

# EU SUSTAINABLE ENERGY WEEK



**Innovative Technologies and Regulatory  
Schemes accelerating islands'  
decarbonisation**

**Challenges and opportunities on  
Islands' decarbonisation**

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# Eurelectric new vision to be carbon-neutral well before 2050

*Change  
mindset*

*Embrace the  
future*

*Transform the  
present*

A competitive European power sector to support the development of sustainable and smart societies

Lead cost-effective  
**decarbonisation**

Accelerate  
**electrification** of  
key sectors of the  
economy

Create value for  
**customers** in the  
energy transition

Unleash power  
sector **innovation**  
fuelled by  
**digitalisation**

Deepen **integrated**,  
competitive markets for  
**secure & affordable**  
electricity

**Islands are ideally positioned to pioneer these efforts**

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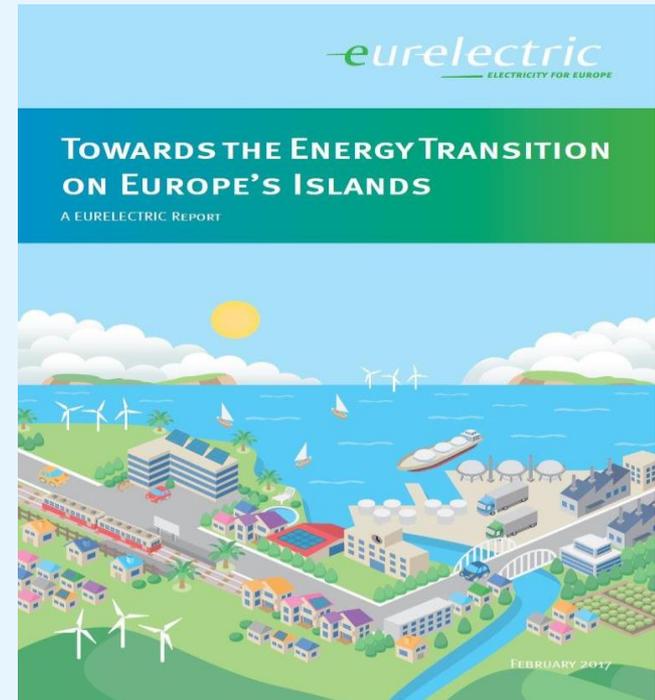


# “Towards the energy transition on Europe’s Islands”

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## “Towards the energy transition on Europe’s Islands” (Report)

- Illustrate success-stories on how islands decarbonise their power systems in practice.
- Show the challenges and the opportunities that lay before them.



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# A new paradigm for Islands

## European Islands' challenges and opportunities

- **Decarbonisation**: islands need to tackle **fossil fuel emissions** through carbon free technologies, while ensuring the stability and security of the energy system. **Air quality** becomes crucial and **electrification of the transport** should be fully integrated in decarbonisation goals.
- **Security of supply**: islands rely in many cases on fuel imports and, in absence of economies of scale, **new competitive technologies can play an important role.**
- **Reliability**: most islands cannot diversify their energy supply; technologies/resources are not always cost-efficient (large amount of storage/gas facilities) or with limited or no interconnections. **RES, energy storage and smart systems are part of the solution.**
- **Operational constraints**: due to their small size and/or isolated features, **available capacity and flexibility assets** like peaking plants, storage and demand response, become crucial.
- **A more decentralized system together with a variable generation**, with growing penetration of **distributed-generation** and energy **storage**; more **active and price-responsive energy consumers**; **increasing digitalization** enabling energy to be produced, transmitted, and consumed more intelligently and efficiently by agents of any size.

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# Eurelectric's recipe for transition on Europe's islands (I)

## Tailored-made solutions

- **Each island has unique features.** Tailor-made solutions to the particular needs of islands are needed, “one-size-fits-all” approach does not deliver effective solutions.
- **Assessments, cost-effective analysis and efficient measures are crucial to address Islands challenges:** isolation, fragile ecosystem, external dependency, economies of scales, with limited or no interconnection.

## Involvement of all stakeholders

- **Policy makers and regulators are crucial to adopt solutions with the involvement of ALL players** at National, Regional and Local level. Utilities engagement is crucial in order to provide the technical and operational perspective needed to ensure the timely roll out of actions aiming at fulfilling political objectives.
- **Increasing knowledge of the specific challenges and opportunities of islands, providing growth and jobs at local level.** Island energy managers can raise awareness among their local island population.

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# Eurelectric's recipe for transition on Europe's islands (II)

## Innovative investments

- **Design innovative mechanisms and financial instruments** to ensure cost reduction and improve financing and economic viability of projects on islands. Assist islands' administrations and private actors in understanding these financing facilities.
- Current funding and future financial perspectives (MFF) should integrate islands' needs for **innovative energy solutions: storage, micro-grids, smart-grids, electrification of the transport.**

## All sectors must contribute towards decarbonisation

- **All sectors have to contribute to decarbonisation**, including buildings, transport, heating, etc. Clean transport (EV) is crucial in islands in terms of emissions, air quality, sustainable tourism.
- **Keeping a capable local workforce, well-trained in the new energy technologies is a major challenge in small market** (able to install, maintain, and operate innovative energy systems).

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