

SEAF – The Sustainable Energy Asset Framework

Creating the Market Place for Energy Efficiency

Joule Assets Europe

EASME – Financing Energy Efficiency in Greece and Cyprus

31 May 2018

Company Offering Joule Assets Inc.

- Based out of New York, offices in London and Italy
- Began as a financial fund manager of Energy Reduction Assets (ERA)
- Today acts as conduit for finance in Europe, a project developer and financier in the US
- Project coordinator of SEAF H2020 funded project
- Forwards policy: Board Member and Chair of Smart Homes and Buildings Committee at SmartEn association in Brussels





Bridging the Finance Gap

The SEAF project was funded by the European Commission. Has developed eQuad

- Budget: 1.7 million euros
- Duration: 24 months

ARISTOTLE
UNIVERSITY OF
THESSALONIKI

HSB Engineering Insurance



Servizi Energia Ambiente S.R.L.



The University of Manchester



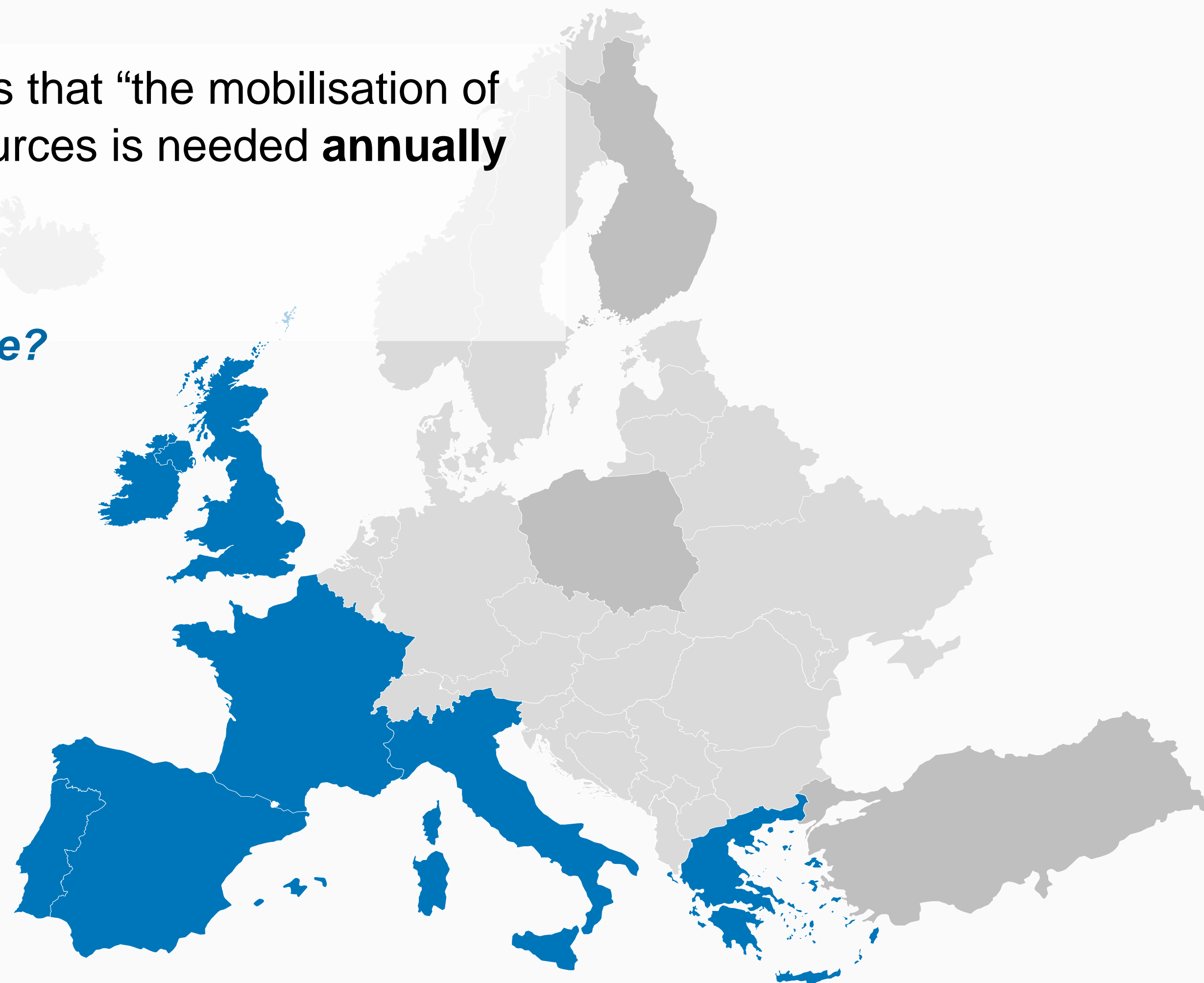
**A partial list*

The eQuad platform: The EU Commission estimates that “the mobilisation of an extra €177 billion from public and private investment sources is needed **annually** from 2021 to 2030 to reach the 2030 climate and energy.”*

What if ALL viable projects successfully accessed finance?

- **Fund managers:** successfully finance only 5%-15% of all projects reviewed – representing a significant upfront cost and reduction of profits
- **Project developers:** often self finance their projects or use bank loans due to perceived difficulties in accessing appropriate finance

**eQuad active today in:
Italy, UK, Ireland, France,
Portugal, and Spain**

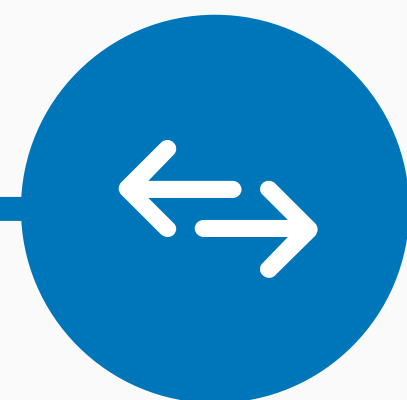


*Assessing the European clean energy finance landscape, with implications for improved macro-energy modeling. European Commission, 2017

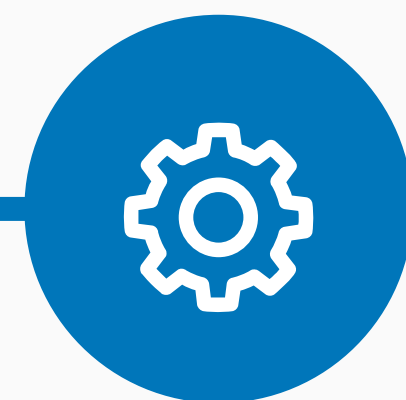
The Journey: Project Developer

A project's journey toward finance

We help ESCOs, engineering firms, and construction companies across Europe access appropriate project investment by providing third-party valuation, performance insurance, project certification, and due diligence that facilitate and expedite funding for energy efficiency projects.



VALUATION



CONTRACT
DEV.
SUPPORT



STANDARDISATION



INSURANCE
QUOTATION



INVESTOR-PROJECT
HANDSHAKE

eQuad Investor Network



**A partial list*

Results for Investors

- **Lowered project processing fees**
- **Vetted, viable opportunities**
- **Risk mitigation:** Meet the fund's financing requirements
- **Due diligence:** Have had technical due diligence preformed by accredited ICP rep.
- **Insurance:** Have the option of a insurance quotation for performance insurance
- **Standard Contracts:** Can be structured according to the fund's contractual requirements

Investor Journey



Example Key Project Facts:

- Sale is made: the housing association wants this solution. Over 5,000+ homes would benefit (20K in all)
- 14% IRR on investment
- 7-9 year payback time for investors
- 20 year contract
- £12 million initial investment

- **Guaranteed** lower utility payments for low income families
- Use of solar, batteries and controls
- Improved comfort for families
- Ability to carry out Demand Response – benefit to electricity system
- Experienced technical partners
- Solid client credit rating (housing associations)

Difficult to control:

- **Financing model mismatch:** not only the projects are highly specific. Funds are as well.
Different requirements, risk mitigation strategies and appetite, money types (debt, equity) contract types (SPV, EPC...)
- **Investment size:** The investment may be too small/large, in the wrong country, wrong tech...
- **Stage of the fund:** The fund may either be in too early, too late a stage in their own fund deployment

Examples of what can be mitigated:

- **Credit risk of client CRITICAL:** What happens if the low income families don't pay their bills?
Have a portion of each payment go to an account to protect against default
Housing association will step in after this
Default in reality for this group is very low
- **Credit risk of contractors:** A minor technology supplier in the group is a small company: will they last?
Be ready to change out one technology provider for another
- **Contractual risk:** Investors need protection through your client contract
Have a clear and fair contract, deals with default risk, reputational risk
- **Technological risk:** This could be a lot of technology risk – what are your guarantees?
Include performance insurance and technology insurance

Conclusion

Hybrid Homes bring real societal benefits and returns – also with today’s prices

- Tech providers focus on:
 1. The technological solution
 2. Creating a good offering for customers
 3. Gaining access to strong customers and to market market share

The time and energy required securing investment should not be underestimated

- This is still a new industry and funds are not familiar with such solutions
- The investments/projects are not yet standardized and make risk assessment difficult

Project can access finance but time has a cost and a risk

The housing association may not wait (the families have no choice)

Joule’s mission remains to ensure every viable project gains access to finance

Thank you!

Caroline Milne
Communications Director

Joule Assets Europe
Mobile: +32 4 87 54 39 07
69-71 rue d'Arlon
1040 Brussels, Belgium
cmilne@jouleassets.com