



## **ETIP SNET**

European Technology and Innovation Platform Smart Networks for Energy Transition

Annual Activity Report 2023

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## ETIP SNET in brief

## **ETIP SNET**

#### **ETIP SNET in brief**

Established with the vision of revolutionizing Europe's energy systems, the European Technology and Innovation Platform on Smart Networks for Energy Transition (ETIP SNET) was established to **foster collaboration between key stakeholders to guide research, innovation and development in smart energy networks**, ensuring that they are **efficient, resilient and capable of meeting modern demands, as requested within the SET Plan priorities**. The ETIP SNET pursues its mission through six different Working Groups representing the main areas of interest.

#### **HIGHLIGHTS OF ETIP SNET IN 2023**

- ★ New ETIP SNET Secretariat appointed in September 2023
- ★ Publication of Mapping progress in the energy system
- \* Revision of the ETIP SNET Roadmap and ETIP SNET R&I Implementation Plan
- ★ Publications within working groups
- ★ Signed 7 partnerships with external stakeholders
- ★ Organisation of recurrent Executive Committee and Governing Board meetings
- ★ Organisation of 2 regional workshops
- \* Active participation in external events
- \* Renewal of ETIP SNET chairmanship and revamping of the ETIP SNET Governing Board membership



## Main Achievements of 2023

## **ETIP SNET**

## ETIP SNET publications in 2023

ETIP SNET publishes **3 documents** that consolidate the views of more than **350 stakeholders** to guide and identify **research and innovation R&I priorities** and address the innovation challenges for the energy system:

1

#### Mapping progress in energy systems research and innovation

Evaluates the progress of European Research and Innovation projects in relation to the ETIP SNET R&I Roadmap and the ETIP SNET Implementation Plans. The current report was published in July 2023 as a continuation of the progress monitoring report published in 2021.





#### **ETIP SNET R&I Roadmap**

Describes the 10-year path towards a decarbonised energy system and is regularly revised. The current Roadmap version was published in March 2023, and covers the 2022-2031 time horizon.

2

3

#### **ETIP SNET R&I Implementation Plan**

Describes in more detail the most urgent R&I needs for the next 3-4 years and is revised every 2 years. The current Implementation Plan version was published in August 2023 covers the 2025-2028 timespan with a total overall proposed budget of 954 M€ for R&I.



#### ETIP SNET WG Publications in 2023

In 2023, the ETIP SNET Working Groups, published the following documents:

WG1

#### Hydrogen's impact on grids - Impact of hydrogen integration on power grids and energy systems

The report, published by WG1 in **July 2023**, focuses on the impact of hydrogen on electricity grids, underlining the importance of clear discussions on hydrogen options and the need for regulations for hydrogen systems.

#### **Energy storage systems - KPI assessment and prioritisation of R&I targets**

The position paper, published by WG2 in **March 2023** analyses different energy storage and conversion technologies, highlighting their benefits, potential applications and specific challenges, while prioritising and proposing specific actions to address them.

WG2

WG4

#### **Energy Data Space policy paper**

The policy paper, published by WG4 in **December 2023**, provides a short technical introduction to the topic of Energy Data Spaces and provides references for a deeper analysis, focusing on the identified opportunities, challenges and necessary actions for a rapid deployment of a common European Energy Data Space.

#### Regulatory sandboxes policy paper

The policy paper, published by WG5 in **July 2023**, examines regulatory sandboxes in the energy sector, and outlines their essential role in promoting innovation and competition, by presenting successful examples of regulatory sandboxes in different countries and preferred tools for conducting experiments.



#### ETIP SNET WG's results achieved in 2023



#### Reliable, economic and efficient energy system

Publishing of the paper <u>Hydrogen's impact on arids</u> (July 2023)

- Contributions to ETIP SNET WG4 paper Energy Data Spaces and ETIP SNET WG5 paper Regulatory Sandboxes
- Preparatory work for the paper on Energy Communities' impacts on grids



## Storage technologies and system flexibility

 Publishing of the paper <u>Energy storage</u> systems, <u>KPI assessment and prioritisation of</u> <u>R&I targets</u> (March 2023)



#### Flexible generation

• Drafting of the focus paper *Ramp-up of H2* based power generation

3





### Digitalisation of the electricity system

' Achievments

- Publishing of the policy paper on <u>Energy Data</u>
   <u>Space</u> supported by an industry-driven
   questionnaire (December 2023)
- Launched a new task force to work on a playbook, describing best practices to increase engagement in the digitalization and customer participation
- Launched a new Task Force on Digital Skills, with the aim of supporting the skills coverage by the digitalization of the Energy System



## Innovation implementation

- Reporting results, data and papers and report in EIRIE platform, and configuration of Maturity Index Tool outside of the EIRIE platform
- Preparatory work for the paper on Energy Community as catalysts of the energy transition
- Publication of the policy report <u>Regulatory</u> <u>Sandboxes</u> (July 2023)

5



#### National Stakeholder Coordination Ground

Key Achievments

Organisation and conduction of a series of **3** stakeholders events dedicated to local flexibility. 2 events were virtual (April 2023 and may 2023) and one was in presence (July 2023 in Rome). The events touched upon the needs for local flexibility within Smart Grids, as well as related technologies, policies and regulatory aspects.

## ETIP SNET achievements with external partnerships

#### Large Scale Partnership on Digital skills

- Participation of ETIP SNET in the start-up event on Dec 14th
- Ongoing registration in the EU Pact for skills

#### CIRED

· Signed the Memorandum of Understanding to enhance understanding of the needs of energy system users, promote efficient R&D efforts, facilitate insights into the energy transition and global trends, support working groups with expert contributions, and collaborate on joint deliverables to advance Smart Grid progress.

#### **ETIP WIND**

- · Identification of overlaps and synergies between ETIP SNET and ETIP WIND
- Launched call for interest to WG members to collaborate with ETIP WIND on common areas of work

#### **RES Partnership**

· Contribution by ETIP SNET on new/future/emerging skills and job profiles

#### **2Zero Partnership**

- First explorative meeting with EGVIA
- Participation to the EGVIA TransEU Corridor event on Nov 24th

#### **ETIP FORUM**

- Contribution by ETIP SNET on the recommendations on the revised SET Plan
- Contribution by ETIP SNET on the recommendations on the NECPs R&I priorities

#### ISGAN

· Signed the Memorandum of Understanding to enhance understanding of the needs of energy system users, promote efficient R&D efforts, facilitate insights into the energy transition and global trends, support working groups with expert contributions, and collaborate on joint deliverables to advance Smart Grid progress.



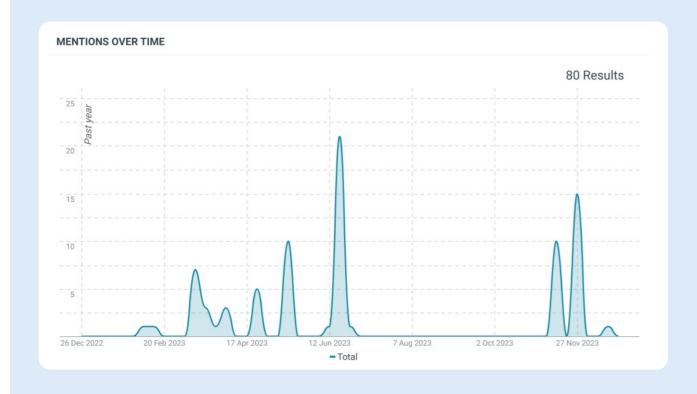
# Communication and Dissemination in 2023

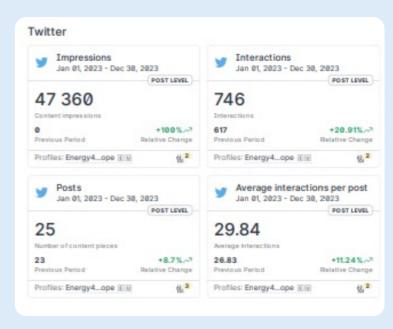
## **ETIP SNET**

#### **#ETIPSNET** on social media

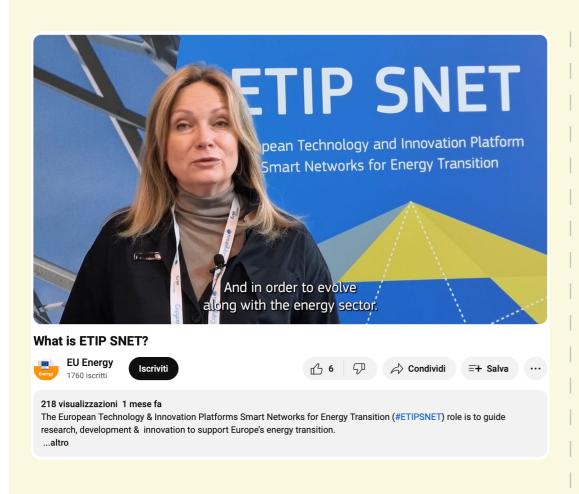
In 2023 **ETIP SNET** has experienced significant growth as a trend, on social media an increase in interest was recognized with emerging themes such as #energysystem, #ETIPsFORUM, and #EnergyTransition.

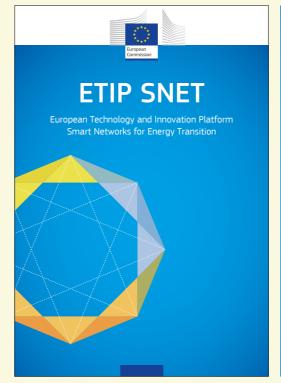
Overall, people engagement increased by 572.2% compared to previous period with a number of potential outreach higher than 500,000.





## ETIP SNET video and promotional materials



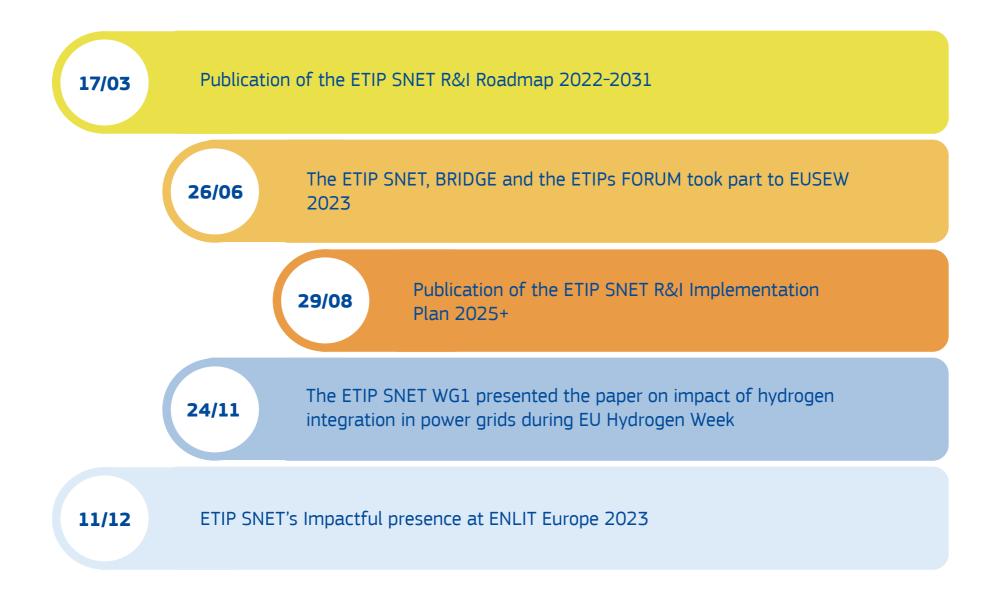




New ETIP SNET video here

New ETIP SNET leaflet

## ETIP SNET press releases issued during 2023





## Meetings and events throughout 2023

#### **ETIP SNET**

## ETIP SNET GB and EXCO meetings

## #3 physical ETIP SNET Governing Board Meetings held in Brussels



25<sup>th</sup> Governing Board Meeting, from left to right: L. Cunha (E-REDES), S. Gallego (i-De), G. Paunescu (CINEA), E. Gaspari (PwC), N. Constantinescu (ENTSO-E), L. Beaumel (EGVIA), N. Samovich (Enercotium), G. Barchi (Eurac), Venizelos Efthymiou (EURELECTRIC), F. Di Persio (CIRCE), A. Iliceto (ENTSO-E), T. Esterl (EUREC), Nuno Souza e Silva (nester)

23<sup>rd</sup> ETIP SNET Governing Board Meeting 24<sup>th</sup> ETIP SNET Governing Board Meeting 25<sup>th</sup> ETIP SNET Governing Board Meeting

8th February 2023 24th May 2023 5th December 2023

#### **#9** ETIP SNET ExCO Meetings held online

Throughout 2023, the Executive Committee meetings were mainly conducted online, on a monthly basis:



Following the transition to the new secretariat, the frequency of these calls has returned to a monthly schedule, and plans for the upcoming calls in 2024 are already in progress.

## ETIP SNET Regional workshops

#### **#2** ETIP SNET Regional Workshops



#### **ETIP SNET 16th Regional Workshop**

28th February 2023 from 09:00 - 17:30 (CET) Location: Iberdrola Innovation Hub, Bilbao, Spain

- Agenda of the workshop
- Slide deck presented
- Workshop proceesings
- Conclusions and recommendations



## ETIP SNET 17<sup>th</sup> Regional Workshop

#### **Energy**Week

21st March 2023 from 09:00 - 16:15 (GMT+2) Location: Vaasa EnergyWeek, Vaasa, Finland

- Agenda of the workshop
- Workshop proceedings
- Key Recommendations & Conclusions

## National Stakeholder Coordination Group meetings

#### **#3** events of the National Stakeholder Coordination Group

In the wider context of developing an integrated energy system, the NSCGs have placed particular emphasis on local flexibility, and their efforts have highlighted that the true impact of such flexibility is not always fully captured.



Michele de Nigris and Ludwig Karg during the event Technologies and markets for local / regional flexibility in Rome (June 14th)

This insight is the outcome of three events organised by the NSCG in 2023, specifically:

#### #1 (19th Apr, online)

Regional and local flexibility needs (recording of the session)

#### #2 (9th May, online)

Energy communities' contribution to local and regional flexibility (<u>recording of</u> the session)

#### #3 (14th Jun, Rome)

Technologies and markets for local/regional flexibility (recording of the session)

On this occasion, the NSCG shed light on key aspects of local flexibility issues, including identified needs, relevant technologies and the relevant policy and regulatory landscape.

#### ETIP SNET active involvement in various external events



## ETIP SNET at the SET Plan Conference (14 November 2023)

The SET Plan Conference, facilitates discussions on the SET plan since 2008, aiming to accelerate low-carbon technology development through collaboration among MSs, industry, research, and stakeholders.

Norela Constantinescu, Chair of ETIP SNET, participated in a panel discussion on the **Future integrated and resilient energy system**, alongside industry and European Commission experts

## ETIP SNET at ENLIT EU (Paris, 28-30 November 2023)

Enlit is a major EU event focused on catalyzing industry connections and shaping the future of a decarbonized and digitalized energy system. Key ETIP SNET members took on significant roles as moderators/speakers in various sessions:

- N. Samovich, WG1 Co-Chair, led a session on Energy Data Spaces
- E. Kovacs, WG4 Chair, moderated a session on energy flexibility solutions within the e-balance plus project
- S. Gallego Amores, WG1 Chair, highlighted the alignment of market needs between DSOs and aggregators, presenting opportunities for accelerated change
- Luis Cunha, Co-Chair of ETIP SNET, participated in a session on SET Plan at the Enlit Summit



#### Other external events 2023 (\*):

- The EU Hydrogen Week: Innovation in Hydrogen's Impact on Energy Grids (20-24 Nov) – presentation of WG1 paper Hydrogen Impacts on Grid
- 2023 ISGT Europe in Grenoble (23-26 Oct) –
  participation of WG3 and WG1 in the Innovative
  Smart grid Technologies Europe through an
  Industry Panel Session "ETIP SNET: H2 integration
  in power systems"
- ETIP SNET-RHC ETIP Sustainable Energy Day Joint webinar (29th Jun, online) – Coupling of Heating/Cooling and electricity sectors in a renewable energy-driven Europe
- ETIP SNET & BRIDGE Key results and steps forward (20th Jun, Royal Library of Belgium (KBR), Brussels)
- EM-Power Europe (14-16 June) Collaboration at a joint stand ETIP SNET & 8 BRIDGE projects, and panel session "The Latest from EU Innovation: BRIDGE Projects, Activities and Outcomes"

(\*) more events can be found at this link.



# Renewal of the ETIP SNET chairmanship

### **ETIP SNET**

## Renewal of the ETIP SNET chairmanship (1/2)

Role	Profile	Status	
ETIP SNET chairmanship	N. Constantinescu (ETIP SNET Chair from TSO association)	Ongoing renewal process for 2024	
	L. Cunha (ETIP SNET Vice-Chair from DSO association)	Ongoing renewal process for 2024	
	Vacant position (ETIP SNET Vice-Chair Storage ass.)	Ongoing identification process	
	2 vacant positions (ETIP SNET rotating vice-chairs)	Ongoing identification process	
WG1 chairmanship	S. Gallego (WG chair)	Position renewed for 2024	
	N. Samovich (WG co-chair)	Ongoing renewal process for 2024	
	N. de Souza e Silva (WG co-chair)	Position renewed for 2024	
	A. Iliceto (honorary co-chair)	Position renewed	
WG2 chairmanship	L. Grande (WG chair)	Entered into force in August 2023	
	F. Di Persio (WG co-chair)	Entered into force in February 2023	
	P. Rodriguez (WG co-chair)	Entered into force in December 2023	

## Renewal of the ETIP SNET chairmanship (2/2)

Role	Profile	Status	
WG3 chairmanship	O. Bernstrauch (WG chair)	Ongoing renewal process for 2024	
	A. Wiedermann (WG co-chair)	Ongoing renewal process for 2024	
	T. Phuong DO (WG co-chair)	Position renewed for 2024	
WG4 chairmanship	E. Boskov (WG chair)	Ongoing renewal process for 2024	
	A. Monti (WG co-chair)	Ongoing renewal process for 2024	
	M. Sanchez (honorary co-chair)	Position renewed	
	Laurent Schmitt	Ongoing renewal process for 2024	
WG5 chairmanship	S. Olivero (WG chair)	Entered into force in Januray 2023	
	C. Papadimitriou (WG co-chair)	Ongoing renewal process for 2024	
	V. Efthymiou (WG honorary co-chair)	Position renewed	
NSCG	Michele De Nigris (WG chair)	Position renewed	



# Revamping of the ETIP SNET membership

#### **ETIP SNET**

## Revamping of the ETIP SNET Governing Board membership

In December 2023, a mapping exercise was carried out to identify **inactive GB members and pending seats** per each stakeholder group.

A revamping process for GB members is ongoing, including the identification of new organisations to recruit members from.

These steps will be formalised during 2024.

Stakeholders group	Target	N. of members	Accepted invitations to last GB	Seats pending
TSO	4	3	3	1
DSO	4	3	3	1
Members States	3	2	0	1
Research & Academia	4	3	2	1
Storage	3	2	1	1
Final Consumers	2	1	0	1
Market Operators	2	0	0	2
Thermal Generation	5	4	0	1
ICT technology & network providers	3	1	1	2
Non ICT equipment suppliers	4	2	1	2
Renewable Energy Sources	6	5	1	1
Interface to other energy carriers	3	2	0	1
Total	43	28	12	15 (31)



## **ETIP SNET**

European Technology and Innovation Platform Smart Networks for Energy Transition



Learn more on our website

