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# CONNECTING ENERGY, PROTECTING NATURE

A JOINT BIRDLIFE EUROPE AND EUROPEAN ENVIRONMENTAL  
BUREAU BRIEFING ON PROTECTING NATURE IN THE DELIVERY OF  
ENERGY INFRASTRUCTURE PROJECTS OF COMMON INTEREST



BirdLife Europe is a Partnership of 49 national conservation organisations and a leader in biodiversity conservation. Our Partners are present in 48 European and Central Asian Countries, including all EU Members States. BirdLife's unique local to global approach enables it to deliver high impact and long term conservation for the benefit of nature and people.

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Created almost 40 years ago, the European Environmental Bureau (EEB) is Europe's largest federation of environmental organisations. With some 140 member organisations from more than 30 countries, we stand for environmental justice, sustainable development and participatory democracy. Our aim is to ensure a healthy environment and rich biodiversity for all.

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Connecting energy, protecting nature

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# EXECUTIVE SUMMARY

Developing Europe's electricity transmission network and other energy infrastructure is essential for maintaining secure and affordable energy supplies, and for the transition to a sustainable energy system. To help achieve its energy and climate policy objectives, the European Union (EU) selects certain electricity, gas and oil infrastructure projects and promotes them as the highest priority investments for the EU.

Lists of these energy infrastructure projects of common interest (PCIs) are developed on a rolling two-yearly basis. Under the 2013 EU energy infrastructure regulation (known as the TEN-E Regulation<sup>1</sup>) the PCIs are given the highest significance possible in national permitting procedures and spatial planning, and benefit from streamlined permitting procedures and access to public funding.

BirdLife Europe and the European Environmental Bureau (EEB) recognise the need for energy infrastructure development, particularly for renewable electricity transmission, and broadly support the PCI approach. However, the framework should be used to enable an ecologically sustainable energy transition, in line with EU climate and environmental objectives and the Treaty on the Functioning of the EU.

That means the PCI framework, and each project it promotes, must contribute not only to energy security and trade, but also to meeting European environmental objectives and standards, including on biodiversity and climate change.

Europe's decision makers, citizens, industries and environmental groups face immense and pressing challenges in two related areas:

- (i) making our energy systems sustainable, and**
- (ii) protecting and restoring our ecosystems.**

Both are fundamental to our future well-being and prosperity and we cannot afford to fail on either. Rising to meet both of these challenges simultaneously, and ensuring initiatives in both spheres are mutually supportive and reinforcing, opens up opportunities for greater gains in the long term.

This briefing explores how protecting nature when establishing power lines, and the other energy infrastructure needed to become a low carbon society, can create a virtuous circle of smaller and more manageable impacts on nature, better public acceptance, less risk and delay in investments, and a safer, healthier environment for all.

By making its high-priority energy infrastructure PCIs as environmentally friendly as possible, Europe can become a world leader in enabling and demonstrating the feasibility of a sustainable energy transition.

# RECOMMENDATIONS

## 1. ADDRESS CLIMATE AND BIODIVERSITY TOGETHER

Getting power lines built, and stopping biodiversity decline, are two immense challenges Europe is facing today. Yet, protecting nature and building the energy infrastructure that Europe needs are related and compatible. More needs to be done by all parties involved to understand both challenges, and how they can be tackled simultaneously and coherently.

## 2. ENERGY SAVINGS AND RENEWABLES FIRST

We need an energy system and a society that can be sustained indefinitely because it does not deplete resources, nor pollute and damage the environment upon which we all depend. Delivery of energy infrastructure PCIs should support this switch to an energy efficient society and clean, sustainable renewable energy.

## 3. PROTECT HABITATS AND VULNERABLE SPECIES

The PCI label is an endorsement by the EU, which has targets and objectives for both energy and biodiversity. Therefore the PCI label should not reward projects that are likely to damage Europe's most precious wildlife sites and endangered species. Promoting highly damaging projects would undermine EU objectives, and is likely to provoke conflict, rather than help to speed up delivery as intended.

## 4. PLAN AHEAD

National and European energy infrastructure plans should be "environment-proofed" and "climate change-proofed". Energy system development as a whole, and the details of each project, should contribute to building a coherent, resource-efficient, and ecologically rich low-carbon future. No project should receive PCI status if it has not been scrutinised by environmental authorities and stakeholders in its host countries. This can most effectively be achieved through strategic environmental assessment of national infrastructure plans.

## 8. LEARN AND IMPROVE

PCI lists are renewed every two years, with the Commission's Regional Groups and the EU Agency for Co-operation of Energy Regulators (ACER) charged with reviewing progress of the implementation of the projects. This provides an excellent framework for improving the environmental profile of PCI projects, which should increase public support. It is also a good opportunity to publicise the benefits of the PCI label, and to highlight the challenges faced in developing energy infrastructure sustainably (see Recommendation 1 above). Learning and improvement of this kind can best be achieved in consultation and dialogue with environmental stakeholders.

## 7. FACTOR CLIMATE AND NATURE IN

It is important that the methodologies used to prioritise and select projects for PCI status are robust and help ensure environmentally acceptable projects, which are also in line with EU climate objectives, come forward. Cost-benefit methodologies for all PCIs should include information on potential environmental impacts, including whether all or part of a project is likely to fall within a site protected for its nature value. They must also be based on scenarios and demand assumptions that are in line with Europe's commitments to cutting carbon emissions.

## 6. LISTEN

Current consultation on which projects become PCIs needs to be improved, to ensure stakeholders and the public have a real chance to engage meaningfully. European and national institutions and developers must provide the necessary information, opportunities and forums for the public and interested parties to be able to have their say. It is important to help stakeholders to get involved, to work together and to engage early in the decision-making processes – rather than interested parties finding out about plans late in the process and fighting to stop them. There should at least be the potential for the public participation processes to lead to projects being modified or rejected as a result. There is much to be gained by going beyond formal public participation requirements. Grid operators and national and European institutions are increasingly discovering the benefits of working with environmental stakeholders to develop strategies, agree standards and improve practices. The non-governmental organisations (NGOs) can then seize these opportunities, and help to shape the plans and projects, to make sure they are as environmentally acceptable as possible.

## 5. OPEN UP

The Aarhus Convention and Regulation set out minimum requirements for openness and public participation in environmental decision-making, and the TEN-E Regulation introduces additional transparency measures. If fully implemented across Europe, these provisions provide a strong basis for ensuring that the PCI selection process is opened up for input from interested parties, and consequently better involves and reflects the priorities of European citizens.

# PART I MAKING EU ENERGY INFRASTRUCTURE POLICY WORK FOR CLIMATE AND NATURE

Modern society could not function without reliable energy supplies. Yet our energy systems are the main cause of climate change, which threatens to seriously undermine our prosperity and well-being. Similarly, society cannot function without rich, healthy ecosystems: ecosystem services directly and indirectly support our survival and quality of life. These natural life-support systems face many threats, including climate change and development pressures.

Andy Hay (rspb-images.com)



## 1.1 PROJECTS OF COMMON INTEREST

Experience from the first round of PCI selection shows that improvements are necessary for all objectives to be reached (Box 1). Before these are addressed it is important to understand why and how PCIs are proposed and selected.

### 1.1.1 THE NEED FOR PCIs

The European Commission estimated in 2010 that the EU needs to invest €200 billion in energy infrastructures by 2020. It warned, however, that half of the total investment needed was at risk of not being delivered due to obstacles related to lengthy and ineffective permit granting procedures and public acceptability, as well as difficulties with existing regulatory system and/or financial frameworks<sup>2</sup>.

High costs and delays in power line development threaten to become major obstacles to the renewable energy investment needed to make energy supplies sustainable. Failure to develop new infrastructures could also become a threat to energy security and a major obstacle to opening up international trade and competition in energy markets. The conclusion was drawn that changes in regulatory and



financial schemes would therefore need to be introduced in Member States to ensure that EU energy and climate targets are delivered on time.

The European Commission has identified “adequate, integrated and reliable energy networks” as crucial for achieving the main goals of EU energy policy<sup>3</sup>. These goals are (i) ensuring security of supply, (ii) competitiveness and (iii) sustainability. To enable development of such energy networks, the regulation on guidelines for trans-European energy infrastructure (the TEN-E Regulation)<sup>4</sup> was adopted in 2013, setting out 12 priority corridors (e.g. North Seas Offshore Grid) and areas (e.g. Smart Grids). These cover electricity, gas, oil and carbon dioxide transport networks.

## 1.1.2 PCI SELECTION

Identification of PCIs represents the core element for implementation of these priority corridors and areas. PCIs are projects that benefit more than one EU Member State, and must meet certain other criteria laid down in the TEN-E Regulation<sup>5</sup>, such as contributing to energy security.

The process of selecting PCIs takes the following steps:

1. Project promoters submit proposals to Regional Groups composed of representatives of Member States, national regulatory authorities, transmission system operators (TSOs), the Commission, the EU Agency for Co-operation of Energy Regulators (ACER) and the European Networks of Transmission System Operators (ENTSOs) for Electricity and Gas.
2. Regional groups assess the eligibility of the proposals according to criteria set out in the Regulation, such as contribution to energy security, market integration and sustainability, as well as benefiting more than one EU Member State<sup>6</sup>. For the second and subsequent lists of PCIs, proposals must already be in the ten-year network development plans (TYNDP) for electricity and gas, prepared by the ENTSO for Electricity and ENTSO for Gas respectively<sup>7</sup>. The Groups assess and rank the projects. If the number of proposed projects exceeds a manageable number, the Commission can remove the lowest ranking proposals.
3. In preparing their lists, the Regional Groups are required by the TEN-E Regulation to consult organisations representing various stakeholders, including environmental groups.

4. The decision making body of each Regional Group (decision making powers in the Groups are restricted to Member States and the Commission) adopts the regional lists of proposed PCIs (draft regional lists).
5. ACER provides an opinion on the draft regional lists, in particular on the consistent application of the criteria and the cost-benefit analysis across regions.
6. The European Commission adopts the final EU list of PCIs, through the delegated act procedure.

## 1.1.3 BENEFITS OF PCI STATUS

Projects awarded the energy infrastructure PCI label<sup>8</sup> are given preferential treatment in permit granting, and the highest available status in spatial planning, in the host Member States. This includes a 3.5-year time limit for permitting and a “one-stop-shop” administrative arrangement with a single competent authority facilitating and co-ordinating the permit granting process. Gaining PCI status establishes the necessity of the project from an energy policy perspective in the permit granting procedure. PCIs are also considered in the public interest from an energy policy perspective.

PCI status enables Member States to provide public subsidies under EU competition law, including through EU Structural Funds<sup>9</sup>. PCIs can also be eligible for EU co-financing<sup>10</sup> under the Connecting Europe Facility (CEF). These funds are intended for various studies supporting the development of projects, and development works where there are positive externalities and no commercial viability. Under CEF €5.85 billion will be available for the period 2014–2020.

The TEN-E Regulation also introduced a requirement for Member States to assess potential measures to streamline environmental assessment procedures for PCIs. Streamlining is to be achieved “without prejudice” to nature protection legislation<sup>11</sup>.

In line with provisions of the Aarhus Convention<sup>12</sup>, as well as the Aarhus Regulation<sup>13</sup> and other relevant Union law, and in recognition of the public acceptability challenges faced in the sector, the Regulation also creates additional requirements for PCIs in terms of transparency and public participation<sup>14</sup>.

## 1.1.4 THE FIRST LIST OF PCIs

The first Union list of PCIs was adopted by the European Commission by Delegated Regulation (EU) No 1391/2013 on 14 October 2013;<sup>15</sup> it entered into force on 10 January 2014. The PCI list is reviewed every two years. All projects, including those on the first list, will need to undergo the same selection procedure outlined above.

The first round of PCI selection lacked some of the basic elements which would be required for swift delivery of the necessary energy infrastructure, supporting climate

goals and the minimising environmental impacts (Box 1). Key failings included:

- Lack of transparency – stakeholders were provided with too little information about candidate projects to be able to identify any potential problems.
- Insufficient public participation – stakeholders were approached late in the process and given insufficient opportunity and time to comment.
- Superficial engagement – there was no evidence that the consultations that did take place influenced the list in any way.
- Lack of consideration of environmental and climate objectives and commitments.

### BOX 1: WHAT WENT WRONG IN 2012-13

The process of the preparation of the first PCI list lacked essential features, such as adequate transparency and public participation. An initial written public consultation on a list of over 400 candidate PCIs was undertaken in autumn 2012. At this time, too little information was given about many of the projects for respondents to be able to provide meaningful comments, and a seriously deficient methodology was in place for assessing the social and environmental impacts of electricity and gas PCIs. Results of this consultation were never made public. It later became evident that following this consultation additional projects were added to the list of the candidates, including some that are environmentally problematic.

In late May 2013, certain environmental stakeholders were invited to attend a ‘Stakeholder Consultation (environmental)’ on the draft regional PCI lists. This consultation, which is a requirement of the TEN-E Regulation, was very inadequate. Invited stakeholders were provided with the draft PCI lists just two working days before the consultation event, which made it virtually impossible to gather useful information from

national NGO partner and member organisations. It was impossible for some NGOs from further afield to attend at all at such short notice. Moreover, too little information about many of the projects was given to enable stakeholders to form an opinion, or to judge whether a project could be considered a PCI in line with the TEN-E Regulation.

Following the event, and complaints from NGOs, the Commission provided some additional information on the projects and an additional period to send written comments. However, the information provided was again limited, and by that time the decision making body at the technical level had already taken a decision (a week after the environmental stakeholder consultation) on the draft regional lists. The agreement among Member States and the Commission, adopted at the final meeting of the decision making body at political level in late July, which formed the basis for the Commission delegated regulation (final PCI list), did not introduce many changes. No real opportunity was therefore offered to actually influence the details of projects or their inclusion in the lists.

One of the results of this failure to properly engage with civil society is that the list has proved to be problematic in relation to environmental and climate objectives. Some of the projects at a more advanced stage are already proving to be highly controversial with national stakeholders due to environmental concerns<sup>16</sup>. Selection and justification

of gas PCIs was based on “aggressive” assumptions about future gas demand<sup>17</sup>. EU gas consumption is assumed to grow at almost twice the rate estimated by the International Energy Agency, and at a rate far above that which the EU’s own climate and energy roadmaps<sup>18</sup> say is necessary to meet climate objectives.

## 1.2 PCIs AND NATURE PROTECTION

The EU seeks to tackle energy, climate and nature protection challenges, and to ensure compatibility between these objectives. Under its 2020 Biodiversity Strategy<sup>19</sup>, Europe aims to halt the loss of biodiversity and the degradation of ecosystem services by 2020, and restore them where physically possible. The Birds and Habitats Directives and the Natura 2000 network of protected areas are key instruments for achieving these goals. The nature protection framework also contains mechanisms to enable development, including energy infrastructure, without damaging Europe's most important ecosystems.

Europe is losing biodiversity at an alarming rate and its ecosystems are being degraded. Energy infrastructure, if not planned and developed with the environment in mind, can significantly impact ecosystems and the

communities they support (Box 2). Many species that are already endangered, due to pressures such as deliberate illegal killing and loss of habitats to development, face additional risks of electrocution and death by collision with power lines. Similarly, development of new large dams and river diversions proposed for hydro pumped electricity storage could threaten some of the last remaining natural rivers in Europe. However, just as nature protection does not need to be an obstacle to development, energy plans and projects do not need to undermine nature protection. Environmental assessment procedures have been developed to help ensure this.

Grid planners and developers often go to considerable lengths to minimise impacts on nature and on host communities, and are very creative in finding technological and routing solutions. For example in Italy, the grid operator TERNA uses a multi-layered geographical information system to identify detailed routing with the lowest impacts. This and other good practices are reviewed in the Renewables Grid Initiative's Best Practices reports<sup>20</sup>.

### BOX 2. RISKS TO WILDLIFE AND HABITATS

Climate change is a massive threat to biodiversity, and new infrastructures are needed to limit its impacts. However delivering these infrastructures can, itself, have negative impacts on wildlife and their habitats. Some of the major threats to wildlife potentially posed by PCIs are summarised here.

#### Gas infrastructure

Liquefied natural gas (LNG) is shipped from the place of production and turned back into gas (re-gasified) at an LNG terminal, which may be onshore or near the coast. There can be a risk of pollution from LNG ships and terminals, threatening marine wildlife. The marine ecosystem and fisheries could be impacted due to dredging activities during construction and operation, as a result of sediment re-suspension and the potential release of contaminants. Further impacts may arise from the disposal of the dredged sediments. Gas flaring can also present a significant risk to bird species. In 2013, an LNG terminal gas flare in Canada killed about 7,500 songbirds<sup>21</sup>.

#### Power lines

In principle, any flying species of bird or bat can collide with any type of aerial wire or cable. In most cases, the impact of collision produces fatal

injuries or immediate death. However, the risks vary by location and species. High-risk areas for birds include wetlands, coastal areas and meadows. Birds that migrate at night are particularly at risk, as are those flying in flocks, and large and heavy birds with limited manoeuvrability. Storks, cranes, bustards, flamingos and geese are among the birds at highest risk. Migratory birds are particularly at risk where power lines cut across important flyways and migration routes, such as river valleys, mountain passes and straits<sup>22</sup>.

Vegetation management in power line corridors may present opportunities for habitat enhancement. However, it may cause habitat fragmentation, and facilitate the movement of invasive alien species. Placing power lines underground can reduce impacts on wildlife and greatly improve public acceptability. However, it may cause significant damage to certain habitats, such as heathland or peat, which may take many years to recover.

#### Pumped storage

At hydro-pumped storage facilities, water is stored at high altitude and released to a lower reservoir to drive turbines and provide power at times of peak demand,

or to control frequency on the grid. When demand drops, the water is pumped to the upper reservoir for future use. Creating reservoirs and diverting rivers can eliminate important habitats and damage ecosystems. Flooding of reservoir sites can cause direct loss, or fragmentation, of important terrestrial habitats. Entire populations, or even species, have disappeared when endemic species with narrow ranges were located in the reservoir area<sup>23</sup>. Dams can also completely modify

aquatic and riparian ecosystems, disrupting natural hydrology and sediment flows. Facilities can prevent free migration of many aquatic species including fish. Water discharges from dams can also disrupt ecosystems by affecting water temperatures and/or oxygen levels<sup>24</sup>. Indirect impacts are also caused by water level fluctuations in reservoirs, which can damage habitats and reduce food availability.

## 1.3 PCIs, CLIMATE CHANGE AND SUSTAINABLE ENERGY

Without concerted action to cut carbon emissions, average temperatures will rise by several degrees this century, and extreme weather events will increase in intensity and frequency<sup>25</sup>. This could have severe impacts on people and businesses directly, and also harm the natural world upon which we all depend<sup>26</sup>. Rich ecosystems provide an array of services that are essential for our well-being, health and livelihoods, such as flood and erosion risk reduction, clean water and air, pollination and disease control. They are also central to the carbon cycle, locking up vast reservoirs of carbon in forests, soils and the oceans. If degraded, these will create positive feedbacks that accelerate climate change. And nature needs to be resilient to make climate change adaptation feasible.

It is essential to reduce greenhouse gas emissions to keep warming within safe limits. Renewable energy sources are central to the solution. Yet renewables are not all equally benign or beneficial in environmental terms, and need to be well-selected and planned. For example, hydropower schemes can eliminate habitats and ecosystems, and biofuels can displace biodiversity and add to greenhouse gas emissions. In its publication *Meeting Europe's Renewable Energy Targets in Harmony with Nature*,<sup>27</sup> BirdLife Europe explains how this can be achieved. The solutions lie mainly in choosing the right technologies for the locations and taking steps to avoid and reduce impacts on nature. Four principles are central: (i) renewables must be low carbon, (ii) a strategic approach to deployment is needed, (iii) harm to birds and biodiversity must be avoided, and (iv) Europe's most important sites for biodiversity must be protected. Similar

principles apply in delivering the energy infrastructures needed to make a renewables-based system possible.

Renewables developed in this way are the only kind of energy supply that can be provided without depleting resources and without causing pollution and other environmental impacts. The cost of wind and solar energy has fallen rapidly in recent years. Well-selected, planned and located renewables are the only affordable, safe and sustainable basis for future energy systems.

Renewable *electricity*, in particular, has a central role to play in a sustainable energy system. Even with concerted action to save energy, which is indispensable, power consumption is expected to rise in a low carbon society. This is because we currently lack viable alternatives to electricity for low carbon space heating and transport, so use of heat pumps and electric vehicles must increase unless unexpected innovations are made in these sectors. Research and development funding should do more to promote innovations in the energy sector that help prevent impacts on nature.

For energy security reasons, the EU also promotes gas and oil infrastructure. However, using domestic renewable energy sources is inherently more secure than continued reliance on imported fossil energy supplies. It is argued that some gas fired power generation may also be needed to provide back up electricity supplies in a high renewables future. However, promoting gas and oil infrastructure, especially if based on inflated demand assumptions, will conflict with climate objectives<sup>28</sup>.

Among the energy infrastructures promoted by the PCI label, only power lines are essential for the transition to a sustainable energy system. Power lines are needed to connect new energy sources, such as remote and offshore wind farms, and to get the electricity to demand centres. They are also needed to connect regions and nations so they can import and export electricity when there is too much or too little renewable energy available locally, due

to weather patterns. Energy storage remains challenging for technical, financial and environmental reasons, so balancing systems through inter-connection is a vital contribution to making a renewables-based system feasible.

For climate change reasons it is correct that Europe promotes power line development. The process of prioritising energy infrastructure projects in the EU should reflect that. Making use of existing hydro capacity to help balance supply and demand also has an important role to play. The PCI label, however, also promotes oil and gas infrastructures, which may conflict with climate objectives, and great care needs to be taken for new energy storage schemes involving the creation of lakes and diversion of rivers. It is vital that any infrastructure is delivered without increasing the risks faced by wildlife, or further degrading the ecosystems upon which we all depend, and is in line with climate objectives.

## 1.4 PCIs AND PUBLIC ACCEPTABILITY

Industry and regulators have identified long and uncertain permitting procedures as one of the main reasons for

delays in the delivery of energy infrastructure in Europe<sup>29</sup>. Complex administrative procedures, and failures to meet transparency or environmental assessment requirements, are among causes of delays. These may be compounded by stakeholder and public opposition and legal challenges, and a lack of high level political support.

However, delivering essential infrastructure in a timely way cannot be achieved by forcing through unpopular projects or by cutting corners on quality to try to meet unrealistic deadlines. Instead, a major effort is needed to improve the public acceptability of grid development. This means promoting transparency, public engagement and supporting good practice to avoid and minimise impacts. Moreover, public support will be more forthcoming where energy infrastructure development is based on a coherent vision and plan to meet people's energy needs in an efficient and cost-effective way, taking into account the interests of all stakeholders. Europe's citizens clearly favour renewable energy development (Box 3) and support nature protection, so these goals should be central to this future vision.

### BOX 3. EU CITIZENS WANT RENEWABLES AND NATURE PROTECTION

Eurobarometer surveys published in 2013<sup>30</sup> found significant support among European citizens for renewable energy and nature protection. Seven out of 10 Europeans think renewable energy sources should be prioritised now. In all 27 countries, renewable energy is the most mentioned energy option to be

prioritised now with a view to the next 30 years. At the same time, almost two-thirds agree that the EU should increase the areas where nature is protected in Europe, while nine out of 10 agree that halting biodiversity loss is important for our quality of life.

When a new power line is announced, host communities routinely object and try to get the route changed or the project abandoned. Affected communities may not appreciate the system-wide challenges that make developments necessary. Moreover, new lines are expected to reduce local property values, and are suspected to be a health risk. Cross-border projects often face particularly strong opposition as they may connect distant suppliers and markets, with no perceived local benefits.

In the face of such opposition it may be tempting to seek to avoid built up and populated areas when routing new power lines or placing other infrastructure. However, less-populated areas are often the most important refuges for Europe's endangered wildlife, and are essential to provide ecosystem goods and services. Environmental impacts affecting people and their natural environments are identified, avoided and reduced through impact assessment procedures. This benefits all of society.

Nevertheless, a perception remains among some decision-makers that there must be trade-offs between these different objectives. This is often associated with recommendations to weaken biodiversity protection.

The economic recession in Europe has prompted calls from some politicians for less demanding environmental regulation, to cut costs for businesses and to stimulate investment. However, economic problems cannot be solved at the expense of the environment. In the long run this would undermine the very basis for a prosperous economy. Side-lining environmental protection, or completely ignoring it, in policy making is short sighted

and dangerous, as has been seen with European biofuels policy.

Some politicians have seen the energy infrastructure sector as a vehicle for weakening environmental protection. The Birds and Habitats Directives, which are the backbone of nature protection in Europe, have been subject to attacks in the name of energy infrastructure development and PCIs in particular. However, as Europe's grid operators have recognised (Box 4) there is no inherent contradiction between building electricity grids and environmental protection.

### BOX 4. WORKING TOGETHER IS BETTER

In 2011 Europe's largest transmission system operators (TSOs) and environmental NGOs signed the European Grid Declaration on Electricity Development and Nature Conservation. This Declaration sets out principles and commitments for ensuring there is no conflict between grid development and nature protection. It recognises that the European environmental legislation provides a good basis for environmentally sensitive grid planning and delivery. It calls for full and proactive implementation of procedures such as strategic environmental assessment of grid plans. The signatory NGOs commit to working constructively with TSOs and supporting the development of power lines needed for the transition to renewable energy.

The Declaration was developed by NGOs and TSOs working with the Renewables Grid Initiative (RGI), a partnership for environmentally- and publicly-acceptable integration of renewable electricity into the European grid. In June 2012, the RGI released a statement in reaction to a call by the German Federal

Minister of Economics and Technology to revise the Birds and Habitat Directives to enable grid expansion. The RGI statement, supported by TSOs and NGOs alike, stated that there is no contradiction between building electricity grids and environmental protection. As they explained, seeking to undermine nature protection will not deliver faster grid development, but risks polarisation among different stakeholder groups with unpredictable consequences.

A successful collaborative planning approach to renewables and grid planning has been adopted in the US<sup>31</sup>. To ensure all interests were taken on board, the California Independent System Operator worked with stakeholders to identify zones for renewable energy generation and the transmission to access them. Through careful, collaborative planning it was possible to greatly reduce the cost and time taken to deliver an efficient system of generation and transmission in California, with risks to nature minimised.

## 1.5 A NEW WAY OF WORKING: TOWARDS A VIRTUOUS CIRCLE

Environmental NGOs such as BirdLife Europe and the European Environmental Bureau (EEB), and their national affiliate organisations, seek to work constructively early in the process with policy makers, planners and industries to ensure nature is protected, rather than resorting to

taking action against projects at the planning stage. This means ensuring nature protection is taken into account in new policies and plans, and that existing safeguards for nature are properly implemented. With respect to individual projects, this may involve talking to developers about concerns and finding a mutually beneficial solution through modifications to a proposal.

However, when this approach fails, NGOs are left with no choice but to take steps to prevent damaging projects from going ahead. Moreover, depending on the Member State, opportunities for constructive

engagement are not always available, and the EU's own decision-making sometimes lacks transparency and opportunities for environmental stakeholders to get involved.

In this briefing we put forward a number of recommendations that would improve how NGOs, industry and policy makers interact over the PCI process. This would improve policies and plans and reduce conflicts and delays later in the process. Our recommendations

are relevant to the planning and delivery of all energy infrastructure development, but this approach should be pioneered in the development of PCIs, as these projects are deemed to be those of greatest importance for the EU as a whole. This can create a virtuous circle of greater understanding, more transparency, better stakeholder engagement, lower environmental impacts, more public acceptability, smoother project delivery, quicker decarbonisation and a safer, healthier environment for all.

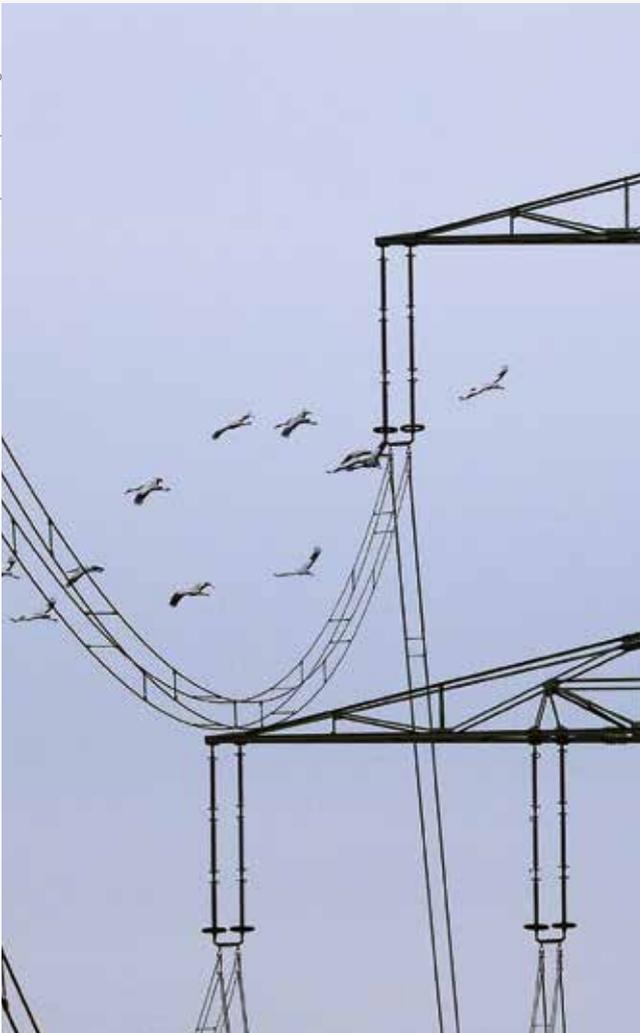


Water Vole by Ben Andrew (rsph-images.com)

# PART II TOWARDS ENVIRONMENTALLY FRIENDLY ENERGY INFRASTRUCTURE

BirdLife Europe and the EEB recommend improvements in eight related areas to ensure PCIs are a success for Europe's current and future generations.

Nick Upton (rspb-images.com)



## 1. ADDRESS CLIMATE AND BIODIVERSITY TOGETHER

Energy infrastructure planning and development should promote sustainability, which means it must have the dual challenges of climate change and biodiversity decline at its core. All parties have an important role to play here.

- Environmental groups should do more to communicate this message among their members, affiliates and partner organisations so they can engage constructively and effectively to help ensure PCIs deliver for sustainable energy and for the environment.
- In developing initiatives to promote essential energy infrastructure, national and European decision- and policy makers should
  - i) avoid rhetoric suggesting nature protection is a barrier or additional cost in the energy transition, and
  - (ii) make sure public policies in the energy and environmental protection spheres remain mutually supportive.
- Public awareness campaigns relating to energy infrastructure should highlight the broader environmental sustainability challenges involved in the energy transition.
- Public authorities and project promoters should adopt “combating climate change” and “protecting nature” as core values and business principles, and help get the message across to others that the two go hand in hand.



## 2. ENERGY SAVINGS AND RENEWABLES FIRST

We need to have an energy system – and a society – that can be sustained indefinitely because it does not deplete resources, nor pollute and damage the environment and ecosystems upon which we all depend. The energy transition itself must also be environmentally sensitive, which means investments must be delivered carefully with respect to impacts on nature. For this and future generations we must:

- (i) **improve energy efficiency and reduce energy use;**
- (ii) **maintain energy security;**
- (iii) **ensure people have access to the energy they need; and**
- (iv) **protect and enhance natural resources, ecosystem services and the natural environment.**

Renewable energy, together with energy savings, must be the bedrock of this future, sustainable energy system. While renewables are not by definition sustainable or environmentally acceptable, no other kind of energy can be truly sustainable in the sense that it is non-polluting, does not deplete resources and avoids conflicts with nature. No other kind of energy supply enjoys as much public support (Box 3). Yet the environmental benefits and public support cannot be taken for granted. Renewable energy technologies must be selected and used carefully to maximise their environmental, social and economic advantages.

Delivery of PCI energy infrastructure should support the switch to an energy efficient society and clean, sustainable renewable energy.

- Environmental groups should push for energy infrastructure investment that is essential to facilitate a renewables-based energy future, and help ensure this is delivered without unacceptable impacts on the environment.
- National and European decision makers should commit to ambitious and binding targets for cutting greenhouse gas emissions, saving energy and the use of renewable energy.
- Policies and funds for energy innovation should promote technologies that help avoid or reduce impacts on nature.
- Energy infrastructure project promoters should prioritise projects that are essential in the transition to a sustainable, renewables-based energy system.

- The Regional Groups charged with selecting PCIs should prioritise projects that are essential for a renewables based energy system and are compatible with nature protection, by giving weight to these considerations in their ranking of projects.

## 3. PROTECT HABITATS AND VULNERABLE SPECIES

The Natura 2000 network protects Europe's most important habitats for wild animals and plants. The Birds and Habitats Directives are, in part, a mechanism for sustainable development in these areas. They ensure that development goes ahead in a way that is compatible with protecting these most important habitats and species.

PCIs are essential infrastructure investments, which have to be able to meet a tight consenting timetable and be delivered promptly. Therefore it is particularly important with PCIs to avoid any risk of conflict or unforeseen administrative hurdles. As such, the PCI label should not put at risk Europe's most precious wildlife sites and threatened species, as this may cause delays and undermine public support.

- Full public participation in PCI selection processes should be ensured, with information made available about each project to indicate sites, species or other receptors that could be put at risk.
- Project promoters should not put forward, and Regional Groups should not give PCI status to, any project that cannot realistically be commissioned in the target timeframe. To avoid putting energy and nature objectives in conflict PCIs must be capable of meeting the compressed consenting timetable set out in the TEN-E Regulation, whilst also complying with Birds and Habitats Directives' requirements, for example on environmental assessment and compensatory measures.
- National and European decision makers should ensure developers have adequate guidance materials available to ensure proposals for PCI status and PCI developments are compatible with the Birds and Habitats Directives.

## 4. PLAN AHEAD

Private investment and competition can have significant advantages in the energy sector, helping to keep costs down and to minimise demands on public finances.

However, energy infrastructures have certain qualities of natural monopolies. Sometimes more effective and efficient solutions are possible through a planned approach to delivery than through unplanned competitive investment. For example, marine cabling for connecting offshore renewables and for inter-connection of national electricity systems could be planned together in a strategic way to advance development of a European supergrid.

Under European legislation all Member States are required to plan electricity and gas infrastructure developments for the next 10 years. These national 10 year network development plans (TYNDPs) then feed into EU-wide TYNDPs. These EU plans are updated every two years. For the second and subsequent PCI lists, a project has to be included in the European TYNDP to be eligible for PCI status<sup>32</sup>. However “third parties” can submit projects directly to the European TYNDP, and many Member States do not, in fact, yet produce and consult on binding national energy infrastructure plans or ensure public participation in the process of their development.

This results in a situation where some PCIs may have never been subject to scrutiny by environmental authorities nor subject to public participation requirements at the national level. However, by gaining PCI status they must be treated as having the highest significance in national planning and permitting procedures. This creates a kind of European “back door” through which, potentially, a highly environmentally damaging project awarded PCI status could become very difficult to challenge in the normal way through national planning procedures. Closing off legitimate channels in this way may just result in more conflict and delays, which goes against the central objective of the PCI legislation.

- Strategic spatial planning for PCIs should be introduced, to deliver the required infrastructure in an effective, efficient and nature-friendly way.
- It is essential that all candidate PCIs should have been subject to public participation requirements and scrutiny in national spatial planning by environmental authorities before they are given PCI status.
- National governments should implement European legislation requiring the development of TYNDPs, and should use strategic environmental assessment (SEA, as required by the Directive 2001/42)<sup>33</sup> to ensure these plans are scrutinised by environmental authorities, stakeholders and the public.
- The European electricity and gas TYNDPs should, themselves, be “environment-proofed” with national authorities and stakeholders if they continue to contain any projects that have not undergone SEA at the national level.

- The European TYNDP for gas transmission should acknowledge the EU’s climate commitments, and not inflate Europe’s gas needs.

## 5. OPEN UP

The Aarhus Convention and Regulation set out minimum requirements for openness and public participation in environmental decision-making. These are, in effect, a set of rights that citizens have with regard to plans and projects that are expected to significantly affect their environment.

Openness, or transparency, is an essential element in enabling public engagement and maintaining public understanding and support. In many cases the public and stakeholders may not actually get involved with a specific plan or project, but they must be enabled to find out about it and to have their say, should they have concerns.

The European electricity and gas TYNDPs provide interested parties with maps and detailed information about projects that may become PCIs. The PCI Regulation introduces additional requirements for transparency. Regional Groups are required to assess projects in a transparent manner.<sup>34</sup> The Commission itself is required to maintain a transparency platform, providing information about PCI projects and related decision making.<sup>35</sup> The PCI Regulation also introduces a requirement that national governments should publish a “manual of procedures” informing interested parties how the PCI permit granting process works and how they can have their say.<sup>36</sup> In addition, project promoters, (or the competent authority, where national law so provides) are required to develop a project website and leaflet, containing certain key information for interested parties.<sup>37</sup>

These transparency provisions are welcome. However, more needs to be done to open up the process of PCI selection itself.

- The Commission’s Regional Groups should inform the public of their own decision-making procedures and publish details of all their meetings, including minutes and a record of attendance.
- Information provided on candidate PCIs should be as comprehensive as possible, and should include maps showing locations or routes.

## 6. LISTEN

When stakeholders, industry and governments work together, often conflicts can be avoided and better solutions reached. Real dialogue and collaboration should be the goal. More immediately some gaps need addressing in public participation. The TEN-E Regulation requires PCI project promoters or competent authorities to carry out at least one additional public consultation<sup>38</sup> before entering the formal permit granting procedure (which should take no more than 18 months).<sup>39</sup> However, as explained in point 4, in many Member States environmental authorities and stakeholders do not have any earlier opportunity to comment on a binding infrastructure plan, and some third party projects can become PCIs without first being scrutinised at the national level. The priority status of projects awarded the PCI label might diminish the possibility to challenge the project at the stage of national permitting procedures.

At the European level, the Regional Groups are required to consult stakeholders during the preparation of their lists of PCIs.<sup>40</sup> However, when and how such consultation is publicised and conducted remains partly in the hands of the European Commission and the Regional Groups. It is important that the Commission and the Regional Groups go beyond the minimum requirements of the TEN-E Regulation and ensure stakeholders and the public have the opportunity to scrutinise and comment on candidate PCIs at a stage where providing these comments can be taken into account in finalising the lists.

European and national institutions must provide the information and opportunities for interested parties to have their say. It is then vital that, wherever they have the capacity, NGOs seize these opportunities and help to shape the plans and projects and to make sure they are as environmentally acceptable as possible.

Almost all energy infrastructure projects will inevitably face some opposition from their host communities and some stakeholders. When building a power line, for example, it is often impossible to avoid all heavily populated areas, all scenic areas and all areas with high nature value. Not all power lines can be put underground, as this would add hugely to the costs of the energy transition, and would be more environmentally damaging in some locations. Zero impacts and 100% support is not realistic.

However, plans and projects can be greatly improved, and impacts can be avoided or made acceptable,

provided there is input from people with local and expert knowledge. Environmentally concerned citizens, organisations and groups have important roles to play in pushing for environmentally sensitive grid development, providing their knowledge to help improve decisions and projects, and in holding decision makers to account.

- The European Commission and national governments should work with industries and environmental stakeholder groups to facilitate meaningful early engagement and collaboration on energy infrastructure policies and plans.
- The Regional Groups should publish information on candidate PCIs and invite written comments over a period of at least three months.
- Before finalising their lists, each Regional Group should meet interested stakeholders and members of the public in a dedicated meeting for discussion of candidate PCIs. These meetings should be open to all, should take place no less than four weeks after the start of the written consultation, and should be well publicised in advance.
- Where a particular project is highly controversial, the Regional Group should organise dedicated meetings to discuss the project with concerned stakeholders.
- NGOs should help to explain to the public and to their local partners the need for infrastructure investment, the challenges associated with it, and how they can engage early in the process to help shape and support good plans and projects rather than only opposing bad projects at the final stage.

## 7. FACTOR CLIMATE AND NATURE IN

If the recommendations above are fully implemented, projects with acceptable environmental impacts will be put forward and selected as PCIs, and stakeholders will feel they have had good opportunities to find out about plans and projects and to have their concerns taken into account. This will make infrastructure delivery greener and improve public support.

However, it is important that the methodologies used to prioritise and select projects for PCI status are also robust and help ensure environmentally acceptable projects are proposed. They must also be based on scenarios and demand assumptions that are in line with Europe's commitments to cut carbon emissions. A draft cost benefit assessment (CBA) methodology<sup>41</sup> for electricity projects includes some indicators for which money values are not calculated. This includes a measure of how many kilometres of a new power line may fall within a

protected area or densely populated area. It will be very valuable for decision makers and interested parties to have an early indication of which projects might be most challenging in terms of environmental safeguards.

However this is only a very basic level of information, and even this will not be provided for all projects. For example, current guidance on the use of this indicator suggests that promoters of very immature projects may not have to provide an estimate for this indicator. Moreover, it may not apply to non-linear infrastructures such as hydro-pumped storage reservoirs or facilities for liquefied natural gas. No such information is available at this stage for gas or oil PCIs, and the CBA methodologies for those projects do not yet include such an indicator. It is recommended that:

- Cost benefit methodologies for all PCIs should include information on potential environmental impacts, including whether all or part of a project might fall within a site protected for its nature value.
  - All candidate PCIs should be scrutinised by national environmental authorities and stakeholders, and the environmental assessment findings should be made accessible during PCI selection.
  - Regional Groups should take this information into consideration, and ensure that projects are not given PCI status if this, and other information sources, suggest impacts on the environment would be unacceptably severe or that climate commitments would be compromised.
- PCI selection must be based on scenarios and demand assumptions that are in line with Europe's commitments to cut carbon emissions.

## 8. LEARN AND IMPROVE

PCI lists are renewed every two years, with the Commission's Regional Groups and the EU Agency for Co-operation of Energy Regulators (ACER) charged with reviewing progress with implementation of projects. This provides an excellent framework to progressively improve procedures and methodologies.

- The Regional Groups should facilitate stakeholder input into reviewing progress in the implementation of PCIs. Given the large number of projects, and that these include oil, gas and electricity projects, the review process should be undertaken on a regional and sectoral basis.
- Promoters, NGOs and officials who have engaged with PCI plans and projects should proactively share their ideas for improvement.
- Lessons from monitoring should feed back into improving selection methodologies and procedures. They should also be used to inform communications efforts so that all parties better understand the challenges involved and how these are being addressed (thus contributing to the objectives under Recommendation 1).



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