# Policy workshop in national capitals (N2)

D11.27





PROGRAMME	H2020 COMPETITIVE LOW CARBON ENERGY 2017-2-SMART-
	GRIDS
GRANT AGREEMENT NUMBER	773505
PROJECT ACRONYM	EU-SYSFLEX
DOCUMENT	D11.27
TYPE (DISTRIBUTION LEVEL)	☑ Public
	☐ Confidential
	☐ Restricted
DUE DELIVERY DATE	M52
DATE OF DELIVERY	M52
STATUS AND VERSION	V1
NUMBER OF PAGES	17
Work Package / TASK RELATED	WP11/T11.5
Work Package / TASK RESPONSIBLE	WP11/EURACTIV
AUTHOR (S)	EURACTIV

#### DOCUMENT HISTORY

VERS	ISSUE DATE	CONTENT AND CHANGES
1	17/02/2022	First version

#### **DOCUMENT APPROVERS**

PARTNER	APPROVER	
EirGrid,	PMB	
EDF,		
SONI,		
VITO,		
Innogy,		
Elering,		
EDP,		
EURACTIV,		
Zabala		



#### **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	5
1. BACKGROUND	
2. PREPARATON	7
3. AGENDA	9
3.1 AUDIENCE	12
4. EVENT PROMOTION	13
5. COPYRIGHT	17



#### **ABBREVIATIONS AND ACRONYMS**

EU-SYSFLEX	Pan-European System with an efficient coordinated use of flexibilities for the integration of a large share of Renewable Energy Sources (RES)	
PMB	Project Management Board	
MEP	Member of the European Parliament	
WP	Work Package	
TSO	Transmission System Operator	
DSO	Distribution System Operator	



#### **EXECUTIVE SUMMARY**

The following report addresses the deliverable 11.27 "Policy workshop in National Capitals" associated with task 11.5 "Project events". The report summarizes activities carried out in relation to the three project webinars prepared by EURACTIV (WP11 Leader), EirGrid, EDF, other members of the PMB, project consortium and OSMOSE project partners.

The deliverable is prepared by the WP11 Leader and approved by the Project Management Board.



#### 1. BACKGROUND

After four years of the project work, partners decided to present the key project outputs and achievements during via last three project webinars. In January 2022, project partners organized workshop focused on the technical scarcities, work of the work package 2 of the project. In February 2022, as a closeout of the project, partners organized two online webinars: one complex event where the main output of the project, the roadmap was presented, and one technical event focused on the demonstrations of the project.



#### 2. PREPARATON

## Webinar #11| Mitigation of technical scarcities associated with high levels of renewables on the European power system Webinar info:

FRIDAY, 14 JANUARY 2022, 10:00-12:00 CET | TEAMS webinar

EU-SysFlex would like to invite you to a webinar on the topic of Mitigation of technical scarcities associated with high levels of renewables on the European power system.

Over 4 years of work, technical power system studies have identified various technical shortfalls when scenarios with levels of renewables beyond 50% are applied. The scarcities investigated include frequency stability, voltage stability, rotor angle stability, congestion, and restoration. Studies have been performed to test the capabilities of various flexibility solutions to mitigate these scarcities in: the Ireland and Northern Ireland power system (all scarcities), the Polish transmission system that is connected to an approximate model of neighboring countries (voltage and rotor angle), the Continental Europe (frequency and balancing).

The webinar will present the results of the recently published Task 2.6, final deliverable of WP2.

Full info and agenda to be found on the project website <u>here</u>.

#### **Preparation info:**

Leaders of the work package 2 were responsible for developing an invitation, agenda and speakers' list for the webinar. WP11 leader was responsible for the technical organization of the workshop, invitation of the participants and event promotion. The project event was promoted via the project's website, newsletter and social media. Partners were encouraged to actively invite attendees via their own communication channels. Project Management Board was informed about the scope of the webinar. Prior to webinar, WP11 leader held a Teams meeting with all of the partners involved in the event in order to discuss the structure and technical aspects of the webinar. On the day of the webinar, partners also met in a Teams webinar half an hour prior to the start of the webinar for the final check of the presentation and technical issues.

#### Webinar #12 | EU-SysFlex Final Event

#### Webinar info:

EU-SysFlex invites you to watch its final online event, which will be held in February 2022. Final event will be held on 7 February 2022 and will present the EU-SysFlex project summary and main results, introduce the Project Roadmap, and include a roundtable with high-profile speakers. Full info and agenda to be found on the project website here.

#### **Preparation info:**

Several months prior to the event, WP11 leader, project leaders (EirGrid and EDF) and roadmap leader (UCD) started meeting regularly to prepare the final event. Initial plan was to organize such an event as a physical presentation and discussion on the project outcomes. However, due to the situation around the COVID-19, after several discussions between project partners, WP11 partners in Brussels (EURACTIV.com), it was decided to move the event into the online sphere. Project leaders worked closely on the agenda, list of speakers, invitation of the roundtable speakers, moderator, and promotion of the event, PMB was regularly informed about the progress.

Presentation of the project outcomes was supported by the final project video developed within the WP11.

WP11 leader was responsible for the technical organization of the workshop, invitation of the participants and event promotion. The project event was promoted via the project 's website, newsletter and social media. Partners were encouraged to actively invite attendees via their own communication channels. Project Management Board was informed about the scope of the webinar. Roadmap leader developed a template for the event presentation, using the graphic elements developed by the graphic designer. Other speakers then worked with the template to prepare the slides for the event. Presentation went through final check by the leaders of the project and WP11 leader. Project leaders developed a list of the supporting documents and set of questions for the speakers and moderator of the roundtable discussion.

Prior to webinar, WP11 leader held a Teams meeting with all the partners involved in the event to discuss the structure and technical aspects of the webinar. A preparatory call with the moderator of the roundtable was organized as well. On the day of the event, partners also met in a Teams meeting half an hour prior to the start of the webinar for the final check of the presentation and technical issues.

## Webinar #13 | EU-SysFlex Final Technical Event on Project Demonstrations Webinars info:

EU-SysFlex would like to invite you to its final technical event, which will be held on 14 February 2022 and will present the results of the EU-SysFlex demonstration projects.

Increasing the flexibility of the pan-European system requires a comprehensive and all-encompassing vision that extends across a broad portfolio of new approaches, solutions and technologies. EU-SysFlex provides this by demonstrating different business use cases in seven field tests at all system levels and across Europe: Portugal, Germany, Italy, Finland, France, Poland and Estonia as well as a qualification trial process in Ireland and Northern Ireland.



The demonstrations and trials provide evidence of how the timely provision of required system services will be achieved using new approaches to coordinate the resources, actors and new technology mixes that will be present in the future European system. This involves testing new concepts, tools and a wide range of flexibilities including centralized pump storage plants, batteries, wind and photovoltaics (PV), heat loads, electric vehicles (EV). The interaction between the system layers and actors, and the replicability of concepts and approaches is also addressed.

Full info and agenda to be found on the project website <u>here</u>.

#### **Preparation info:**

As a part of the final presentations of the project outcomes, it was decided to hold a final technical event focused on the demonstrations of the EU-SysFlex project. Technical manager of the project discussed the proposals during several months with the Demonstration Board of the project. After finalization of the proposal, technical manager and WP11 leader started their work on the organization of the online event. During the regular calls, partners finalized the agenda, speakers list and technicalities. Technical manager developed a template of the presentation for the event, and demonstration leaders incorporated the slides within this template. Presentation went through final check by the technical manager and WP11 leader. Project Management Board (PMB) was regularly informed about the progress.

As already established, WP11 leader was responsible for the technical organization of the workshop, invitation of the participants and event promotion. The project event was promoted via the project 's website, newsletter and social media. Partners were encouraged to actively invite attendees via their own communication channels.

Prior to webinar, WP11 leader held a Teams meeting with all of the partners involved in the event in order to discuss the structure and technical aspects of the webinar. On the day of the webinar, partners also met in a Teams webinar half an hour prior to the start of the webinar for the final check of the presentation and technical issues.



#### 3. AGENDA

As each of the mentioned webinars was focused on the different work of the project agendas differed from webinar to webinar. Agendas were developed and approved by all partners involved.

#### **SPEAKERS LISTS AND AGENDAS**

#### Webinar #11 | Mitigation of technical scarcities associated with high levels of renewables on the European power system

- John Lowry, Project Director, EirGrid
- Marie-Ann Evans, Technical Manager, EDF
- David Corcoran, Senior Engineer, EirGrid
- Grégoire Prime, Research Engineer, EDF
- Ye Wang, Research Engineer, EDF
- Caroline Bono, Senior Engineer, EDF
- Mateusz Skwarski, Power System Analyst, PSEi
- Invitation and project overview presentation by project director John Lowry, EirGrid
- Overview of scarcities identified in the power system at high RES and mitigating flexibilities tested in the EU-SysFlex project by Technical Manager, Marie-Ann Evans, EDF
- Inertia and frequency stability mitigations for Continental Europe, Grégoire Prime and Ye Wang, EDF
  - Q&A
- Voltage and rotor-angle stability mitigations for Continental Europe, Mateusz Skwarski, PSE
  - o 0&A
- Frequency and voltage stability mitigations and congestion management for the Island of Ireland, David Corcoran, EirGrid
  - Q&A
- Supporting balancing with new flexibilities for large shares of variable RES integration in Europe, Caroline Bono, EDF
  - Q&A
- Key findings on flexibilities for the power system, Marie-Ann Evans, EDF

#### Webinar #12 | EU-SysFlex Final Event

- John Lowry, Project Director, EirGrid
- Maroš Šefčovič, Vice-President of the European Commission for Interinstitutional Relations and Foresight
- Marie-Ann Evans, Project Technical Manager, EDF
- Amir Moshari, Senior Power System Researcher, UCD
- David Corcoran, Chartered Senior Lead Power Systems Engineer, EirGrid
- Helena Gerard, Senior Researcher, VITO
- John Wallace, EirGrid
- Jacek Wasilewski, Expert, PSE
- Maik Staudt, Project Manager, MITNETZ STROM
- Miguel Jorge Marques, Head of Business Development, EDP
- Kalle Kukk, Senior Advisor, Elering
- Elaine O'Connell, Policy Coordinator, Internal Energy Market, DG ENER, European Commission
- Norela Constantinescu, Head of Innovation Section, ENTSO-E, European Commission
- Vera Silva, Chief Technology Officer, GE Grid Solutions
- Liam Ryan, Chief Innovation and Planning Officer, EirGrid
- Carmen Munoz, R&D Deputy Director, EDF
- Frédéric Simon, Editor, Energy & Environment, EURACTIV
- Seán Kelly, Member of European Parliament (EPP)

Time	Title	Leader/Speaker
14:00	Introduction and welcome	John Lowry, Project director, EirGrid
14:05	Opening remarks (pre-recorded video)	Maroš Šefčovič, Vice-President of the European
		Commission



14:10	EU-SysFlex project summary and main results	Marie-Ann Evans, Technical manager of the
	Project Final Communication Materials (TBC)	project, EDF
14:25	European power system flexibility roadmap: an introduction to the key messages	Amir Moshari, UCD
	Technical scarcities & Required flexibility	David Corcoran, EirGrid
	Financial gaps	Marie-Ann Evans, EDF
	Market evolution	Helena Gerard, VITO
	New operating tools	John Wallace, EirGrid and Jacek Wasilewski, PSE
	TSO-DSO coordination	Maik Staudt, Mitnetz strom
	Aggregation of distributed resources	Miguel Jorge Marques, EDP
	Data management	Kalle Kukk, Elering
15:35	Q&A (Slido)	John Lowry, EirGrid
15:45	Stakeholder roundtable discussion	<ul> <li>Moderator: Frédéric Simon, Editor, Energy &amp; Environment, EURACTIV</li> <li>Speakers:         <ul> <li>Elaine O'Connell, Policy Coordinator, Internal Energy Market, DG ENER,</li> <li>Norela Constantinescu, Head of Innovation Section, ENTSO-E, European Commission,</li> <li>Vera Silva, Chief Technology Officer, GE Grid Solutions,</li> <li>Liam Ryan, Chief Innovation and Planning Office, EirGrid,</li> <li>Carmen Munoz Dormoy, R&amp;D Deputy Director, EDF</li> </ul> </li> </ul>
16:30	Closing speech: Thanks Presentation of Brochure & Video, Roadmap	Video from Seán Kelly, MEP, John Lowry, EirGrid
16:35	Closing of the Project Final Event	

#### Webinar #13 | EU-SysFlex Final Technical Event on Project Demonstrations

- Marie-Ann Evans, EDF
- Maik Staudt, Mitnetz Strom
- Sebastian Wende-von Berg, Fraunhofer
- Simone Tegas, e-distribuzione
- Marino Carla, E-GI&N NT&I
- José Villar, INESCTEC
- Susete Albuquerque, E-REDES
- Mateusz Skwarski, PSE Innowacje
- Ye Wang, EDF
- Miguel Jorge Marques, EDP
- Michael Wenzel, Siemens Energy
- Oliver Ojala, Helen
- **John Wallace**, Eirgrid

## **Project summary and main outcomes**, Marie-Ann Evans (EDF), 15 min **DSO Demos main objectives, results, challenges** 45 min (15 min each)

- German demonstrator: Flexibility of active and reactive power from HV distribution grid to EHV transmission grid, Maik Staudt (Mitnetz Strom), Sebastian Wende-von Berg, (Fraunhofer)
- Italian demonstration: Flexibility services provision from resources connected to the MV DSO network, Simone Tegas (e-distribuzione)



 Portuguese FlexHub: A short- and long-term TSO-DSO coordination platform, José Villar (INESCTEC) and Miguel Louro (E-Redes)

#### TSO-DSO Round table 20 min

- Challenges for the flexibility in the enhanced TSO-DSO coordination key outcomes of the Dispatcher Training Simulator Sessions, Mateusz Skwarski (PSE Innowacje)
- Demos and supporting Key messages around TSO-DSO coordination TM-demo leaders

#### VPP Demos main objectives, results, challenges 45 min (15 min each)

- French VPP demonstration multi-services provision by multi-resources, Ye Wang (EDF)
- Portuguese Virtual Power Plant: Unlocking flexibility at a utility-level, Miguel Jorge Marques (EDP) and Michael Wenzel (Siemens Energy)
- Finnish Demo: Market based integration of distributed resources in the transmission system operation, Oliver Ojala (Helen)

#### VPP Round table: 20 min

- Qualifier Trial Process: Ireland & Northern Ireland, John Wallace (Eirgrid)
- Demos and supporting Key messages around aggregation and new flexibilities TM-demo leaders

#### CCL and next steps, overcoming the barriers to scalability, Marie-Ann Evans (EDF) 5 min



## EU-SysFlex webinar | Mitigation of technical scarcities associated with high levels of renewables on the European power system

FRIDAY, 14 JANUARY 2022, 10:00-12:00 CET | TEAMS webinar EU-SysFlex would like to invite you to a webinar on the [...]
7.DECEMBER.2021 EVENTS



#### **SAVE THE DATE | EU-SysFlex Final Webinars**

EU-SysFlex would like to invite you to its last two webinars, which will be held in February 2022. First webinar [...]

18.JANUARY.2022 EVENTS

### Watch EU-SysFlex Final Technical Event



Presentations

EU-SysFlex invites you to watch its final technical event, which will present the results of the EU-SysFlex demonstration projects.



#### **3.1 AUDIENCE**

Several rounds of invitations were sent by the WP11 leader, and project partners were asked to share the invitations with their contacts as well.

#### Webinar #11| Mitigation of technical scarcities associated with high levels of renewables on the European power system

- 91 attendees on Teams
- 365 views on Facebook, LinkedIn, Twitter, website

List of the companies, institutions present: Aarhus University, ACER, Artelys, Aurora Energy Research, Bord na Móna climote Limited, Danish Energy Agency, DEMAND RESPONSE ASSOCIATION OF IRELAND, EDF, EDF R&D, EDP, Eirgrid plc, Elering AS, ELES, EnBW / RUB, Energia Renewables, EPRI - Electric Power Research Institute, ESADE, ESB, EURACTIV Slovakia, European Commission, EVN, Fortum Power and Heat Oy, Futurenergy Ireland, GESTERNOVA, Hanwha Energy Corporation Ireland Limited, HSE, International Energy Agency, JRC, KPMG Sustainable Futures, Mutual Energy, NIE Networks, Northern Ireland Electricity Networks , OATI, Omie, PSE S.A., QUB, REN – Rede Eléctrica Nacional, S.A., Riga Technical University, Rte, Siemens AG, SMA Solar , SONI Ltd., SP Renewables, SPP, SSE, Statkraft Ireland, TOSHIBA ENERGY SYSTEMS AND SOLUTIONS CORP., TUS - Technical University of the Shannon, University College Dublin, University of Ljubljana, VIOTAS, VITO, Whitethorn, World Bank.

#### Webinar #12 | EU-SysFlex Final Event

- 212 attendees on Teams
- 1 236 views on Facebook, LinkedIn, Twitter, website

#### List of the companies, institutions present:

3d-Hydro Engineering, Aarhus University, ACER (The European Union Agency for the Cooperation of Energy Regulators), AECO, AEGEE-Warszawa, Akka Technologies, Amprion, APG, Artelys, AST, Bayernwerk AG, Bord na Móna, Brigham Young University, CGI, ČEPS, ČEZ, Deutsche Energie-Agentur, E-distribuzione, E-REDES, E.DIS AG, E.DSO, E.ON, ECA, EDF, Edisys, EDP, EDSN, Eesti Teadusagentuur, EIHP, EirGrid, Electrical Power Engineer, Elenia, Elering, Enedis, Enefit ,Enel, Energia, Energiforsk, Energinet, EnergyVille ,ENGIE, ENS Rennes, ENTSO-E, enviaM, Environmental Coalition on Standards, EPEX SPOT, ESADE, ESB, EUGINE, EURACTIV France, EURACTIV Poland, EURACTIV.com, European Commission, Fingleton White, Flogas Electricity, Fluxys, Fondazione Bruno Kessler, Fortum, Fraunhofer IEE, General Electric, Helen, Hume Brophy, Ibox Energy, Imperial College London, INESC TEC, Instituto de Investigación Tecnológica , King's College London, KPMG Ireland, KU Leuven, Litgrid, Marie Curie Sklodovska University, Masaryk University, MITNETZ STROM, Mott MacDonald, Munster Technological University, Mutual Energy, Navigator Gas, NET ZERO ENERGY, Petrocom Energy Group , PLUTINSUS, Politechnika Wrocławska, PSE, R&D Nester, Recognis, Red Eléctrica de España, REN, ResearchGate, RISE, RSE, RTE, RTU, Siemens, Slovenská elektrizačná prenosová sústava, SONI, SSE, Statnett, SuperGrid Institute, Tartu Ülikool, TenneT, The DRAI, Tilburg University, TNO, Transition Technologies S.A., TransnetBW, Trialog, TrønderEnergi, UBITECH, UCD Connect, Universidad Nacional de Colombia, Universidad Pontificia Comillas, Université Paris-Est Créteil, University College Dublin, Uniwersytet Gdański, Uniwersytet Jagielloński, Uniwersytet Wrocławski, VIOTAS, VITO, WindEurope, World Bank, Zabala Innovation.

#### Webinar #13 | EU-SysFlex Final Technical Event on Project Demonstrations

- 86 attendees on Teams
- 222 views on Facebook, LinkedIn, Twitter, website

List of the companies, institutions present: ebIX, Austrian Power Grid AG, IDAE, Mitteldeutsche Netzgesellschaft Strom mbH, Fortum Power and Heat Oy, CGI, Riga Technical University, KU Leuven, Siemens AG, Engie, REN - Rede Eléctrica Nacional, S.A., EDF, REN, S.A., EDF, Fluxys, Bord na Móna, AST, MITNETZ STROM, Riga Technical University ,Enefit Connect OÜ, European Commission, REN, Sullane Grid Solutions, EC — ENER, PSE S.A., ENDESA, S.A., CGI, Imperial College London, VITO, University College Dublin, SEPS, Skagerak Energi AS, Skagerak Kraft AS, EDP NEW R&D, EDP, WRD Wobben Research and Development GmbH, Helen Sähköverkko, Oy, ACER, E-REDES, Rse, Helen Electricity Network Ltd., Zabala Innovation, Siemens Energy, enel, Bayernwerk Natur GmbH, EirGrid plc, University of Western Macedonia, ProEnergy, NCBJ, AST, AKKA, RSE Ricerca sul Sistema Energetico, Enoco, ESADE, AS Augstsprieguma tīkls, SMA Sunbelt, Fraunhofer IEE, EON, EirGrid ,EDP Produção, Transition Technologies - Systems sp. z o.o., Ricerca Sistema Energetico - RSE S.p.A., SEPS a.s., Ricerca sul Sistema Energetico - RSE S.p.A.



#### 4. EVENT PROMOTION

To ensure the most varied and appropriate audience composition, the events were promoted in various ways **prior to its start:** 

- Several rounds of the invitations were sent by the WP11 leader,
- Project Coordinator shared the invitation with the Advisory Board of the project,
- Partners were encouraged to actively invite attendees via their own communication channels,
- Event was promoted on the EU-SysFlex social media channels, in the project newsletter and partners were asked to promote the event via their own channels,
- Information about the event was published on the project website and social media channels,
- Webinars were livestreamed on the project website and social media channels,
- Information on the project event was published in the RGI Newsletter.

#### After the event:

- Recordings of the webinars, presentations, videos were made available on the project website and social media channels,
- All registered participants received a thank you email with the links to the outputs mentioned above,
- In the case of the final webinar:
  - Technical manager of the project Marie-Ann Evans developed a blogpost presenting the key takeaways from the webinar,
  - EURACTIV Slovakia published an article focusing on the topics of the final event,
  - EURACTIV Brussels published an <u>article</u> based on the final event of the project, which will be followed up by the number of the pieces focusing on the topics related to the EU-SysFlex project,
  - <u>Videos</u> from the Mr. Commissioner Šefčovič and MEP Kelly were published on the project website and social media channels of the project and partners.

#### Recordings of the webinars:

Webinar #11| Mitigation of technical scarcities associated with high levels of renewables on the European power system <a href="https://eu-sysflex.com/webinar-mitigation-of-technical-scarcities-associated-with-high-levels-of-renewables-on-the-european-power-system/">https://eu-sysflex.com/webinar-mitigation-of-technical-scarcities-associated-with-high-levels-of-renewables-on-the-european-power-system/</a>

#### Webinar #12 | EU-SysFlex Final Event

https://eu-sysflex.com/eu-sysflex-final-webinar/

#### Webinar #13 | EU-SysFlex Final Technical Event on Project Demonstrations

https://eu-sysflex.com/watch-eu-sysflex-final-technical-event/

#### Watch EU-SysFlex Final Event



Presentations

present the EU-SysFlex project summary and main results, introduce the Project Roadmap, and include a roundtable with high-profile speakers.

#### Watch EU-SysFlex Final Technical Event

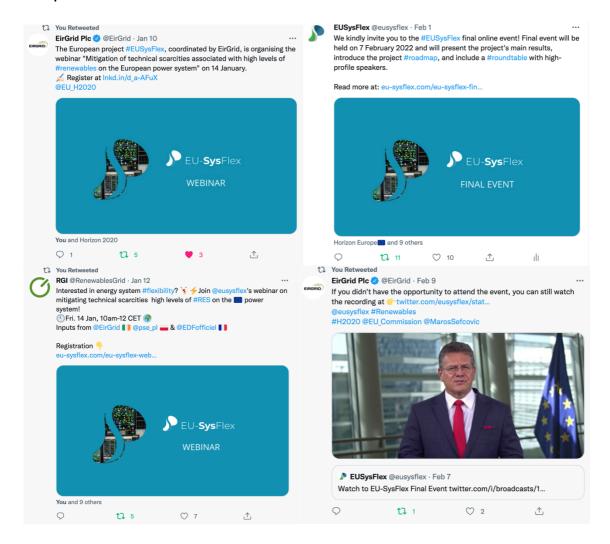


Presentation

 $\hbox{EU-SysFlex invites you to watch its final technical event, which will present the results of the \hbox{EU-SysFlex} demonstration projects and the \hbox{EU-SysFlex} demonstration projects are the results of the \hbox{EU-SysFlex} demonstration projects are the results are$ 

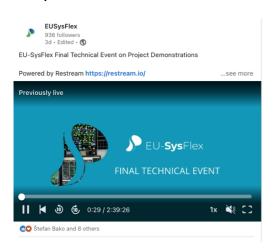


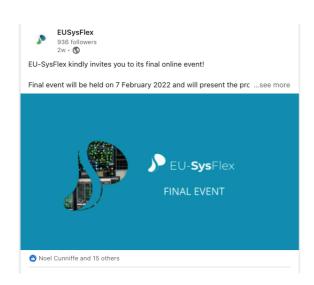
#### **Example Tweets:**

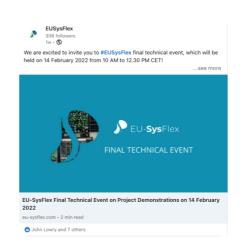




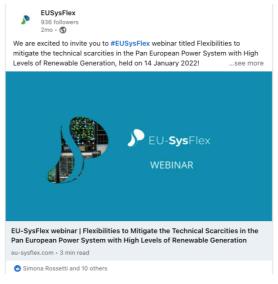
#### **Example LinkedIn Posts:**



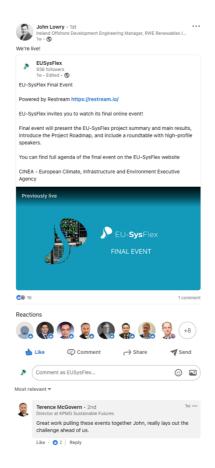




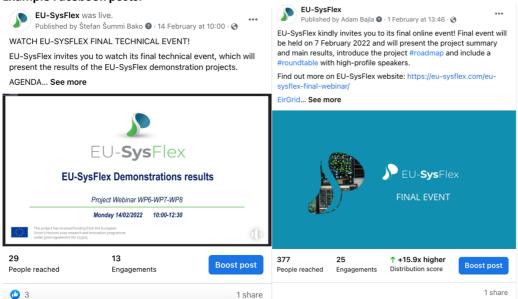








#### **Example Facebook posts:**





#### 5. COPYRIGHT

Copyright © EU-SysFlex, all rights reserved. This document may not be copied, reproduced, or modified in whole or in part for any purpose. In addition, an acknowledgement of the authors of the document and all applicable portions of the copyright notice must be clearly referenced.

Changes in this document will be notified and approved by the PMB. This document will be approved by the PMB.

The EC / Innovation and Networks Executive Agency is not responsible for any use that may be made of the information it contains.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under EC-GA No 773505.