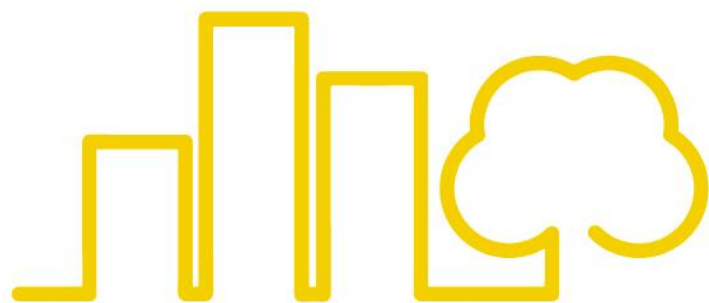


REACT Citizen engagement



**SUSTAINABLE
PLACES 2023**

Fausto Sainz
COMET

Madrid - 15/6/23





Motivation of the REACT project



Energy cost overrun

- High dependency on the mainland energy market
- Losses during the transport and distribution of electrical energy (inefficient and costly energy transmission)



Fossil fuel consumption

- Lack of a strong generation/supply infrastructure
- High dependency on the energy import
- High GHG emissions



Variable load profiles

- Significant population fluctuations (tourist and non-tourist season)
- Different market contexts and climate conditions



TIDAL



WIND



SOLAR



There is a need to characterize and leverage islands' renewable energy resources (RES) to develop a more sustainable energy model



HYDROELECTRIC



GEOTHERMAL



BIOMASS



Aims and objectives of the REACT project



- REACT (*Renewable Energy for self-sustAinable island CommuniTies*) is a 4-year research project (01/01/2019 – 31/12/2022) funded by EU's Horizon 2020 programme that aims for island energy independency
- REACT will demonstrate the potential of large-scale deployment of RES and storage assets on geographical islands to bring economic benefits, contribute decarbonizing local energy systems and reduce GHG emissions
- REACT will deliver a scalable and adaptable cloud-based ICT platform for planning and management of RES/storage enabled infrastructure, supporting a holistic cooperative energy management strategy at the community level

PILOTS



La Graciosa (SPAIN)
Climate: Marine west coast - Atlantic ocean

22 pre-selected residential dwellings
Reach up to 270 dwellings in La Graciosa & Canary Islands archipelago
Partners: AIE, FEN, ORD, AES.



San Pietro (ITALY)
Climate: Mediterranean - Mediterranean sea

30 pre-selected residential dwellings & community buildings
Reach up to 2,300 dwellings in San Pietro & the Sardinia Region
Partners: CCF, R2M, MID, MERCE



Aran Islands (IRELAND)
Climate: Marine west coast - North Atlantic ocean

24 pre-selected residential dwellings & community buildings
Up to 450 dwellings in Aran Islands & islands along the west coast of Ireland.
Partners: UNG, ESNB, AES, ELE

FOLLOWER ISLANDS



Gotland Island, Sweden
Climate: Humid continental
Baltic Sea
Partner: UPP



Lesbos Prefecture, Greece
Climate: Mediterranean
Aegean Sea
Partner: AEG



Majorca Island, Spain
Climate: Mediterranean
Mediterranean Sea
Partner: FEN



Isle of Wight, UK
Climate: Marine west coast
North Atlantic Ocean
Partner: TEES



Reunion Island, France
Climate: Marine east coast
Indian ocean
Partner: LE2P







Engagement

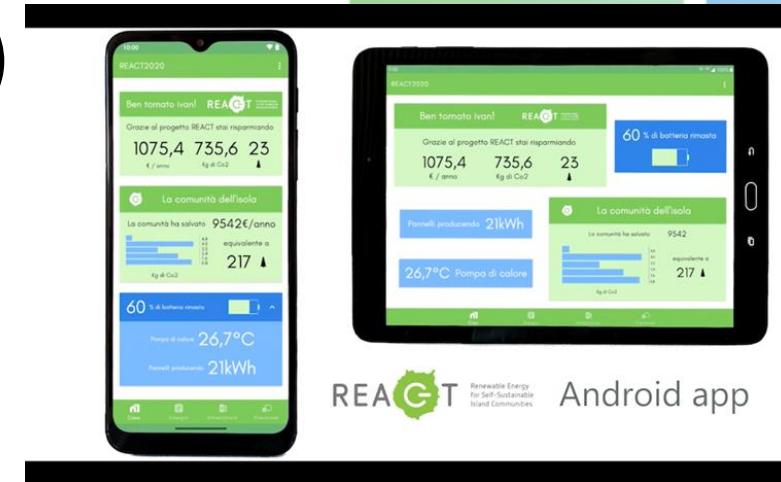


Tools for engagement:

- Social media (Tweeter, Facebook, YouTube)
- Presentation video

Islands Presentation video

- [La Graciosa](#)
- [Inis Mor](#)
- [San Pietro](#)
- REACT app demo, [English](#)
- REACT app demo, [Italian](#)
- REACT app demo, [Spanish](#)



- Face to face meetings
- Informative sessions





Objectives social research



Find out about participants knowledge and interest on:

- Demand response
- Energy communities
- Renewable energies
- Users' satisfaction with technology provided

Tools

- Interviews
- TAM
- SUS

	Inis Mor	La Graciosa	San Pietro
Number Participants:	20	20	30/0
Dwellings/other buildings	17/3	18/2	30/0
Interviews	18	14	15
Number TAM respondents	8	14	11
Number SUS respondents	8	14	6



Interviews

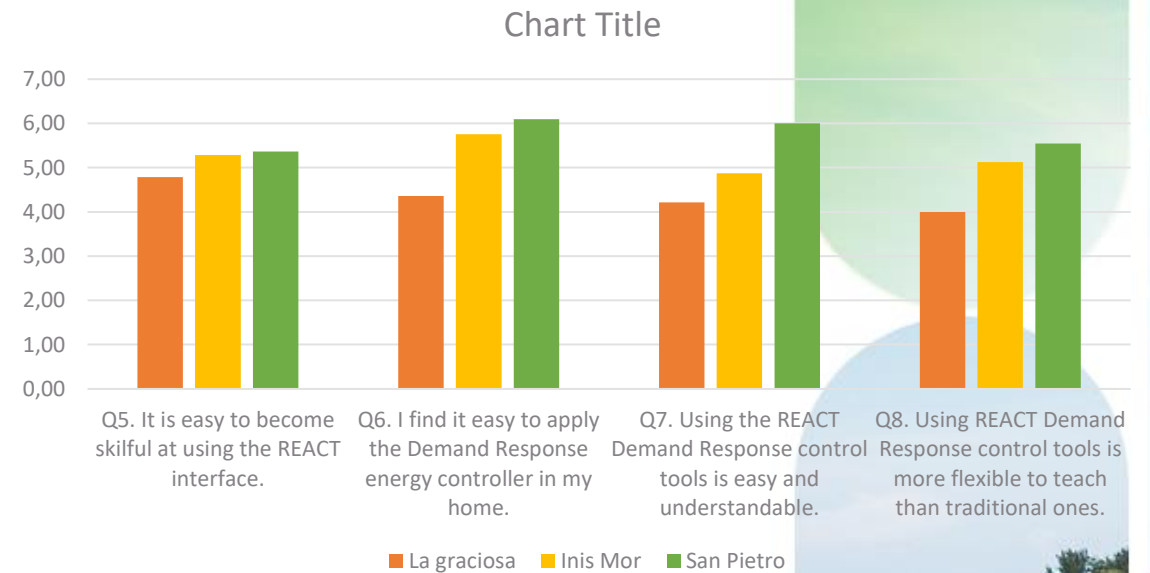
- Most participants didn't know about demand response (exception made of San Pietro) at the time of the interviews, they also stated they wanted to learn more.
- They all perceived themselves as knowing about energy savings but not much about energy management and storage.
- All were concern about energy prices, specially in Inis Mor where they have a strong sense of community
- In San Pietro environmental protection and savings -both economic and energetic- were mentioned as some of the positive aspects of the technology
- La Graciosa, first reluctant (trusted figure needed) to participate and then very satisfied with the energy independence results.



Results - TAM

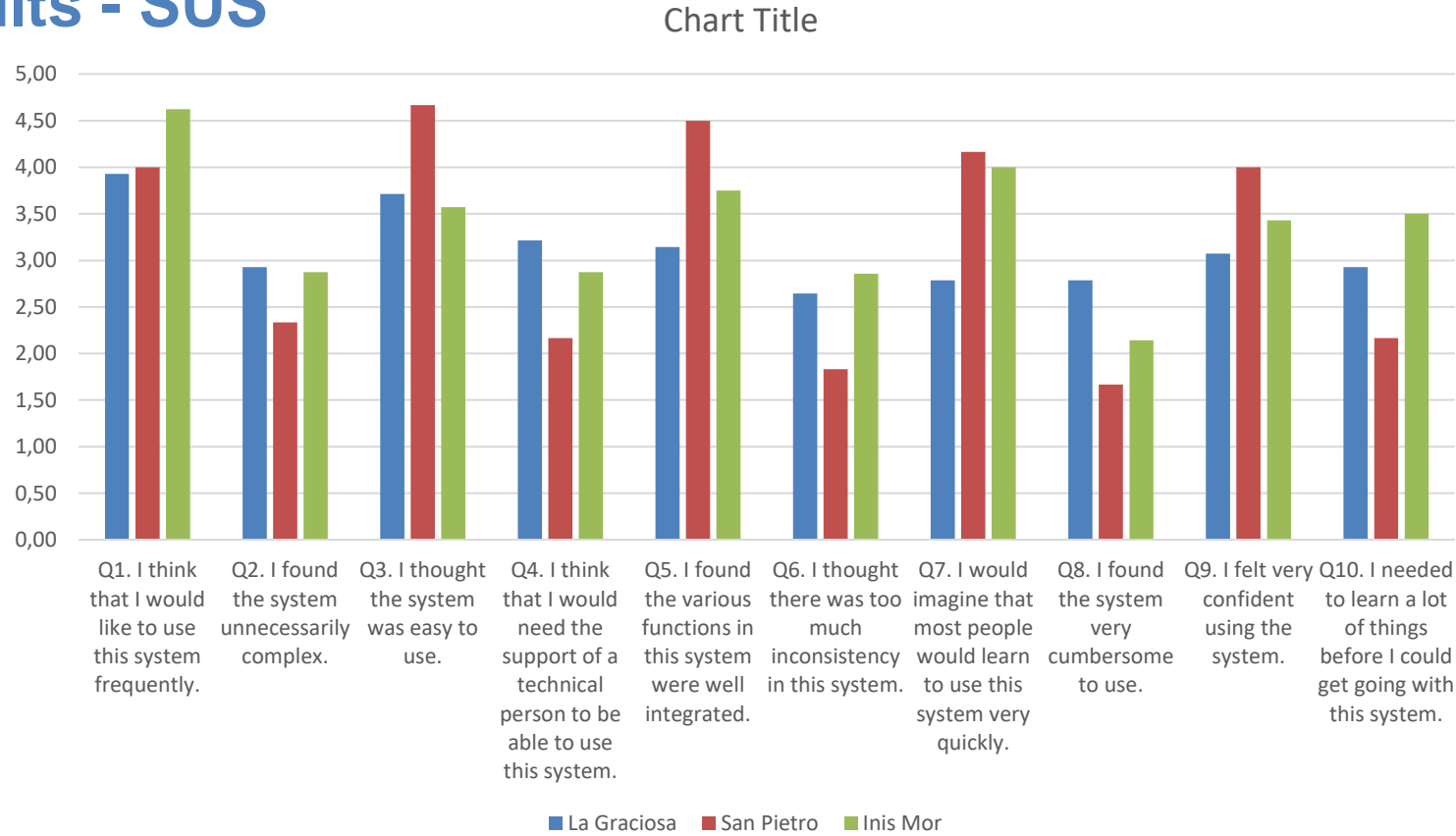


- The results from TAM showed a positive attitude towards the REACT solution in all four areas explored by the survey in all three islands:
 - Perceived usefulness
 - Perceived Ease of Use
 - Attitudes Toward Technology Use
 - Intention to use
- Minor differences were encountered: participants from San Pietro were the more optimistic ones about the system while participants from La Graciosa were less positive





Results - SUS



- San Pietro respondents had the better opinion about the app. The perception from Inis Mor users was slightly better than in La Graciosa but still not as good as expected. The fact that some residents in Inis Mor knew about another app that helps in getting information about energy management in the dwellings might have to do something with these results as they have previous experience with another app.





Ethical aspects (1)



There are several points emerging from the study:

- Double check proper representation of all stakeholders and significantly of those different belonging to a group (for example of all different consumers profiles should be represented), diversity among groups should be well represented
- GDPR, and privacy compliance, it is advisable to make sure participants are well informed and have access to all relevant documentation and if possible have simplified versions, for their better understanding



Ethical aspects (2)



- Stay alert for possible “external” dangers (socio-economic changes, historical movements, media outlooks, representations, propaganda, political conflict, etc.) that can affect the development of the activities, and their effects on the relationship with participants
- Monitor relationships among stakeholders and participants: power relationships, communication styles, interaction patterns, etc.



Project website

<https://react2020.eu/es/>



LinkedIn

<https://www.linkedin.com/company/react-2020-project/>



Twitter

<https://twitter.com/React2020>



YouTube channel

<https://www.youtube.com/channel/UCDPj1ebKXQyskcTPY5nB7BA>



Facebook groups (Irish pilot in progress)

<https://www.facebook.com/LaGraciosaREACT/>

<https://www.facebook.com/SanPietroREACT>



You can contact us at

info@react2020.eu

THANK YOU FOR YOUR ATTENTION



Renewable Energy for
Self-Sustainable Island Communities



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