Italian case. This intensive three-day residential course built on the expertise and experience of leading experts from across the sector to bring you up to speed with regulatory developments in this space, including with a view to upcoming developments.

Organised by FSR and the Italian Regulatory Authority for Energy, Networks and Environment (ARERA).

SECTION 2

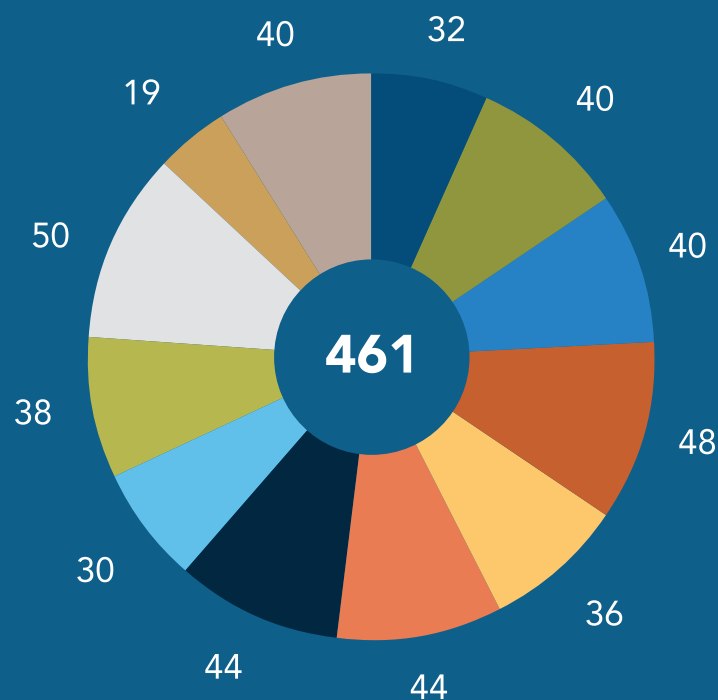
EVENTS



ONLINE AND WORLDWIDE

FSR Energy & Climate offers a vast range of opportunities for open exchanges of views on energy regulation, EU energy and climate policy and law. These events provide a platform for innovative discussion and practice-sharing, and offer opportunities for close interaction with the key stakeholders of the energy industry at various locations across Europe.

Policy events attendees



- Incentive Regulation in Network Industries
- Policy Advisory Council meeting – FSR Energy spring
- Policy Advisory Council meeting – FSR Energy autumn
- The Revision of the TEN-E Regulation
- Brexit and Electricity Trading: Preserving the Benefits of Efficient Electricity Trading after Brexit
- Methane Emissions from the Energy Sector and the EU Emission Trading System
- A Market Framework for Hydrogen
- Planning and Regulating Energy Infrastructure: A fit-for-purpose framework for the transition to 2050
- Carbon Market Policy Dialogue – Session “Carbon leakage prevention”
- Carbon Market Policy Dialogue – Session “Environmental integrity: use of offsets”
- ETS Alignment: Possible Reforms for Integration
- EU-India Smart Grid Platform on Smart Grids

Online events numbers

535

1963

758

58

219

Total 3529

FSR Series: Insights
FSR Series: Debates
Online Event
FSR Series: Talks
Webinar



POLICY EVENTS



Electricity

Incentive Regulation in Network Industries

5 November 2021 | Online | FSR Regulatory Policy Workshop

The Workshop reviewed and compared the experience with the implementation of incentive-based regulation in the energy, transport, and water sectors.



Energy Policy

The Revision of the TEN-E Regulation

12 March 2021 | Online | FSR Regulatory Policy Workshop

This workshop discussed the changes to the TEN-E Regulation proposed by the European Commission and assessed how they fare vis-à-vis the new challenges faced by the energy sector and the corresponding needs for infrastructure development.

This FSR Policy Workshop was organised in collaboration with the Copenhagen School of Energy Infrastructure.

Brexit and Electricity Trading: Preserving the Benefits of Efficient Electricity Trading after Brexit

26 March 2021 | Online | FSR Regulatory Policy Workshop

This workshop discussed which form of volume coupling is best suited for governing day-ahead trading on the borders between Great Britain and the EU/Northern Ireland. It further considered how disputes between operators/owners of interconnectors, disputes between regulators at different 'ends' of the interconnectors, and disputes between the parties to the EU-UK Trade and Cooperation Agreement might be settled in the future.

Policy Advisory Council meeting – FSR Energy

17-18 May 2021 | Online | Policy Advisory Council meeting

25-26 November 2021 | Online | Policy Advisory Council meeting

The Policy Advisory Council discusses the most topical regulatory and policy issues and debates the relevance and robustness of the latest FSR research findings.

The meeting gathers renowned academics, experts from the FSR Energy Major Donors, the European Commission, the EU Agency for the Cooperation of Energy Regulators (ACER), and National Regulatory Authorities.



Gas

Methane Emissions from the Energy Sector and the EU Emission Trading System

26 February 2021 | Online | FSR Regulatory Policy Workshop

The Workshop assessed the pros and cons of extending the EU ETS to cover methane emissions by reviewing the state of the art in measurement, reporting and verification of methane emission, with specific reference to the requirements for the inclusion of these emissions in the EU ETS, and the international experience with including methane emission in tradable quota systems. It also assessed to what extent such an inclusion in the EU ETS would be feasible and its advantages and drawbacks, and any associated challenges.

A Market Framework for Hydrogen

18 June 2021 | Online | FSR Regulatory Policy Workshop

The Workshop explored the market framework for hydrogen, focusing on how best to recognise the decarbonisation value of green, blue and turquoise hydrogen and the value of green hydrogen in pursuing the renewable energy penetration target. The potential role of a Guarantee of Renewable Origin (GROs) system in this context was also assessed, considering whether GROs could play a role in the implementation of the additionality condition and, more generally, in providing an accounting framework for the achievement of the renewable energy penetration target, allowing for any desired degree of flexibility on the resulting vector mix. Finally, the Workshop assessed how best to ensure the needed coordination of network planning and operation across the electricity, gas and hydrogen sectors, at national and EU level.

Planning and Regulating Energy Infrastructure: A fit-for-purpose framework for the transition to 2050

12 November 2021 | Online | FSR Regulatory Policy Workshop

The Workshop focused on Identifying the challenges and benefits of a holistic planning of the demand for energy network services in Europe, zooming into the planning of the hydrogen network. It also aimed at identifying the main principles for a hydrogen tariff structure which is conducive to undistorted competition and a well-functioning internal market for hydrogen.



Climate

Carbon Market Policy Dialogue – Session “Carbon leakage prevention”

9 June 2021 | Policy Dialogue

The first session of the CMPD meeting discussed “Carbon leakage prevention: free allocation and other measures”. Prior to the session, the background report “ETSs with different measures for carbon leakage prevention: implications for linking” was shared with the participants in order to help stir the discussions. The feedback received at this occasion have been used for the preparation of final version of the report after the meeting

Carbon Market Policy Dialogue – Session “Environmental integrity: use of offsets”

9 July 2021 | Policy Dialogue

The second session of the CMPD meeting discussed “*Environmental integrity: use of offsets*”. Prior to the session, the background “*ETSs with different offsets provisions: implications for linking*” was shared with the participants in order to help stir the discussions. The feedback received at this occasion were used for the preparation of final version of the report after the meeting

ETS Alignment: Possible Reforms for Integration

22 October 2021 | Technical Workshop

The fifth LIFE DICET Technical Workshop focused on the topic “Alignment: possible reforms for integration”. The primary purpose of the workshop was for the invited experts to provide valuable input and help the research team to identify, conceptualise, and discuss the topic of possible reforms for Emissions Trading Systems (ETSs) alignment and carbon market integration.



Global

EU-India Smart Grid Platform on Smart Grids

January – June – October 2021

The FSR chaired this platform, which brought together senior experts from the European and Indian side in several closed door meetings, where they discussed and deliberated key challenges on smart grid replication in India. The experts identified possible opportunities and barriers in India for replicating and up scaling of smart grid projects and solutions including: technologies; financing issues; social/acceptance issues and regulatory and policy issues. As a result, the first handbook of the platform will be published in collaboration with our knowledge partners Comillas University and Indian Smart Grid Forum.



ONLINE EVENTS



Electricity

What can Antitrust do with Big Tech & the Digital Economy?

13 January 2021 | FSR Talk

Digitalization of energy infrastructure and data interoperability: what can we learn from other sectors?

27 January 2021 | FSR Insight

Welcoming new entrants in electricity markets

24 February 2021 | FSR Insight

The different dimensions and challenges of energy systems integration

19 May 2021 | FSR Insight

Dynamic pricing in the electricity retail market

26 May 2021 | FSR Debate

Interoperability related to smart metering, electro mobility and buildings under the Green Deal

16 June 2021 | FSR Insight

Electricity markets in times of (climate) change

15 September 2021 | FSR Insight

Climate Change Litigation in Numbers

13 October 2021 | FSR Insight



Energy

Germany's Renewable Energy Sources Act 2021 – What's New?

21 January 2021 | Webinar

The Regulation of Energy Storage Across the Vectors: Maximizing Flexibility

3 March 2021 | FSR Debate

Implementing The “Energy Efficiency First” Approach

31 March 2021 | FSR Debate

[The Stranding of Gas infrastructure Assets – an Unavoidable Consequence of the Energy Transition?](#)

28 April 2021 | FSR Debate

[Solidarity and Energy Law and Policy: a Closer Look at the AG's Opinion on the OPAL case](#)

20 May 2021 | Online Event

[An Overview of Recent Energy Case Law from the CJEU](#)

11 June 2021 | Webinar

[REMIT and artificial prices: is guidance from the case law finally emerging?](#)

23 June 2021 | FSR Debate

[How Green is State Aid Control?](#)

23 June 2021 | Online event

[Gender equality and diversity in the energy transition](#)

23 September 2021 | FSR Debate

[Regulatory responsibility and the duty of care in realising the energy transition](#)

20 October 2021 | FSR Debate

[Energy Prices](#)

17 November 2021 | FSR Debate



Gas

[Are hydrogen technologies ready for accelerated deployment?](#)

20 January 2021 | FSR Debate

[The Regulation of Power-to-Gas Facilities and Regulatory Sandboxes](#)

3 February 2021 | FSR Debate

[When and how to regulate hydrogen networks? A European Energy Regulators' White Paper](#)

10 February 2021 | FSR Talk

[The Renovation Wave – making a step change on the EU's energy objectives](#)

17 February 2021 | FSR Debate

[Industry experience and prospectives in Pyrolysis](#)

17 March 2021 | FSR Debate

[The Upcoming EU Legislation on Methane Emissions – What Should Be in It?](#)

14 April 2021 | FSR Debate

Hard to measure: how can we improve monitoring of methane emissions?

21 April 2021 | FSR Insight

The stranding of gas infrastructure assets – an unavoidable consequence of the energy transition?

27 April 2021 | FSR Debate

What should be in the Commission's legislative proposal(s) on Hydrogen

12 May 2021 | FSR Debate

Unproven or underestimated? Photocatalysis for hydrogen production

2 June 2021 | FSR Talk

Taxonomy – what impact will it have

9 June 2021 | FSR Debate

Prioritising renewable electricity supply, electricity and sustainable fuels

7 July 2021 | FSR Debate

What are the consequences of the 'Fit for 55' package for citizens and industry?

6 October 2021 | FSR Debate

Competitive decarbonised gas markets – What should be in the future hydrogen legislative package

3 November 2021 | FSR Debate

Consumers engagement

24 November 2021 | FSR Talk

Gas Methane

1 December 2021 | FSR Debate



Climate

Biochar and greenhouse gas removals: what policy framework should the EU adopt?

24 March 2021 | FSR Insight

Reform of the EU ETS: does the Market Stability Reserve need a new design?

7 April 2021 | FSR Insight

EU, China & US on their way to carbon neutrality: will their implementation strategies converge?

6 May 2021 | State of the Union – fringe event

Innovation pathways, strategies and policies for the low-carbon transition in Europe

30 May – 1 June 2021 | INNOPATHS final conference

FSR Climate Annual Conference 2021

29-30 November 2021 | Academic conference

World Energy Transitions Outlook: 1.5°C Pathway, a Conversation with IRENA

2 December 2021 | Online Event

What Prospects for the global carbon markets after COP26

9 December 2021 | FSR Debate



Global

Engendering the Energy Transition

10 March 2021 | FSR Talk

Reform of the EU ETS: does the Market Stability Reserve need a new design?

7 April 2021 | FSR Talk

Global steps to end energy poverty: the 2020 energy access report

5 May 2021 | FSR Talk

OECD Reports on the Driving Performance of Energy Regulatory Authorities in Latin America

29 September 2021 | FSR Talk

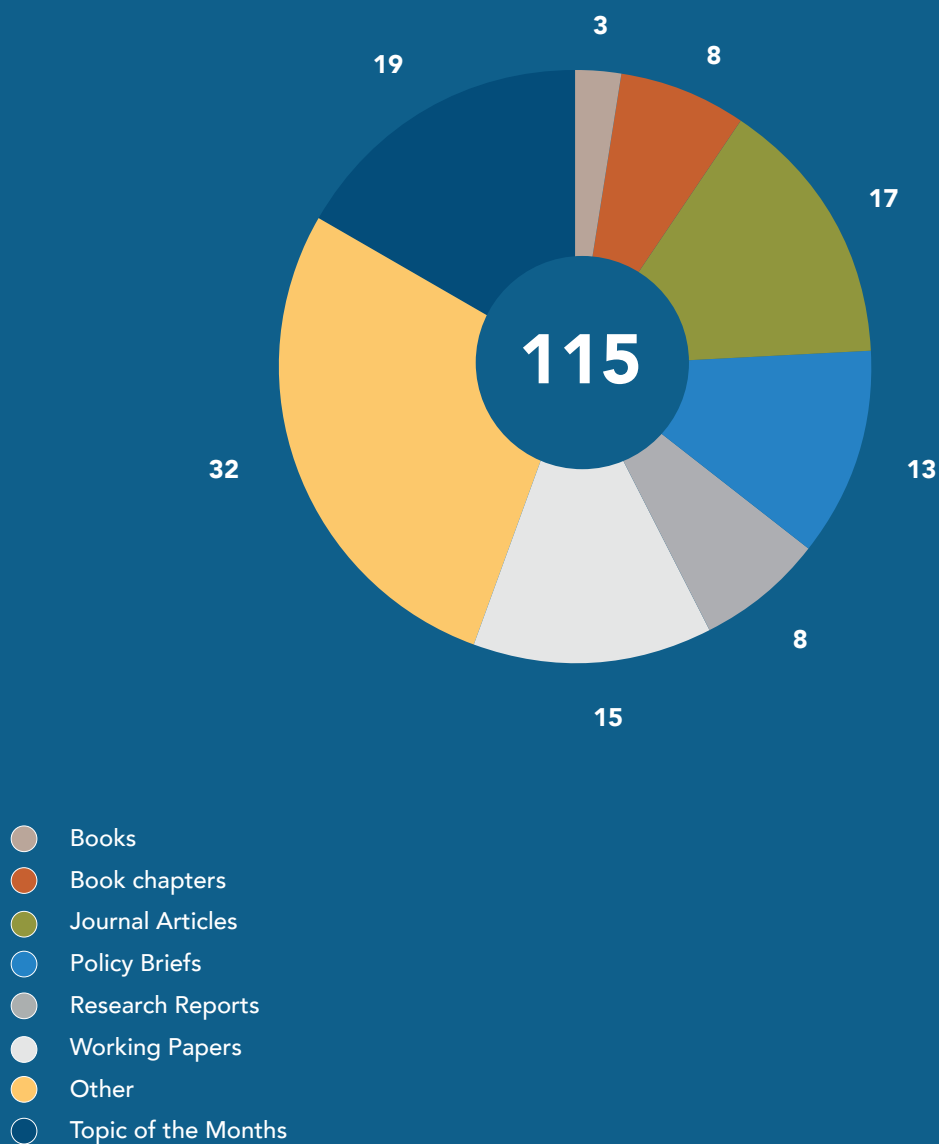
SECTION 3

RESEARCH



ONLINE AND WORLDWIDE

The Florence School of Regulation continued in its commitment to deliver meaningful and innovative insight into the most relevant energy, energy law and climate issues, tackling regulation and policy through a multidisciplinary approach.





BOOKS



Electricity

Handbook on Electricity Markets

Authors: Glachant, J.-M., P. Joskow, M. G. Pollitt
Cheltenham: Edward Elgar Publishing



Gas

Natural gas price control. Theoretical issues and world case studies

Authors: Ascari S., Motz A., Makholm J., Petrovich B., Correlje A.
Online e-book



Global

The journey to net zero. 12 perspectives from the frontline of the energy transition in Europe

Authors: Freitas J., Dabrowski J., Samuel S.
Online e-book

BOOK CHAPTERS



Electricity

Energy Network Innovation for Green Transition: Economic Issues and Regulatory Options

Authors: Jamasb, T., Llorca, M., Meeus, L., & Schittekatte, T.
In Egelund Olsen, B., H. Lund, T. Jamasb, P. Møllgaard and C. Smidt, Energy Regulation in the
Green Transition, Volume 1, Danish Utility Regulator, pp. 14-21.

Capacity remuneration mechanisms in the EU : today, tomorrow, and a look further ahead

Authors: Schittekatte, T., & Meeus, L.

In Hancher, L., A. de Hauteclocque, K. Huhta and M. Sadowska (eds), Capacity mechanisms in the EU energy markets: law, policy and economics, 2nd edition, Oxford University Press, forthcoming (link to the working paper version).

Digitalization of the electricity infrastructure: a key enabler for the decarbonization and decentralization of the power sector

Authors: Rossetto, N., and V. Reif

In Montero, J. and M. Finger (eds), A Modern Guide to the Digitalization of Infrastructure, Edward Elgar Publishing, 2021, pp. 217-265.



Energy

State aid in the energy sector

Authors: Hancher L., Salerno F.M.

In Hancher, L. and J. Piernas (eds), Handbook on European State Aid Law, 2nd edition, – Edward Elgar Publishing, 2021.

Introduction- this is Europe's Moment

Authors: Hancher L.

In Hancher L., Ottervanger T. and PJ Slot (eds), EU State Aids 6th ed, Sweet & Maxwell, 2021.

The General Framework

Authors: Hancher L.

In Hancher L., Ottervanger T. and PJ Slot (eds), EU State Aids 6th ed, Sweet & Maxwell, 2021.

The Compatibility tests under Arts 107(2) and (3) TFEU

Authors: Hancher L.

In Hancher L., Ottervanger T. and PJ Slot (eds), EU State Aids 6th ed, Sweet & Maxwell, 2021.

State Aid for Energy and the Environment

Authors: Hancher L.

In Hancher L., Ottervanger T. and PJ Slot (eds), EU State Aids 6th ed, Sweet & Maxwell, 2021.

JOURNAL ARTICLES



Electricity

New Transactions in Electricity: Peer-to-Peer and Peer-to-X

Authors: Glachant, J.-M., N. Rossetto
Economics of Energy & Environmental Policy, 10(2), 41-55.

Comunità energetiche e fonti rinnovabili

Author: Rossetto, N.
Energia: rivista trimestrale sui problemi dell'energia, 42(2), 76-83.

The regulatory framework for independent aggregators.

Authors: Schittekatte, T., Deschamps, V., & Meeus, L.
The Electricity Journal, 34(6), 106971.

Welcoming new entrants into European electricity markets.

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Making the TEN-E regulation compatible with the Green Deal: Eligibility, selection, and cost allocation for PCIs.

Authors: Schittekatte, T., Pototschnig, A., Meeus, L., Jamasb, T., & Llorca, M.
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Authors: Soroush G., Cambini C., Tooraj J., Llorca M.
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Energy

Baltic Cable AB v Energimarknadsinspektionen (C-454/18): The CJEU decides on congestion income regulation of single electricity interconnector companies and applies classic remedies for modern issues

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Author: Hancher L.

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Climate

The EU ETS and its companion policies : any insight for China's ETS?

Authors: Verde S., Galdi G., Alloisio I., Borghesi S.

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Author: Borghesi S.

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Authors: Antoci A., Borghesi S., Galdi G., Vergalli S.

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Living in an uncertain world: Environment substitution, local and global indeterminacy

Authors: Antoci A., Borghesi B., Galeotti M., Sodini M.

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Authors: Antoci A., Borghesi S., Iannucci G.

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Global virtual water trade of avocado

Authors: Caro D., Alessandrini A., Sporchia F., Borghesi S.

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Global

Expert survey on Energy Storage Systems: Regulation and policy from an Indian power sector perspective

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POLICY BRIEF



Electricity

The importance of the EU taxonomy: the example of electricity storage

Authors: Piebalgs P., Jones C.



Energy

Renewable hydrogen and the “additionality” requirement:
why making it more complex than is needed?

Author: Pototschnig A.

A snapshot of clean hydrogen costs in 2030 and 2050

Authors: Glachant J.M., Dos Reis P.C.

Financing energy system integration in Europe: the state of play and future prospects

Authors: Conti I., Kneebone J., Pirelli L., Soroush G.



Gas

Methane emissions from the coal sector during coal phase-out

Authors: Olczak M., Piebalgs A.

The regulatory approach to power-to-gas facilities

Author: Pototschnig A.

Designing an EU methane performance standard for natural gas
With Chinese translation

Authors: Mohlin K., Piebalgs A., Olczak M.

Taxonomy and natural gas : a fact-based approach to drive sustainable solutions

Authors: Jones C., Piebalgs A., Conti I.

Diversifying risk and maximising synergies in hydrogen technologies:
the case of methane pyrolysis

Authors: Conti I., Jones C., Kneebone J., Piebalgs A.

How Green is “Green LNG”

Authors: Belyi A. V., Piebalgs A., Conti I.



Climate

The biochar system in the EU : the pieces are falling into place, but key policy questions remain

Authors: Verde S., Chiaramonti D.

Linking emissions trading systems with different measures for carbon leakage prevention

Verde S., Galdi G., Borghesi S.

Will be published in November 2021

Linking emissions trading systems with different offsets provisions

Galdi G., Verde S., Borghesi S.

Will be published in November 2021

RESEARCH REPORTS



Electricity

Report on the Foundations for the adoptions of New Network Codes 1.

Authors: Reif V., Nouicer A., Schittekatte T., Deschamps V.N.A., Meeus L.
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Energy

Upgrading guarantees of origin to promote the achievement of the EU renewable energy target at least cost

Authors: Pototschnig A., Conti I.

The EU electricity network codes and guidelines : a legal perspective.- 2nd edition

Authors: Hancher L., Kehoe A. M., Rumpf J.



Gas

Sector coupling and the evolution of the gas sector : new tariffification principles for gas infrastructure?

Authors: Pototschnig A., Cervigni G., Conti I.



Climate

Emissions trading systems with different measures for carbon leakage prevention: implications for linking

Authors: Verde S., Galdi G., Borghesi S., Füssler J., Jamieson T., Soini M., Wimberger E., Zhou L.

Emission trading systems with different offsets provisions: implications for linking

Galdi G., Verde S., Borghesi S., Füssler J., Jamieson T., Soini M., Wimberger E., Zhou L.
Will be published in November 2021.



Global

Integration of Electric Vehicles charging infrastructure with distribution grid:
Global review, India's gap analyses and way forward

Authors: Jutta C., Bhagwat S.

Report 1: Fundamentals of Electric Vehicle Charging Technology and its Grid Integration

Report 2: International Review of Electric Vehicle Charging Infrastructure and its Grid Integration

WORKING PAPERS



Electricity

Participation of electric vehicle fleets in local flexibility tenders: analyzing barriers to entry and workable solutions

Authors: Gonzalez Venegas F., Petit M., Perez Y.

Rate design with distributed energy resources and electric vehicles : a Californian case study

Authors: Freitas Gomes I. S., Perez Y., Suomalainen E.

Peer-to-peer trading and energy community in the electricity market: analysing the literature on law and regulation and looking ahead to future challenges

Authors: De Almeida L., Cappelli V., Klausmann N., Van Soest H.

Electricity rate redesign in an African context : getting ready for the prosumer age.

Authors: Hendam M., Schittekatte T., Abdel-Rahman M., Zakaria Kamh M.
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Digitalization of the electricity infrastructure: a key enabler for the decarbonization and decentralization of the power sector

Authors: Rossetto N., Reif V.

A new world for electricity transactions: peer-to-peer and peer-to-x

Authors: Glachant J.M., Rossetto N.

Smart metering interoperability issues and solutions: taking inspiration from other ecosystems and sectors

Authors: Reif V., Meeus L.

China's diplomatic wisdom and multilateral efforts to tackle global climate change

Author: Zhongxiang Z.

Capacity remuneration mechanisms in the EU: today, tomorrow, and a look further ahead

Authors: Schittekatte T., Meeus L.

An energy system model to study the impact of combining renewable electricity and gas policies

Authors: Roach M., Meeus L.



Energy

The regulatory framework for independent aggregators

Authors: Schittekatte T., Deschamps V.N.A., Meeus L.

Electrification and sustainable fuels : competing for wind and sun

Authors: Belmans R., Dos Reis P. C., Vingerhoets P.

Long term interconnection, transmission rights and renewable deployment

Author: Beato P.

State aid in the context of the COVID-19 outbreak,
including the Temporary Framework 2020

Author: Bouchagiar A.



Global

Expert survey on energy storage systems : regulation and
policy from an Indian power sector perspective

Authors: Bhagwat P., Parashar A.

OTHER



Electricity

Peter Fox-Penner, Power after carbon: Building a clean, resilient grid

Author: Rossetto, N.

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Authors: Baltputnis, K., Schittekatte, T., & Broka, Z.

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Energy

Pre- Notifications, Preliminary Investigations and the Rights of Third Parties in State Aid Procedures – Beware of the Black Hole!

Author: Hancher L.

Guest State Aid Blog by Lexxion Publisher.



Gas

The upcoming EU methane legislation: A change to accelerate methane mitigation policies.

Authors: Piebalgs, A., Olczak, M.

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Will methane come to the fore at COP26? An insight on the IPCC sixth assessment report.

Authors: Olczak, M., Piebalgs, A.

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Lifting the lid on the first initiative of the EU Hydrogen Strategy: the European Clean Hydrogen Alliance

Author: Kneebone, J.

Fit for 55: EU rolls out largest ever legislative package in pursuit of climate goals.

Author: Kneebone, J.

What will be the key elements of the next EU methane legislation?

Event highlight | The Upcoming EU Legislation on Methane Emissions – What Should Be in It?

Methane has to get measured before it gets managed.

Event highlight | Hard to measure. How can we improve monitoring of methane emissions?

Upcoming EU methane legislation: agreement on the goal, but not on a pathway

Event highlight | FSR - EDF webinar: Is the EU ready for new methane legislation?

[Technology neutrality in hydrogen, opportunities and challenges: photocatalysis](#)

[Event highlight](#)

[The implications of Sustainable Finance and taxonomy for the energy industry](#)

[Event highlight](#)

[Guarantees of origin, support schemes and network regulation:
what's in the future of hydrogen regulation](#)

[Event highlight](#)

[Between Green and Blue: a debate on Turquoise Hydrogen](#)

[Event highlight](#)

[Exploring regulatory options for hydrogen networks with ACER](#)

[Event highlight](#)

[Kick-starting the deployment of electrolyzers in the
EU: is there a role for network operators?](#)

[Event highlight](#)

[Clean hydrogen should be more competitive than its alternatives](#)

[Event highlight](#)



Climate

[LIFE DICET's Report "Emissions Trading Systems with different
price control mechanisms: implications for linking"](#)

[LIFE DICET blog](#)

[Short-term impacts of carbon offsets on emissions trading
schemes: lessons from the EU for the Paris Agreement](#)

[LIFE DICET blog](#)

[LIFE DICET's Report "Emissions Trading Systems with different
levels of environmental ambition: implications for linking"](#)

[LIFE DICET blog](#)

[EU Emission Trading System \(EU ETS\)](#)

[Cover the Basics](#)

[Bridging the Atlantic: Linking European and Californian carbon markets?](#)

[LIFE DICET blog](#)

[The EU ETS needs a new autopilot: a proposed reform for the MSR](#)

[LIFE DICET blog](#)

[Leave or remain? An evolutionary approach to carbon leakage in Emission Trading Systems](#)

[LIFE DICET blog](#)

[Spotting methane emissions from the space](#)

[LIFE DICET blog](#)

[Some options and conditions for the introduction of the Carbon Border Adjustment Mechanism in the EU](#)

[LIFE DICET blog](#)

[How the CBAM changes carbon pricing within the EU](#)

[LIFE DICET blog](#)

[How to protect our transition to a decarbonized society?](#)

[LIFE DICET blog](#)

[The EU – Fit for being a \(global\) actor in Glasgow?](#)

[LIFE DICET blog](#)

TOPIC OF THE MONTH



Electricity

[Legal Challenges for Peer-to-Peer Energy Trading and Energy Communities](#)
[Peer-to-Peer, Energy Communities, Legal Definitions and Access to Markets](#)

[Authors: De Almeida L., Klausmann N.](#)

[P2P Energy Trading: Legal Challenges for Data Management and Data Protection](#)

[Authors: De Almeida L., Van Soest H.](#)

[Peer-to-peer electricity trading, Disintermediation and Platform liability](#)

[Authors: De Almeida L., Cappelli V.](#)

[Energy communities: Legal challenges for consumers and investors protection](#)

[Authors: De Almeida L., Rossetto N.](#)



Security of supply

[The modernisation of the energy infrastructure to ensure consistency with the Green Deal objectives](#)

[Authors: Nouicer A., Pototschnig A.](#)

The hunt for green electrons to reach carbon neutrality

Authors: Belmans R.

Paradigm Shift in Energy Security Agenda

Authors: Piebalgs A., Nouicer A.

Lessons learned from Texas and looking ahead

Authors: Schittekatte T.



Thirty years of electricity markets

Creating electricity markets is not so obvious

Authors: Rossetto N., Glachant J.M.

A variety of market designs for electricity across the globe

Authors: Rossetto N., Glachant J.M.

Several innovation waves transforming the electricity sector

Authors: Rossetto N., Glachant J.M.

What future for electricity markets?

Authors: Rossetto N., Glachant J.M.



Gas

Towards a Hydrogen Economy

Hydrogen demand: several uses but significant uncertainty

Author: Dos Reis P. C.

'Clean' hydrogen production: a nascent market and several promising technologies

Author: Dos Reis P. C.

Hydrogen regulation under time pressure

Authors: Piebalgs A., Jones C.

Will 2021 be a breakthrough year for global action on methane emissions?

Why is global action on methane emissions needed now?

Authors: Olczak M., Piebalgs A.

Opportunity for US-EU Cooperation on Methane Emission Control

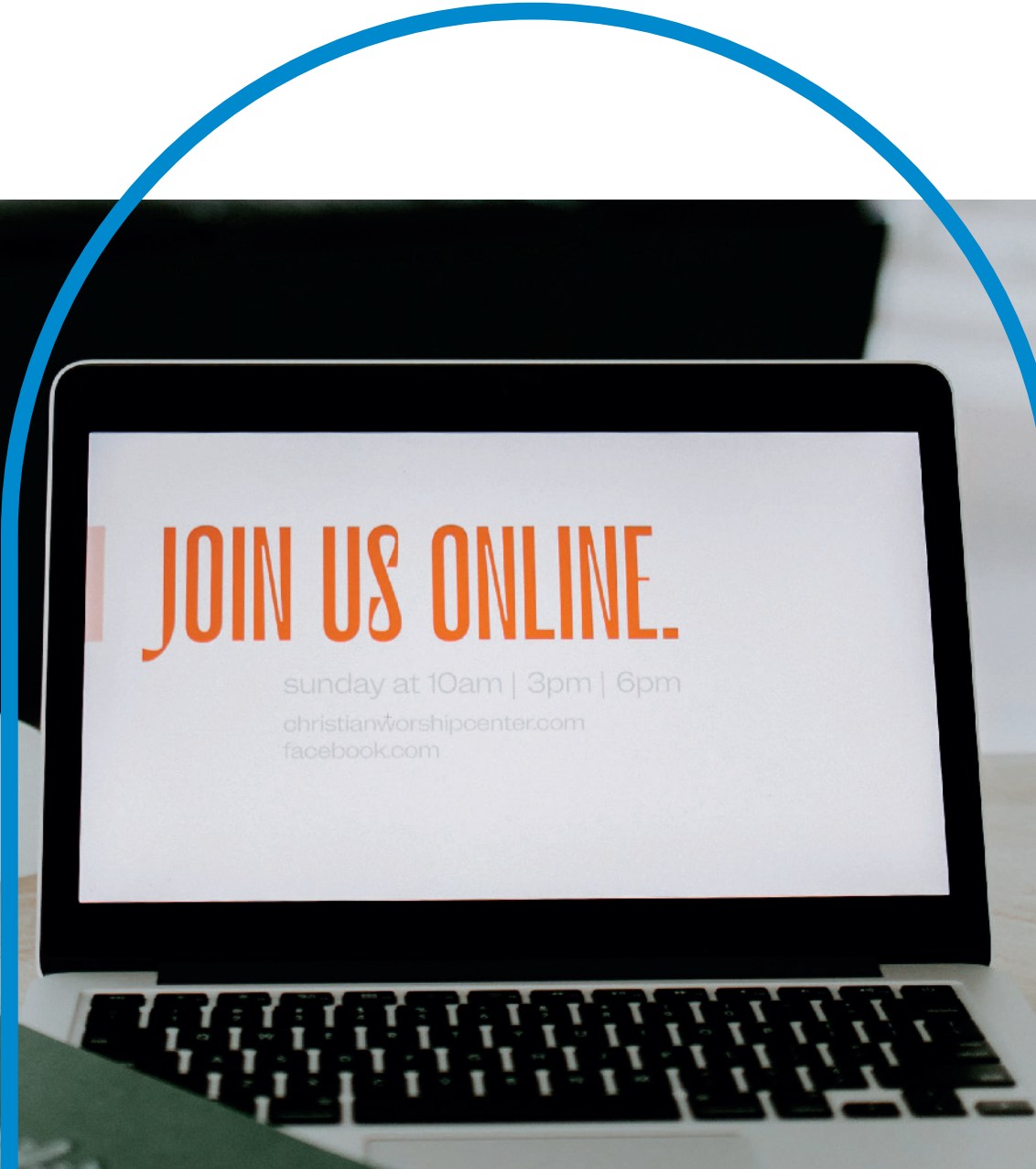
Author: Kleinberg R. L.

International Methane Emissions Observatory: a new step in limiting global GHG emissions

Authors: Caltagirone M., Piebalgs A.

SECTION 4

ONLINE ACTIVITIES

A photograph of a laptop on a wooden desk. The laptop screen displays a white background with orange text. A large blue arc graphic is superimposed over the top half of the image, starting from the left and curving over the laptop. In the foreground, a green notebook and a pen are partially visible.

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sunday at 10am | 3pm | 6pm

christianworshipcenter.com
facebook.com



VIDEOS



Electricity

Promotional video

[Evolution of electricity markets in Europe](#) | [Online course teaser](#)

Online recording

[Digitalization of energy infrastructure and data interoperability](#)

[Welcoming new entrants in electricity markets](#)

[Energy Regulation In The Green Transition: An Anthology](#)

[The different dimensions and challenges of Energy Systems Integration](#)

[Dynamic pricing in the electricity retail market](#)

[Interoperability related to smart metering, electro mobility and buildings under the Green Deal](#)

[Electricity markets in times of \(climate\) change](#)

Knowledge pill

[Paul L. Joskow on US electricity markets](#)

[Michael Pollitt on electricity markets: adapting to new technologies and policy priorities](#)

[Review of EU electricity markets](#) | [Jean-Michel Glachant](#)

[Innovation waves in the electricity sector](#) | [Jean-Michel Glachant](#)

[Global trends in climate change litigation](#) | [Joana Setzer](#)

[Climate change litigations in the US](#) | [Michael Gerrard](#)



Energy

Promotional video

[FSR online series Season 2](#)

Online recording

[Towards a consensus about the need for hybrid power markets?](#)

[Energy transition is not easy: the challenges to reach net-zero](#) | [Yannick Perez \(Centrale Supélec\)](#)

The role of gas in the energy transition | prof. Olivier Massol
Circular carbon economy | Adam Sieminski & Noura Mansouri
EVs and Shared Mobility hand-in-hand Towards Mobility Decarbonization | Ramteen Sioshansi
Implications of the energy transition on the Future of the Oil Industry | Adam Sieminski
The New Energy and Climate Landscapes | Yukari Yamashita
10th FSR Annual Conference | Powering Europe's Recovery | Keynote Speech by Alessandro Carano
10th FSR Annual Conference | Round table discussion with the FSR Areas Directors
Big tech and the digital economy
Germany's Renewable Energy Sources Act 2021 – What's New?
Implementing The "Energy Efficiency First" Approach
The stranding of gas infrastructure assets – an unavoidable consequence of the energy transition ?
Solidarity and Energy Law and Policy: a closer look at the AG 's Opinion on the OPAL case
An Overview of Recent Energy Case Law from the CJEU
Remit and artificial prices: is guidance from the case law finally emerging?
How green is state aid control?
Gender equality and diversity in the energy transition

Knowledge pill

EU Green Deal - Episode 1 | #coverthebasics
EU Green Deal - Episode 2 | #coverthebasics
Electricity markets in the EU - Episode 1 | #coverthebasics
Electricity markets in the EU - Episode 2 | #coverthebasics
Gender and equality in the energy transition: interviews with the experts

Video lecture

Role of hydrogen in the European Green Deal | Prof. J.M. Glachant



Gas

Promotional video

Clean Molecules for the Energy Transition

Online recording

Are hydrogen technologies ready for accelerated deployment?

The Regulation of Power-to-Gas Facilities and Regulatory Sandboxes
When and how to regulate hydrogen networks? A European Energy Regulators' White Paper
The Renovation Wave - making a step change on the EU's energy objectives
The Regulation of Energy Storage Across the Vectors: Maximizing Flexibility
Industry experience and perspectives in Pyrolysis
The Upcoming EU Legislation on Methane Emissions – What Should Be in It?
Hard to measure: how can we improve monitoring of methane emissions?
The stranding of gas infrastructure assets – an unavoidable consequence of the energy transition ?
What should be in the Commission's legislative proposal(s) on Hydrogen
Unproven or underestimated? Photocatalysis for hydrogen production
Taxonomy - what impact will it have?
Prioritising renewable electricity supply, electricity and sustainable fuels
Is the EU ready for new methane legislation?
What are the consequences of the 'Fit for 55' package for citizens and industry?



Climate

Online recording

Biochar and greenhouse gas removals: what policy framework should the EU adopt?
Reform of the EU ETS: does the Market Stability Reserve need a new design?
EU, China and US on their way to carbon neutrality: will their implementation strategies converge?
Innovation Pathways, Strategies and Policies for the Low-carbon Transition in Europe

Interviews

China launches the world's largest emissions trading system | Qian Guoqiang, SinoCarbon
California's Compliance Offsets Program | Jason Gray, CARB
Offsets, environmental integrity and ETS linking under the Paris Agreement | Derik Broekhoff, SEI



Global

Promotional video

Regulation of the Power Sector Online Course

Online recording

Fostering synergies between the European Green Deal and European Gender Strategy

Engendering the Energy Transition

Global steps to end energy poverty

OECD Performance Assessment Framework for Energy Regulators: Peru, Mexico and Brazil

'Book Launch: Renewable Energy in India: Economics and Market Dynamics'

PODCASTS



Energy

Five keys to understand the current power system | Jean-Michel Glachant

Speed And Speed Management In European Road Safety Policy

On the Right Track Ep 1 | What to expect from 2021 as the European Year of Rail?

Regulating Mobility-As-A Service |Matthew Daus And Matthias Finger

On The Right Track Ep 2 | What The Railway Industry Expects From The European Year Of Rail

On The Right Track Ep 3 | Overcoming Barriers Towards

International Long - Distance Passenger Rail

On The Move Ep4 – Airports As Enablers For Wider Aviation Sector Decarbonisation

Conference Highlights Energy Transition And Local Governance

Conference highlights: Energy access around the world

The Role Of Nuclear In Decarbonisation Strategies –

Michel Berthélemy (OECD Nuclear Energy Agency)

The Impact Of The Green Transition On The Power System And The Role Of The Governments

What does the future energy mix look like? | Keigo Akimoto (RITE)

Interview with Marina Holgado (Technical Secretariat Coordinator Of IEA Hydrogen TCP)

[The Latest On Hinkley Point A Study In State Aid To Nuclear](#)

[Foreign Investment Control In The EU](#)

[Nord Stream 2 AG v European Parliament and Council of the European Union](#)

[Energy Transition – the Commission’s State Aid Decisions on the Dutch and German Coal Phase-out Laws - Episode 1 - Dutch Decision](#)

[Energy Transition – the Commission’s State Aid Decisions on the Dutch and German Coal Phase-out Laws - Episode 2 - Germany’s Hard Coal Phase - Out](#)

[Energy Transition – the Commission’s State Aid Decisions on the Dutch and German Coal Phase-out Laws - Episode 3 - Germany’s Lignite Phase-Out](#)

[The CJEU’s Judgment In The OPAL Case: Discussing The Scope Of Energy Solidarity](#)



Climate

[Replicating LIFE DICET in China to deepen global cooperation on emissions trading | Duan Maosheng](#)

[Spot on Climate ep 1 - Carbon Border Adjustment Mechanism: its rationale and challenges | Peter Vis](#)

[Spot on Climate ep 2 - Carbon Border Adjustment Mechanism: its implementation | Peter Vis](#)

[Spot on Climate ep 3 - State-of-play on the Article 6 of the Paris Agreement | Andrei Marcu](#)

[Spot on Climate ep 4 – Paris Agreement: the role of international carbon markets | Axel Michaelowa](#)

[Replicating LIFE DICET to foster international cooperation under the Paris Agreement | Suzi Kerr](#)



Global

[Sustainable Energy for the Caribbean](#)

Net Zero

[The \(radioactive\) elephant in the room: nuclear as part of the Energy Transition In Europe?](#)

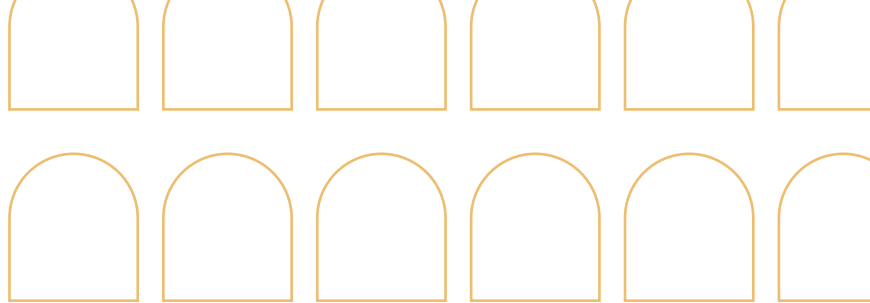
[The Role Of Finance On The Path To Net Zero In Europe](#)

[The Role Of Green Hydrogen In The Energy Transition](#)

SECTION 5

LIGHTS ON WOMEN





Highlights of 2021

3rd Lights on Women Scholarships

The annual Lights on Women scholarships aim to support motivated early- and mid-career women in their professional advancement with new or strengthened capabilities, by providing free access FSR online community courses (of their choice) starting in Autumn 2021. For the 3rd Lights on Women Scholarship programme, the FSR doubled its previous commitment, offering eight scholarships to women contributing to innovative energy solutions, research and initiatives that accelerate a sustainable, diverse, resilient and just energy transition.

Online Articles

Unlocking Europe's talent pool to foster the transition to a climate neutral economy
Feb 4, 2021

Gender Equality and the European Green Deal
Mar 8, 2021

Transatlantic cooperation post-Trump: climate change and the clean energy transition
Mar 29, 2021

Commercialising ocean energy technologies
Apr 24, 2021

Africa's energy transition and the role of women: an interview with Glory Oguegbu
Sep 16, 2021

Addressing gender equality in the energy sector
Sep 27, 2021

3rd Lights on women scholarship: meet the recipients!
Oct 1, 2021

We need systemic innovation to enable higher shares of renewables for the energy transition
Oct 6, 2021

Online Events

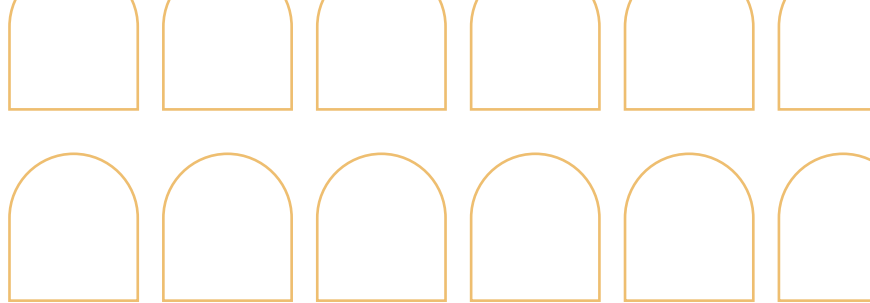
Engendering the Energy Transition
10 March 2021 | FSR Event

Gender equality and diversity in the energy transition
23 September 2021 | FSR Debate

SECTION 6

EXTERNALLY FUNDED PROJECTS





The FSR is involved in a broad range of research projects, programmes and initiatives in cooperation with other international institutions.

INNOPATHS

December 2016 – July 2021

Innovation Pathways, Strategies and Policies for the Low-Carbon Transition in Europe

INNOPATHS is a four year EU funded research project which aims to work with a range of stakeholders from government, academics and civil society, to generate new, state-of-the-art low-carbon pathways for the European Union.

INTERFACE

January 2019 – December 2022

TSO-DSO-Consumer INTERFACE architecture to provide innovative grid services for an efficient power system

The Horizon2020 INTERFACE project works around the question of how to organize the procurement of different services at both the transmission and distribution-level. Several demonstrators are being developed. FSR is in charge of the regulatory framework around such new developments and addressing market design questions.

LIFE DICET

September 2019 – September 2022

Deepening International Cooperation on Emissions Trading

The FSR Climate team is working on LIFE DICET, a project co-financed by the European Commission's Directorate-General for Climate Action (DG CLIMA) through the LIFE Programme. The project will build on and take further the results of the recently completed LIFE SIDE project, which has been supporting European policy-makers with the design and implementation of the new EU ETS legislation.

INC

May 2020 – April 2024

The purpose of this project is to develop knowledge on whether, how and why EU integration in the electricity sector is affected by the process of implementing EU legislation; and to provide policy-relevant knowledge that can be applied strategically to improve energy market regulation, and theory-relevant knowledge that will contribute to the academic research

frontier of integration and implementation in the EU. The project focuses on the development, implementation, application and consequences of EU electricity network codes.

POWEREG

June 2020 – May 2024

Regulating Power in Norway: Decentralization or centralization?

The background for this project is an emerging international trend towards more decentralized electricity system management. The project focuses on local grid companies that increasingly take a more active role in planning and managing local grid constraints. This includes more and better surveillance of the grid, new investments, and involvement of consumers and other stakeholders in production of electricity and management of demand.

OneNet

October 2020 – September 2023

One Network for Europe

OneNet is a Horizon 2020 project bringing together more than 70 European partners to create a fully replicable and scalable architecture that enables the whole European electrical system to operate as a single system in which a variety of markets allows the universal participation of stakeholders, from small consumer to large producers.

Market of a meshed offshore transmission grid connecting offshore wind farms to land.

Naturgy RES

November 2020 – October 2021

FSR is in charge of completing a study on the relative success of different approaches to the support of the development of renewable energy. The study will focus on renewable electricity, examining and benchmarking a series of major countries/States, identifying and explaining in details their support scheme(s) and then examining its effectiveness, on the basis of different criteria.

LNGnet

January 2021 – December 2023

Towards a liquid, flexible and transparent global Liquefied Natural Gas (LNG) Market

The LNGnet Project has been launched in Spring 2021 by the European Commission to support the development of a liquid, flexible, transparent and sustainable global LNG market. The Project operates within the framework of the EU's long-term objective of a climate-neutral economy, while reckoning that natural gas will certainly play a substantial role in the world's energy supplies for several decades, with LNG representing a growing share of natural gas trade. The LNGnet Project includes a Training and Technical Assistance package, aimed at deepening the engagement of partner countries in liquid and flexible global LNG trade, and to increase their understanding of EU gas and LNG market policies and practices, including on the envisaged decarbonisation of the gas sector in line with the EU's climate objectives.

Grid Singularity

May 2021 – December 2021

Decentralised, inclusive and resilient energy market

This study builds upon four research topics:

- Balancing solutions for grids with a very high share of renewables
- Aligning physical balancing and/or penalty costs
- Integration of Balancing Market with DSOs, TSOs, Aggregators and Local Market Operators
- Financial basis for determining penalties and costs

Naturgy follow-on

June 2021 – November 2021

The Naturgy follow-on project consists in an update and expansion of the hydrogen section of the “A cost-effective, citizen-centric energy policy for Europe” study, with a new report. The report will establish a comprehensive annual review of EU hydrogen market development from the EU regulatory and legal perspective.

Jean-Michel Glachant

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