



EU-SysFlex

What makes a successful Project?



#H2020Energy info day

John Lowry
Project Director
EirGrid - Ireland

Energy



Topics



EU-SysFlex

- H2020
- What interested us
- How did we come up with a winning proposal
- Our consortium
- Proposal creation
- Online application process
- Recommendations







Horizon 2020 LCE-04-2017

Work Programme

Secure, Clean, and Efficient Energy

€65m – 2017 call for proposal

















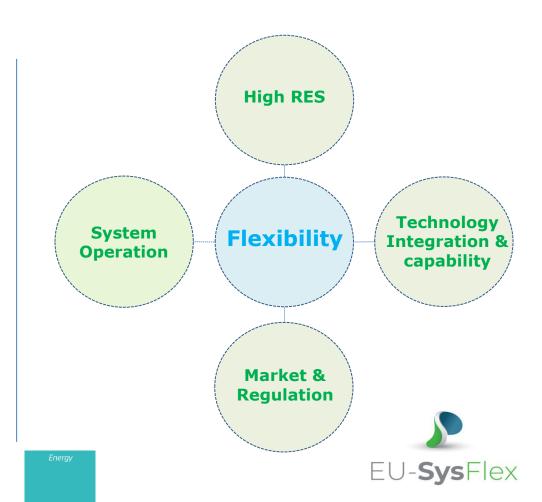


"Demonstration of system integration with smart transmission grid and storage technologies with increasing share of renewables".

What was in the call that interested us?

Relevance!

Alignment with strategic intent!







Common Challenges & Interests!

Mix and scale of RES



GREATER RELIANCE ON VARIABLE SOURCES OF ELECTRICTY

System Structure





BECOMING MORE DECENTALISED AND DISTRIBUTED

New Dimensions

ELECTRIFICATION OF HEAT, COOLING & TRANSPORT





LARGE SCALE DEPLOYMENT OF BATTERY STORAGE



SMARTER LIVING

Today



2030>>



Increased System Complexity

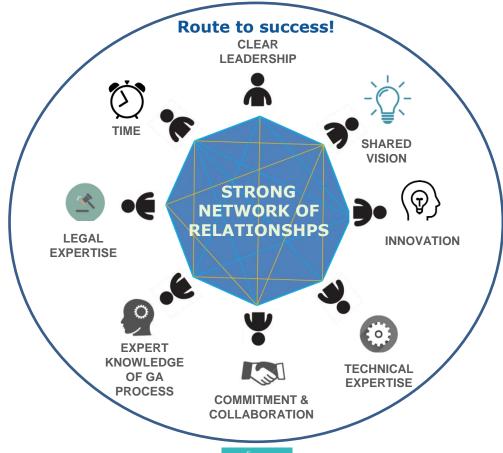
... 2050>> Decarbonisation







How did we come up with the proposal?









5 Dimensions considered



Markets & Regulation

Organizational level

- TSO/DSO interface
- Centralised-decentralised resources optimization / aggregation
- Data exchanges for crossborder coordination
- Wholesale service exchanges at (sub-) system level

Resources

- Distributed resources :
 - Storage, DR, DG, RES
- Centralized resources :
 - Bulk storage
 - Flexible gen
 - DR
 - RES

Services

- Frequency regulation (existing and new services)
- Congestion management in the transmission grid
- Voltage regulation
- Black start

Technical solutions

- Market simulation platforms
- Data exchange solutions
- Optimisation/Aggregation platforms
- Real time control systems
- Flexibility forecast tools
- Pan-european optimisation & simulation tools

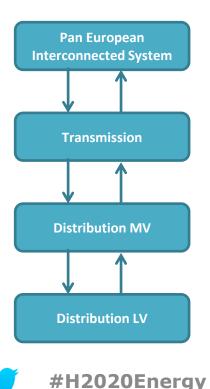






Strong Consortium = Strong Proposal

Challenge of scope crosses entire energy chain







Key thoughts for consortium establishment

- Establish a core consortium partners.
- Identify expertise and sector segments required.
- Work your network, in particular former collaborators from previous projects who would be well known in the area of expertise required.
- Make sure all requirement from Grant call is aligned with project participants.
- Get the right Consortium mix.







Our Consortium



























































Research instituties, universities































Real time simulator







EU-SysFlex Project Dimension

SYSTEM SHORTFALLS

Characterise technical shortfalls of EU system for 50% RES 2030 scenarios

MARKET ENHANCEMENT

Recommend market and regulatory augmentation to incentivise the right flexibility and system services

REGULATORY ENHANCEMENT

Identify flexible capability of technology to facilitate a high RES environment

FLEXIBLE CAPABILITY

Provide system operation tools to support high levels of renewable integration

SUPPORT TOOLS,
POLICIES & PROCEDURES

Ensure scalability and replicability on a pan European basis

SCALABILITY & REPLICABILITY







Proposal creation

Challenges:

- Harmonisation of broad consortium.
- Coordination of partners writing the detailed proposal

What worked well:

- Common vision of core leadership group
- High involvement of the core group
- Very good existing relationships









Issues to be aware of

Do not underestimate the time commitment to develop a winning proposal. There are a lot of technical, legal and financial matters to agree.



TECHNICAL CLARIFICATION



FINANCIAL CLARIFICATION



LEGAL CLARIFICATION











Online Submission

- Comments from partners:
 - It takes time and guidance but doable
 - Very useful if the coordinator and/or administrative partner coordinate the application process
- In General:
 - Straight forward procedure, does not require signatures or adding supplementary documentation
 - Mandatory PIC code: inform partners they need to set this up early







Final Recommendations

- Do not underestimate the amount of time, effort and commitment required
- Very useful to bring in an administrative partner with knowledge of the application process
- Leadership is essential to drive the proposal forward
- Relationships are key
- Stay within the recommended budget
- Develop a strong and broad consortium
- Seek out a strong advisory and letters of support
- Be aware of the funding, 70% for non academic partners







Thank you!

#H2020Energy



Our website

www.eusysflex.com







