GINGR
Global Initiative for Nature, Grids and Renewables

Questions and Answers

A collection of questions from the audience

I. Planning & Methodology

1. How is biodiversity taken into consideration within GINGR? How is the baseline study conducted?

GINGR integrates biodiversity considerations from the earliest stages of planning rather than treating them as a later environmental assessment requirement. The framework develops a living Socio-Ecological Baseline through four complementary Knowledge Layers: Spatial and Territorial Baseline data, field-based ecological data, Social and Cultural data, and Governance and Policy information. Together, these create a more complete understanding of species, habitats, ecosystem services, ecological connectivity, community values, and governance conditions.

Importantly, GINGR extends beyond traditional biodiversity assessments by including ecosystem service justice. The baseline not only assesses what species are present, but also how ecosystems function, where ecological corridors exist, who benefits from ecosystem services, and whose values are represented in decision-making.

The baseline is treated as a living reference point that is updated periodically throughout the project lifecycle to support adaptive management and long-term Nature- and People-Positive outcomes.

2. To reach Nature-Positive goals, should automated Multi-Criteria Decision Analysis be the standard for comparing options?

Multi-Criteria Analysis (MCA) and automated MCDA tools can play an important role in supporting better planning decisions, particularly when evaluating multiple route or siting options. They allow planners to compare technical, economic, environmental and social considerations in a transparent and systematic manner. As the availability of spatial and ecological data increases, these tools can help identify opportunities to avoid impacts before projects reach the permitting stage.

However, GINGR is not tied to a specific decision-support tool. Rather, it seeks to improve decision-making by broadening the criteria considered and supporting adaptive management strategies. In addition to traditional engineering and cost factors, GINGR incorporates ecosystem services, community values, environmental justice, governance conditions and Nature-Positive opportunities.

GINGR provides the information architecture that supports MCDA and helps determine which criteria should be considered, including ecosystem services, justice dimensions, cultural values, ecological connectivity and governance quality.
The objective is not simply to identify the least harmful option, but the option that delivers the greatest combined benefit for nature, people and infrastructure.

3. **How is affordability included in the decision-making process? Are environmental and social measures too difficult to quantify?**

Affordability remains a critical consideration in grid planning and development. However, one of the key messages of the GINGR approach is that decisions should not be based solely on direct financial costs. Traditional planning processes often compare route options primarily on engineering feasibility, construction costs, and permitting requirements. GINGR expands this perspective by also considering biodiversity, ecosystem services, community values, environmental justice, and long-term resilience. During the webinar, Adrián Maté highlighted the need to rethink traditional cost-benefit analyses by incorporating environmental and social externalities that are often overlooked in project decision-making.

While environmental and social factors can be more difficult to quantify than direct financial considerations, this does not mean they should be excluded from decision-making. Increasingly, planners are using indicators, spatial analysis, ecosystem service assessments, stakeholder input, and multi-criteria analysis to compare options in a transparent and structured way. Experience shared during the webinar also suggested that early investment in environmental studies and stakeholder engagement can help reduce permitting delays, legal challenges, and costly project redesigns later in the process.

The webinar also highlighted the important role of regulators in shaping how affordability is assessed. In many jurisdictions, including the UK, regulators are increasingly being asked to consider not only the direct costs of infrastructure projects but also the wider value they create for society and the environment. Demonstrating clear consumer value is often essential for securing regulatory support for measures that go beyond minimum legal requirements. This can include investments that enhance biodiversity, improve community outcomes, strengthen resilience, or reduce long-term environmental risks. As a result, the challenge is not simply to minimise costs, but to demonstrate how environmental and social investments contribute to better overall outcomes for both consumers and society.

In this sense, environmental and social measures should not be viewed merely as additional costs, but as investments that can improve project outcomes, strengthen resilience, and reduce overall project risk.

4. **In case of data deficiency on species and their ecosystem services in a project area, what precautionary measures can be taken to minimize negative impacts of the project?**

Data gaps are a common challenge in infrastructure planning and should not automatically prevent decision-making. A widely applied approach is the precautionary principle, whereby planners assume the potential presence of sensitive species or habitats and assess impacts using reasonable worst-case scenarios. This approach helps ensure that uncertainty does not lead to underestimation of risks.

During the webinar, participants highlighted the use of "assumed presence" and precautionary assessments as common practice in the UK where data are incomplete. At the same time, uncertainty reinforces the importance of adaptive management. Where information is limited, projects can proceed with enhanced monitoring, targeted mitigation measures and commitments to review outcomes as new evidence becomes available. This reflects GINGR's third guiding principle, which recognises that planning and management should continue throughout the project lifecycle rather than ending at the consent stage. Adaptive monitoring should continue throughout the infrastructure lifecycle to avoid shifting baseline syndrome and ensure that new information is incorporated into management decisions.

II. People & Stakeholder Engagement

5. **How to avoid social 'consultation fatigue' with so many processes under way?**

Consultation fatigue often arises when stakeholders are repeatedly asked for input but see little evidence that their contributions influence decisions. Research discussed during the development of the GINGR methodology suggests that participation is most effective when stakeholders are treated as long-term partners rather than one-off consultees. Communities, landowners, Indigenous Peoples, NGOs and regulators all need to see tangible value from their involvement.

Reducing consultation fatigue therefore requires more than increasing the number of engagement activities. It requires transparency about how feedback is used, recognition of different forms of knowledge, coordination between planning processes where possible, and ongoing communication throughout project development. Participation becomes sustainable when people can see that their contributions help shape outcomes and strengthen decision-making.

6. **Many people simply do not want infrastructure in their backyard. Can you share any tips or success stories?**

Experience across many infrastructure projects shows that opposition is often driven by concerns about landscape change, loss of place identity, economic losses, health concerns, fairness and trust. Early engagement can help identify these concerns before project designs are fixed and create opportunities to explore alternatives, mitigation measures or locally

relevant benefits. During the webinar, speakers emphasised that engagement is often an accelerator rather than a barrier to project delivery.

Many conflicts arise because people perceive infrastructure as creating local burdens for wider societal benefits. Recognition, procedural and distributional justice can help address these concerns by ensuring that communities are heard, involved in decision-making, and able to share in the benefits of the transition.

One example discussed during the webinar came from France, where opposition to a transmission project led to discussions on alternative approaches to balancing electricity demand. While every situation is unique, successful projects often share common characteristics: early dialogue, transparency, recognition of local knowledge, and a willingness to adapt plans in response to stakeholder concerns. The objective is not necessarily to eliminate disagreement, but to build trust and identify solutions that are acceptable to all parties.

III. Integrating Multiple Objectives

7. How can climate, biodiversity and social goals be integrated in rangelands and other multifunctional landscapes?

Rangelands provide an excellent example of why climate, biodiversity and social objectives should be considered together. These landscapes often support important ecological functions while also providing livelihoods, cultural values and climate resilience. Decisions that focus on only one objective can inadvertently undermine the others.

GINGR seeks to address this challenge by integrating ecological, social, cultural and governance information into a single planning framework. It also evaluates not only ecological and climate outcomes, but also who depends on ecosystem services provided by rangelands, who may lose access to them, and how benefits and impacts are distributed across stakeholders.

This enables planners to assess how future climate scenarios may affect ecosystems, connectivity, local communities and ecosystem services, while identifying opportunities for restoration, adaptation and sustainable development. Rather than focusing solely on infrastructure resilience, the aim is to strengthen the resilience of the broader socio-ecological system.

IV. Implementation & Regulation

8. Are there any countries that explicitly require biodiversity enhancement or nature restoration on, under, or around grid infrastructure?

There is currently no dedicated EU-wide requirement that grid infrastructure must function as ecological corridors or biodiversity steppingstones. However, several policy developments are moving in this direction. The EU Nature Restoration Regulation, Biodiversity Strategy and existing environmental legislation increasingly encourage restoration, ecological connectivity and nature recovery across landscapes. During the webinar, speakers noted that these broader policy frameworks can support enhancement measures associated with grid infrastructure.

One of the most prominent national examples is the United Kingdom's Biodiversity Net Gain policy, which requires most developments to deliver at least a 10% biodiversity improvement. National Grid has also committed to creating Nature Networks and enhancing ecological connectivity along its network. Similar approaches can be found in individual projects in Spain, Austria and elsewhere, while in the United States several right-of-way initiatives are actively managing transmission corridors for pollinators and wildlife habitat.

V. Specific questions for National Grid

9. "How does National Grid monitor bird mortality and what is the Spotted system?"

National Grid uses a combination of internal reporting, specialist expertise and targeted monitoring to identify bird collisions and other wildlife incidents associated with its transmission network and assets. This information helps inform proactive measures to avoid future impacts and disturbance. Staff and contractors can report observations through an internal system called "Spotted", while partnerships with organisations such as the RSPB and specialist wildlife groups support monitoring, mitigation and habitat management activities. These collaborations also help to design and implement effective deterrents that reduce the risk of future impacts.

The webinar did not include detailed technical information on survey methodologies or marker spacing. These approaches are typically tailored to local species, habitat conditions and site-specific risk assessments. Such assessments may incorporate information on migratory patterns and flight paths, alongside incident records and wildlife observations reported through the Spotted system. This information is used to inform decisions on the installation of bird diverters, line marking devices, and other deterrent measures. In general, bird protection measures may include flight diverters, line marking devices, route optimisation and habitat management, with monitoring data used to refine mitigation measures over time through adaptive management. "Spotted" is National Grid's internal reporting system that enables staff and contractors to record wildlife observations, including bird collisions and other incidents. During the webinar, participants requested a public link to the system. However, as an internal reporting platform, Spotted is not publicly accessible.