

STUDY ON FLEXIBILITY OPTIONS TO SUPPORT DECARBONISATION IN THE ENERGY COMMUNITY

Energy Community Secretariat
ECDSO-E 19th Coordination Group meeting 13 July 2021

TENDER PUBLISHED: 15-06-2021

- eProcurement,
- Austrian Law,
- auftrag.at

DEADLINE FOR BIDS: 23-07-2021 (10am, CET)

VALUE:

- Approx. 140 man-days
- Below threshold 214 000 EUR

**EXECUTION: 01-09-2021 till the end of April 2022
(8 months)**

Übersicht-Veröffentlichung

Titel: Study on flexibility options to support decarbonisation in the Energy Community

Beschreibung: The objective of this study is to comprehensively assess flexibility needs and solutions in the power systems of the Energy Community Contracting Parties, and to propose solutions that will facilitate renewable energy sources integration and transition to the carbon-neutral energy sector in different scenarios for the Energy Community Contracting Parties in a cost-efficient and secure way. The term "flexibility" in this context means the ability of all power system resources/facilities, including generation, storage, interconnectors, and demand-response, to adjust the electricity output and consumption to maintain nominal frequency at all times.

Bekanntmachungsart: Bekanntmachung

Veröffentlicht am: 14.06.2021

Dokumentnummer: L-792936-1610

Dies ist ein eTendering Verfahren

(Information zu elektronischen Verfahren)

Um an einem eTendering Verfahren teilnehmen zu können, müssen Sie angemeldet sein.
[Hier können sie sich registrieren oder anmelden.](#)

[Ansicht](#) [Ansicht \(PDF-Format\)](#) [View \(PDF-Format\) english](#)

Zu 'Meine Ausschreibungen' hinzufügen [Bekanntmachung via E-Mail versenden](#)

Ausschreibungsunterlagen

Dokument	Hochgeladen am	Dateigröße	Bemerkung
 IAU.pdf	30.06.2021 14:50	69,3 KB	Index tender documents (active)
 Questions and Answers on the Tender Documents_2.pdf	30.06.2021 14:49	155,5 KB	
 Questions and Answers on the Tender Documents_1.pdf	22.06.2021 10:18	106,2 KB	
 P-215346-RD01-vorlage.pdf	10.06.2021 12:45	151,6 KB	
 Your Guide to Submitting a Tender_open.pdf	10.06.2021 12:01	548,3 KB	
 ANNEX 4 - Financial Proposal - Submission Form.docx	10.06.2021 12:01	83,4 KB	
 ANNEX 3 - Technical Proposal - Submission Form.docx	10.06.2021 12:00	71,4 KB	
 ANNEX 2 - Declaration in relation to exclusion criteria and absence of conflict of interest.docx	10.06.2021 12:00	61,6 KB	
 ANNEX 1 - Bidder Identity Form.docx	10.06.2021 12:00	59,1 KB	
 ECS_PN01_2021_Flexibility Study_Tender Documents.pdf	10.06.2021 12:00	677,6 KB	

ABILITY OF ALL POWER SYSTEM RESOURCES/FACILITIES TO ADJUST THE ELECTRICITY OUTPUT AND CONSUMPTION TO MAINTAIN NOMINAL FREQUENCY AT ALL TIMES

- generation,
- storage,
- interconnectors,
- demand-response.

SPECIFIC QUESTIONS:

- What is existing flexibility potential in the CPs?
- What additional flexibility is needed in 2030 and 2040 for three RES integration scenarios (baseline, moderate and high RES integration)?
- What may be a role of integrated systems and markets in providing flexibility?



ROLES

Consumers have an essential role to play in achieving the flexibility necessary to adapt the electricity system to variable and distributed renewable electricity generation

- All customer groups (industrial, commercial and households) should have access to the electricity markets to trade their flexibility and self-generated electricity
- Regulatory authorities should ensure that transmission system operators and distribution system operators take appropriate measures to make their network more resilient and flexible.

INCENTIVES for the use of flexibility in distribution networks

Member States shall provide the necessary regulatory framework to allow and provide incentives to distribution system operators to procure flexibility services, including congestion management in their areas, in order to improve efficiencies in the operation and development of the distribution system.

- In particular, the regulatory framework shall ensure that distribution system operators are able to procure such services from providers of distributed generation, demand response or energy storage
- Distribution system operators shall, in a transparent and participatory process establish the specifications for the flexibility services procured and, where appropriate, standardised market products for such services at least at national level.
- The network development plan shall provide transparency on the medium and long-term flexibility services needed, and shall set out the planned investments for the next five-to-ten years, with particular emphasis on the main distribution infrastructure which is required in order to connect new generation capacity and new loads, including recharging points for electric vehicles

SCOPE OF WORK

1. Analyse all available technical and non-technical sources of flexibility

- policies, regulatory measures, and instruments contributing to the increase and utilisation of system flexibility
- to accommodate phase out of coal generation (decarbonisation) and
- upscale of variable renewable energy sources

2. Evaluate current flexibility sources utilised

- regional flexibility resource, needs, possible gaps and costs of procurement
- utilisation of flexible reserves in each Contracting Party's power system,
- including generation, supply, demand-side level and interconnectors

WORKSHOP

3. Evaluate the existing flexibility potential and future needs for additional flexibility in 2030 and in 2040

- in each Contracting Party's power system,
- necessary to support further renewable energy sources integration
- in line with the outlined decarbonisation scenarios
- in the cost-optimal way while maintaining a pre-defined level of security of supply, considering national power systems and market design peculiarities

WORKSHOP

4. Recommend an optimal set of solutions

- efficient utilisation of the existing potential and
- additional flexibility needed to implement envisaged decarbonisation scenarios while maintaining a predefined level of security of supply
- Assumptions and results from the scenarios incorporating:
 - deployment of RES;
 - coal-phase out;
 - carbon costs scenarios;
 - level of market integration;

5. Recommend improvements

- the legal, regulatory and institutional framework for
- efficient utilisation of the existing potential
- deployment of additional flexibility needed to implement each of the analysed decarbonisation scenarios.
- the estimated contribution to the required level of flexibility and to the reduction of emissions of each proposed solution and estimated costs

WORKSHOP

RELEVANT NATIONAL CONTACT DESIGNATED BY PHLG MEMBER

- at least one contact person in charge of Project implementation

Active participation is further to be sought from:

1. Transmission system operators,
2. Distribution system operators and
3. Regulatory authorities in charge of energy
4. Any other relevant market participants and stakeholders.





THANK YOU
FOR YOUR ATTENTION

GET IN TOUCH

 www.energy-community.org

 [Ener_Community](https://twitter.com/Ener_Community)

 [/company/energy-community](https://www.linkedin.com/company/energy-community)

 [/Ener.Community](https://www.facebook.com/Ener.Community)

 [/EnergyCommunityTV](https://www.youtube.com/EnergyCommunityTV)