Re-vitalizing Energy Transition
in Touristic Islands

ENERGY TRANSITION IN ISLANDS – ROLE and POWER of INHABITANTS

Prof. Constantinos S. Psomopoulos, UniWA

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Introduction - The RE debate in Europe and the elements that support and delay the energy transition

Implementing RE technology presents a number of challenges, especially when it comes to handling residents' opposition to the installation of such plants.

Community opposition is not limited to renewable energy projects; it also includes hydro and combustion power plants, but these latter were primarily built and established between the 1960s and 1980s, when society was not ready to express its disapproval.

Introduction - The RE debate in Europe and the elements that support and delay the energy transition

The European literature on the topic of renewable energy conflicts states that the main reasons why people oppose the construction of RE projects are:

The farm's aesthetic impact

According to some academics, urban dwellers appear to place a higher value on landscape than economic opportunities, whereas rural residents appear to have the opposite effect.

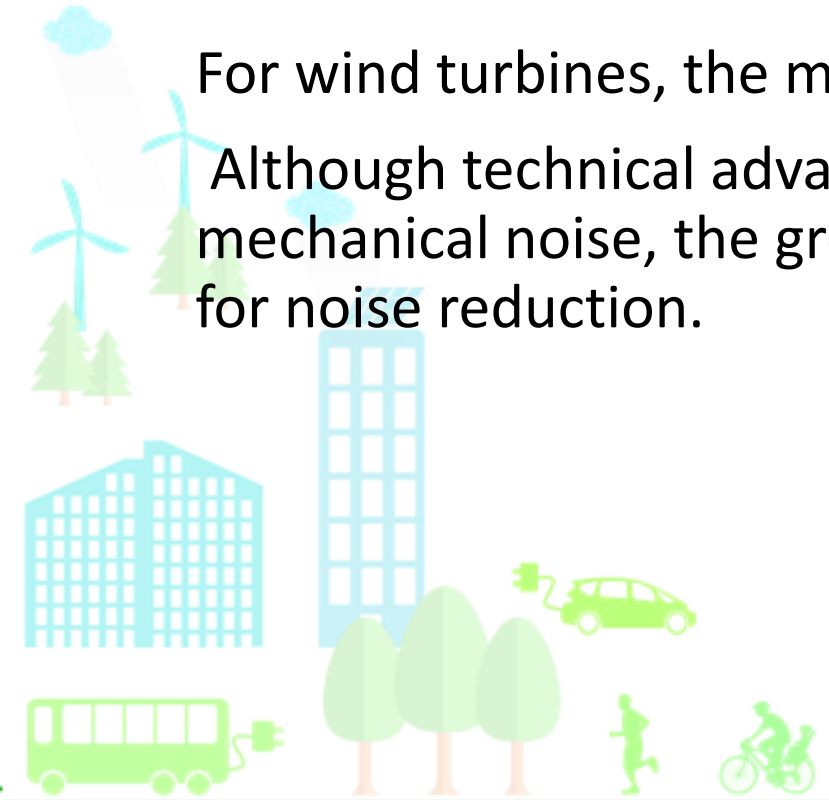
It is suggested that since it is the wind power to generate most of the land use conflicts, it would, perhaps, be a better option for investors to move these farms off-shore.

Introduction - The RE debate in Europe and the elements that support and delay the energy transition

It has however been demonstrated that the public's perception of near-shore wind farms is comparable to that of on-shore ones by examining relevant case studies.

For wind turbines, the mechanical and aerodynamic noises are an additional problem.

Although technical advancements have made it possible to minimise the gearbox's mechanical noise, the growing size of turbines has presented a number of difficulties for noise reduction.



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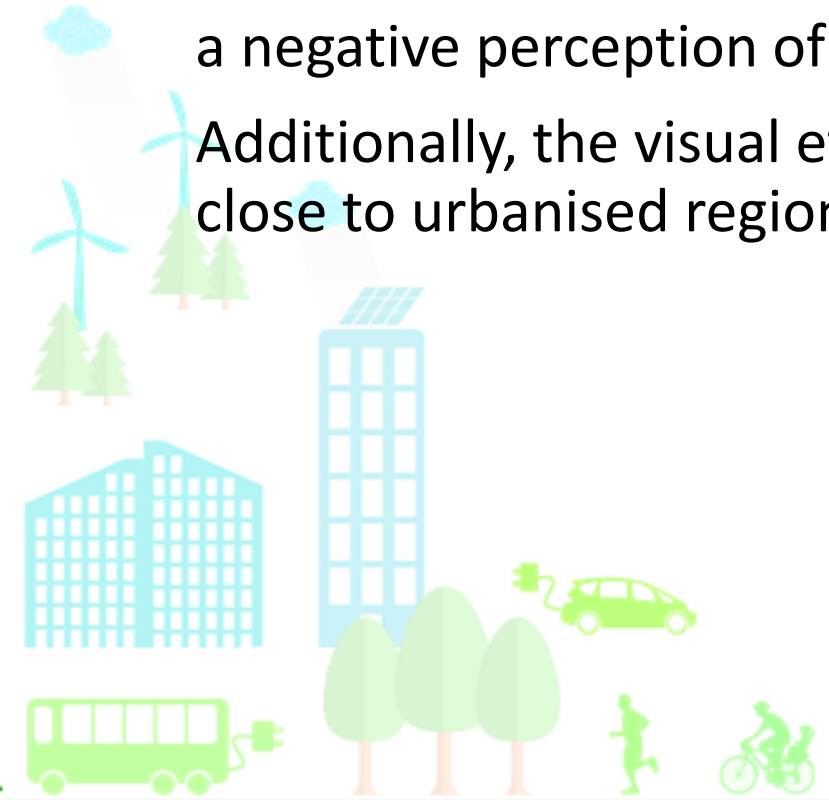
It's crucial to recognise the connections between these crucial elements.

For instance, it has been discovered that noise disturbance is positively connected with visual impact.

This means that individuals are more likely to experience noise disturbance if they have a negative perception of wind turbines.

Additionally, the visual effect of RE plants is seen more adversely if they are situated close to urbanised regions.



Introduction - The RE debate in Europe and the elements that support and delay the energy transition

In the early days of research on wind turbines, the NIMBY (Not In My Back Yard) syndrome was used to explain why people were opposed to the projects.

However, more advanced models are now being used to understand the social, cultural, institutional, and physiological factors that contribute to people's negative attitudes towards renewable energy plants.

Introduction - RE as a new landscape type

Some academics have attempted to investigate design solutions to integrate RE technologies with the environment because of the visual effect of these technologies, which is one of the primary concerns that the community is concerned about.

Scognamiglio's (2016) "photovoltaic landscape" is one such research that focusses on the coordination of RE deployment and landscape design. She specifically contends that the aesthetic potential of RE has received little consideration.

The potential of the area between for other applications, such as food production and leisure activities, is not recognised by the traditional deployment of PV in linear, inflexible designs.

In contrast, a "photovoltaic landscape“ is suggested which is "about designing PV as a landscape, rather than attempting to incorporate PV into a landscape“. In this sense, the porous surface of PV patterns is not a waste but rather a crucial element in boosting the landscape's ability to provide ecosystem services.

Ownership, heritage, and tourism: examples from Italy,France, and Germany

Germany

Numerous studies emphasise how crucial financial incentives are in encouraging private ownership of small renewable energy facilities (like photovoltaic and microwind farms).

For instance, Italy now ranks third in Europe for green energy capacity, behind Germany and Spain, thanks to a combination of market and government incentives that have significantly increased the country's wind energy capacity.

Ownership, heritage, and tourism: examples from Italy, France, and Germany

The implementation of Feed-In-Tariffs (FIT) has been essential in nations like Italy, Spain, and France to give individual green energy users and producers a steady and predictable source of revenue, following the example of Germany.

Wind energy remains a contentious issue in Italy, though, since major NGOs like the Green League, which advocates for green energy, and Our Italy, which advocates for cultural preservation, differ on the need to increase wind energy capacity.

While support for wind power is neither low nor thought to create a negative environment, the findings of a survey of two renewable energy projects in the Scottish Isles have indicated good interest and an improved attitude towards community ownership.

Ownership, heritage, and tourism: examples from Italy, France, and Germany

It has been determined that "local integration of the developer, the creation of a network of support, and access to ownership of the park" are the key elements to increase societal acceptability based on their analysis of two renewable energy projects in France and Germany.

This is especially true for nations like France and Italy that have a poorer institutional framework for green energy, where a significant portion of their (often rural) territories depend on listed historic monuments to provide income for their residents, especially from tourism.

Scotland, which has one of Europe's largest wind power potentials but is heavily dependent on its environment to produce revenue from tourism-related activities, has observed a similar problem.

Ownership, heritage, and tourism: examples from Italy, France, and Germany

Lastly, the implementation of an integrated, community-based green-energy project in a small community in Germany's Black Forest (Freiamt) has been investigated and it was discovered that the residents/promoters of the project were driven more by opportunities to diversify revenues (such as revenue from selling electricity to the grid operators, attracting green-tech tourists, etc.) and pride than by the intense debate surrounding the climate change emergency.

Institutional capacity and participation

In Sweden, municipalities have significant influence over land use, even though the country has a highly centralised government.

In reality, municipalities have the power to refuse any project that falls under their borders, unless it expresses a national interest, such protecting natural regions or ensuring public safety and health.

In Sweden, municipal land use monopoly has resulted in a wide range of wind power implementation strategies, from dispersed micro-plants to concentrated, massive wind farms.

Institutional capacity and participation

Both good and bad outcomes have emerged from this; the former has encouraged a place-based approach, while the latter has made windfarms completely unpopular or had significant landscape consequences.

Municipalities having prior wind energy project expertise are more likely to increase their wind capacity than those without.

Instead of creating top-down systems where individuals have less opportunities to participate, this highlights the critical role that institutional capacity building plays in effectively engaging impacted residents.

Therefore, if public resistance to windfarms is to be favourably addressed, offshore locations are not the answer.

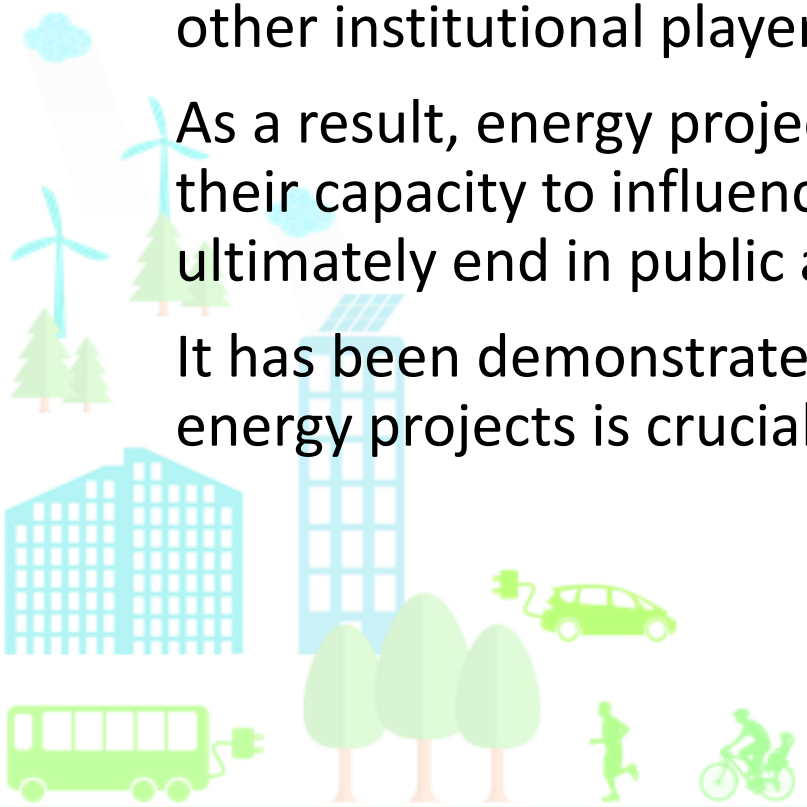
Institutional capacity and participation

Stakeholder participation in state-funded projects has long been practiced in Sweden through written input and participatory sessions. Other interactive methods, however, are not as well-established.

Additionally, tiny associations and informal agencies lack the visibility and power that other institutional players have in the planning process.

As a result, energy projects could actually be a factor in undermining people's belief in their capacity to influence policy, which might cause mistrust in the community and ultimately end in public alienation.

It has been demonstrated that understanding how people react to the effects of energy projects is crucial to understanding their perspectives.



Institutional capacity and participation

If public concerns about the effects of the new energy systems are to be addressed, a place-based strategy to RE plant placement is required.

According to the findings of their joint study in central Sweden involving universities, counties, and municipalities, the number, location, and identity of the owners are more significant to the local stakeholders than the technology itself.

Motivations for engagement

Three primary reasons for community involvement in energy projects are identified in the literature.

Despite criticism from an energy and social justice viewpoint, instrumental justifications—which centre on gaining societal support for projects—remain prevalent.

Normative justifications emphasise the right of individuals to be included in decision-making processes in order to ensure equity in the allocation of energy project costs and benefits.

Last but not least, substantive justifications acknowledge that locals have specialised knowledge about their communities that may be applied to enhance choices.

Motivations for engagement

Because developers' methods may be impacted by their underlying objectives, imposing community involvement criteria does not ensure inclusive conversations or community influence.

Achieving national goals for low-carbon energy and emissions reduction is one source of incentive. By lowering fuel imports and susceptibility to changes in energy prices, increased generation of renewable energy can also enhance national energy security and reduce energy poverty.

Community energy is marketed as offering economical and dependable local energy, even though they are most commonly invoked for large-scale deployments. Many community energy initiatives emphasise self-sufficiency, empowerment, and involvement. Establishing "green" enterprises and jobs in outlying areas may also be an aim.

While some communities may find such aims appealing, advantages may be difficult to achieve in situations where local labour forces lack the necessary skills or if employment is mostly limited to project building.

Motivations for engagement

Instead of promoting active involvement or having a tangible purpose, major initiatives to reach national objectives may include little negotiation and engagement primarily for instrumental reasons.

Project objectives may also lead to conflicts between regional and global interests. Community actors can be dubious about making local sacrifices in order to meet national emissions or energy security targets and instead be more focused on personal and local risks and advantages.

On the other hand, initiatives that tackle local poverty and energy insecurity are more likely to use substantive and normative justifications, as well as more active opinion gathering and project and engagement customisation to local requirements.

Motivations for engagement

Arnstein identifies categories of decision-making involvement and democratisation but does not rank their desirability. Pomeroy and Douvere, similarly categorise approaches from communication to negotiation, while the International Association of Public Participation

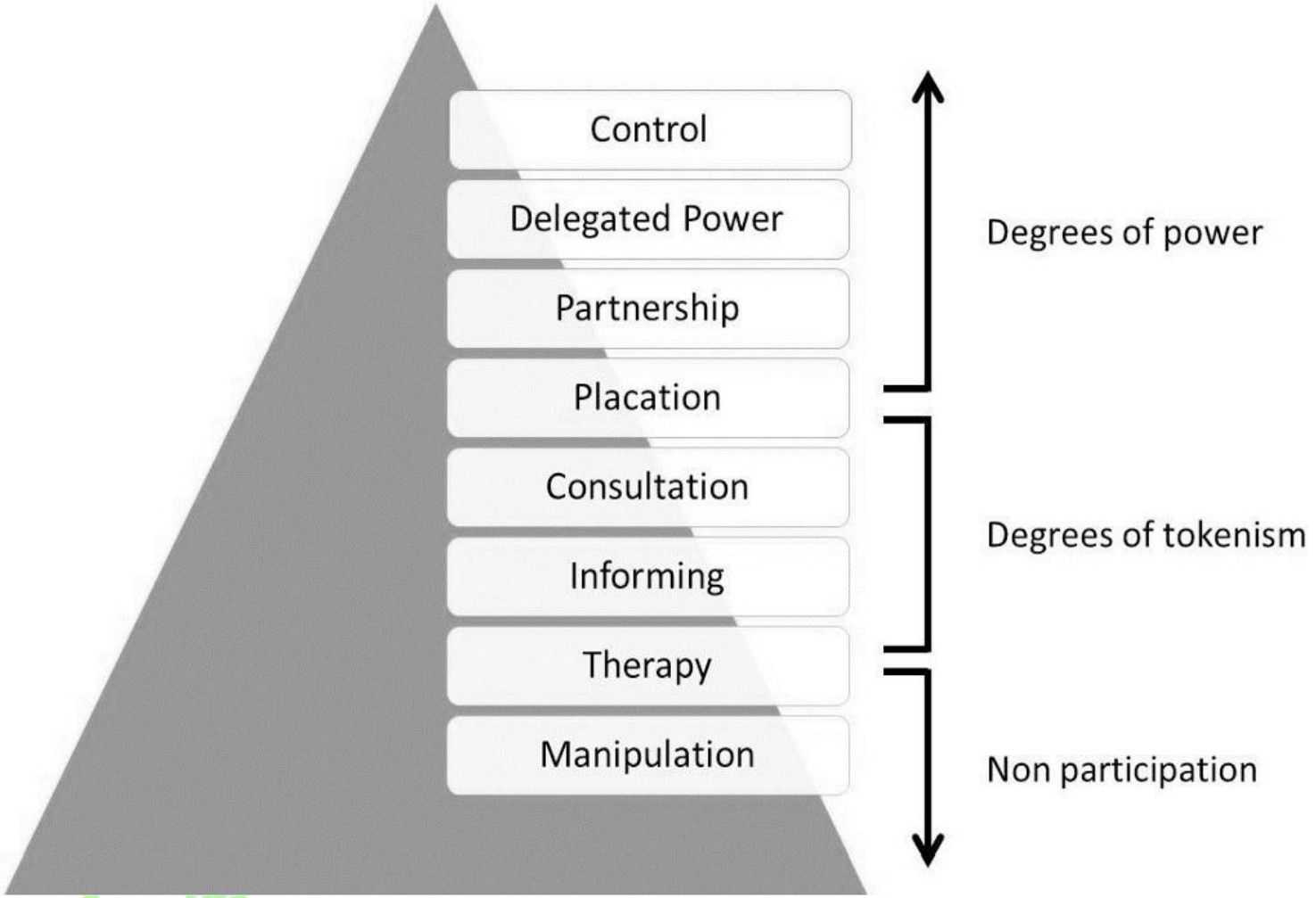
There is a distinction between two types of involvement: lesser (informing) and stronger (empowering). Involvement is distinguished into three categories—awareness-raising, consultation, and empowerment. Nevertheless, each may have a significant and complementary function.

Co-production between developers and impacted parties has become more and more important in recent years.

It has been pointed out that politics and power may skew co-produced initiatives, but they also consider this type of information sharing as helpful for promoting collaboration.

Developers may be encouraged to consider their goals, the impact of various techniques on participants and outcomes in various contexts, and how to modify engagement practices by avoiding the mindset of alternative types of interaction.

Arnstein's Ladder of citizen participation



Motivations for engagement

Who is being engaged is a crucial consideration in engagement methods. It is commonly acknowledged that "the public" should not be seen as a monolith and that answers are influenced by a person's roles, interests, values, and experiences.

As a result, engagement must acknowledge diversity and provide special consideration to under-represented groups while simultaneously giving participants a sense that their insights and views may affect choices.

This expresses normative reasons that acknowledge people's rights to respectful engagement in decision-making and is an essential feature of recognition and participatory justice.

When opinions are misrepresented, such as when developers or investors call project opponents "NIMBYs", misrecognition problems may also occur.

This is a misrepresentation of the numerous reasons why people could oppose innovations and the reality that "individuals opposing developments are often highly informed and cannot be presumed ignorant."

Practices

The literature has proposed a number of strategies to encourage distributive justice, evidence-based decision-making, nondiscriminatory involvement, and the balance of local and broader societal requirements in community engagement on energy projects.

Among the primary suggestions are: Increasing possibilities for local perspectives to influence decision-making is the goal of upstream involvement.

Early and easily available information can enhance siting decisions [86] and enable people to make well-informed decisions.

On the other hand, "decide-announce-defend" strategies, in which the primary components of initiatives are predetermined, may cause stakeholders to feel undercut and undervalued.

Practices

- Knowledge sharing and two-way communication:

  Permitting discussion of data provided by engagement organisers . Communities may be encouraged to contribute local knowledge through participatory methods in order to explore assumptions and uncertainties.

This, when combined with technical knowledge, can result in better judgements. Onshore wind energy experiences demonstrate how ongoing communication can enable problems to be addressed honestly and lower project risks.

- Preserving engagement: to preserve trust with impacted people during project design, construction, operation, and decommissioning.

Practices

- Selecting suitable engagement strategies, which are frequently combined to increase involvement, include empowerment (deliberative forums), consultation (surveys, feedback, meetings), and awareness-raising (exhibitions, websites, newsletters).

While some groups don't have the means, abilities, or confidence to participate in more participatory procedures, others use intense tactics.

Case studies indicate that although public meetings can turn combative and yield unrepresentative results, seminars and scientific fairs can foster laid-back environments.

Practices

• Steer clear of excessive consultation, particularly when it involves several parties and lasts for a long time, as in the case of government and developer-led consultations.

In places with smaller populations and when many engagement procedures take place at the same time, this danger is increased. To prevent recurrence, it is often advised to separate or coordinate clearly.

• Employing reliable gatekeepers: Community liaison officers may help people get involved by monitoring, listening, "bridge-building," and "advocacy" in order to establish communication channels, foster trust, and encourage the exchange of information. Boundary and bridging organisations may also promote cooperative problem-solving and mutual learning.

Practices

• Providing local benefits: Community funds, community ownership, studentships and apprenticeships, educational programs, and power discounts can all be utilised to support local benefits or provide compensation to communities.

Three justifications for providing community benefits are outlined:

- community requests,
- legal obligations,
- best practices.

Some studies emphasise the indirect advantages of energy projects, including increased tourism, while others suggest that community benefit packages should be customised and regionally appropriate.

Practices

• Involving the community in decision-making: to empower communities instead of imposing choices on them from outside governing organisations.

These procedures must be used flexibly to take into account the unique features of each project and environment because they cannot provide problem-free involvement.

Participation and procedural and distributive fairness can also be harmed by power imbalances between sponsors and communities that can lack political clout and technical expertise.

Practices

However, the overall literature assessment suggests that three aspects are essential to encouraging positive engagement processes in addition to comprehending the reasons for involvement.

The first is to promote involvement from all pertinent stakeholders in the proper roles. When people or groups have dual or ambiguous roles, such as being both citizens and company owners, this may be challenging.

Second, fostering trust amongst people, organisations, developers, and process managers contributes to the belief that people or organisations will act in the public interest.

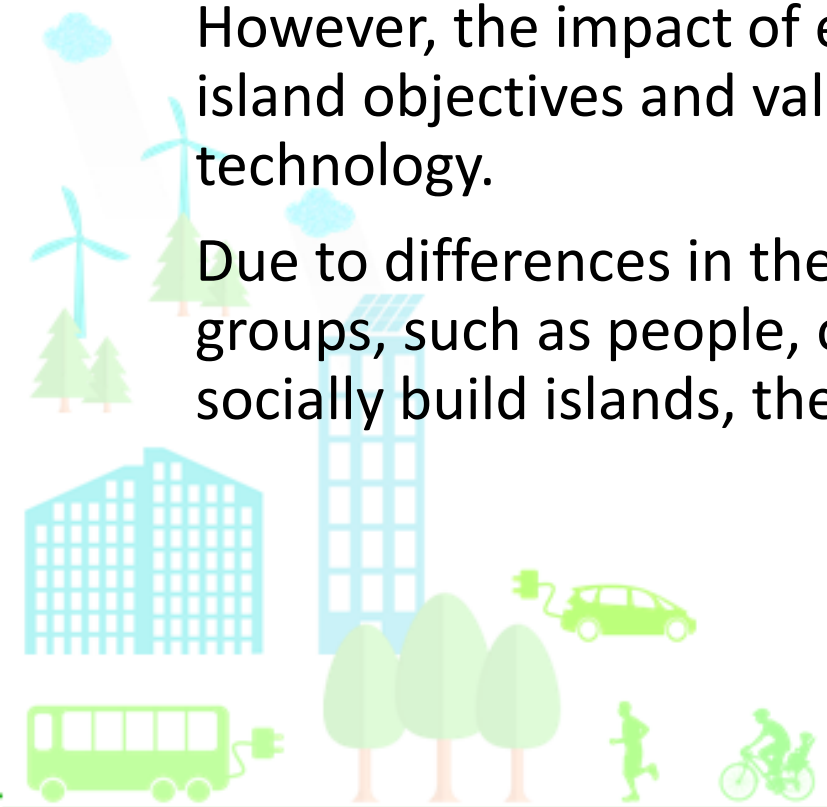
Third, to handle disputes that frequently arise over projects and engagement methods, strong and equitable procedures are required.

The island context and energy transitions

The perceived significance of islands as testbeds and hubs for the deployment of renewable energy is highlighted by initiatives like the Memorandum of Split, which establishes goals for accelerating island energy transitions throughout the European Union.

However, the impact of energy projects can differ based on how well they align with island objectives and values, in addition to the type, scale, and placement of the technology.

Due to differences in the physical attributes of islands and the ways in which various groups, such as people, other local stakeholders, governing bodies, and developers, socially build islands, these are challenging to generalise.



The island context and energy transitions

In attempts to comprehend the social, economic, and historical aspects of islands that might influence energy projects and community involvement on energy concerns, the discursive imagination of "islandness" has been crucial.

The primary characteristics of islands mentioned in the literature are reviewed in this section, with particular attention paid to identity, variety within and across island populations, and the economy, employment, and energy.

Identity and governance

A strong feeling of location and identity, marked by specific configurations of community, fellowship, and cultural ties to maritime places, is a crucial component of many explanations of island imaginaries.

In order to investigate how energy projects may disrupt certain islanders' socio-cultural and emotional links to their surroundings, such portrayals frequently include traditional sectors like as farming, fishing, and aquaculture, as well as cultural interactions with land- and sea-scapes.

In spite of this, islands are frequently seen as both "premier sites, and models, for carefully designed and manicured spaces" and as manageable settings for scalable technological experimentation that envisions islands as references to other locations and broader concerns.

The island context and energy transitions

In a similar vein, scholars have investigated how island identity is portrayed through narratives of peripherality and remoteness.

In contrast to more outward-looking imaginaries of islands characterised by connections rather than physical isolation, others contend that "the small, remote and insular…suggest peripherality, being on the edge, being out of sight and so out of mind".

Efforts to advance distributive and procedural justice may also be hampered by the idea that island populations are excluded from national choices.

The island context and energy transitions

Local communities may feel alienated as a result of such methods and they may reject projects and processes if their opinions are not heard when policies are being made.

Furthermore, rather than encouraging involvement that takes into account these distinctions, the application of similar rules (such as standard planning criteria) may homogenise the demands of various groups within island communities.

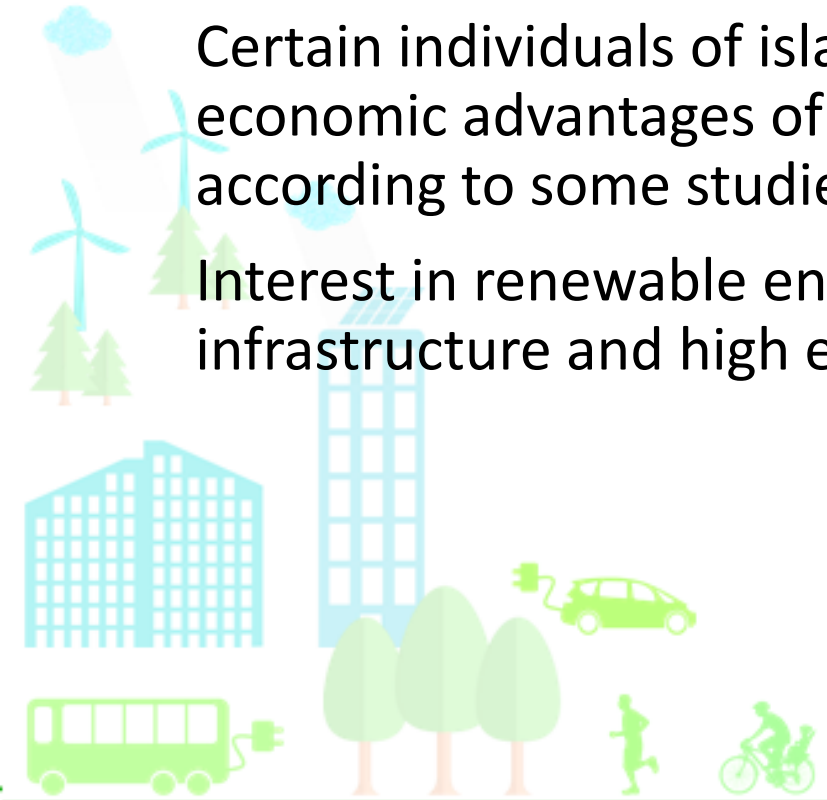
Economy, employment and energy

Numerous islands have very small job bases and a history of underdevelopment.

On certain islands, the majority of jobs are in low-wage, seasonal industries like tourism and fishing, and a lack of work options may lead to younger generations leaving the island and population reduction.

Certain individuals of island communities may be more open to the social and economic advantages of energy improvements as a result of these circumstances, according to some studies.

Interest in renewable energy projects may also be sparked by issues with energy infrastructure and high energy costs.



Economy, employment and energy

However, in many tiny island settlements, local organisations and authorities might not have the resources—both human and financial—to acquire the necessary skills to plan and oversee major energy projects.

In contrast to depictions of islanders as more passive victims of their circumstances, many island communities want to attain long-term stability while retaining their autonomy.

This is one of the additional factors that should be considered when considering participation. Thus, energy projects that promise to address issues of population and development may receive more support, especially on islands where people have a history of accepting change in order to maintain their communities.

Enabling engaged citizens may have more advantages from energy initiatives than energy outputs.

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