

FIGHTING CLIMATE CHANGE PROTECTING NATURE

BIRDLIFE EUROPE'S PRIORITIES
FOR EU CLIMATE AND ENERGY POLICY TO 2030





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 giving nature a home A BirdLife Europe report, with the support of the RSPB (BirdLife in the UK).

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BIRDLIFE EUROPE'S PRIORITIES FOR EU CLIMATE AND ENERGY POLICY TO 2030

Climate change is a huge threat to wildlife, as well as to human well-being, with devastating losses of species and habitats a potential outcome. It is already adding to the rapid, accelerating loss of global biodiversity we see today.

How the EU responds matters. How ambitious we are on climate, and how we deliver emissions cuts “on the ground” in the energy and land use sectors, will greatly affect the world’s chances of averting a climate driven eco-disaster.

We need more ambition on climate, and we need a better approach to delivering the new fuels, carbon sinks, energy technologies and networks of tomorrow. The world’s people and wildlife need an ecologically resilient climate and energy revolution, led by Europe.

BIRDLIFE EUROPE CALLS ON THE EU TO:

- 1 **Increase** its commitment on greenhouse gas mitigation to 2030.
- 2 **Ensure** global accounting rules for emissions relating to land use and forestry support effective climate action, and are not damaging to the natural environment.
- 3 **Develop** ambitious targets and require effective policies for energy efficiency and saving.
- 4 **Develop** policies for ambitious deployment of renewable energy, in harmony with the natural environment.
- 5 **Ensure** its bioenergy dependency is within sustainable limits, and that all bioenergy use delivers genuine emissions reductions.
- 6 **Develop** the energy infrastructures needed for the sustainable energy transition in harmony with nature.



Climate change and the European Union

The EU is a major contributor to global greenhouse gas emissions, and its ecosystems are under stress, with on-going, accelerating loss of biodiversity. In response, the EU has been a world leader in pushing for a global deal to tackle emissions and in developing policies to protect wildlife and the biosphere.

These policies have often proven successful. For example, we have seen rapid investment in renewable energy displacing unsustainable sources, and habitats protected by EU legislation proving effective in slowing down and reversing biodiversity loss. Nevertheless, much more needs to be done to limit global warming to below 2 degrees and to halt and reverse biodiversity loss.

The EU 2030 climate and energy policy framework agreed in Brussels in October 2014 sets out headline targets for EU greenhouse gas mitigation efforts, use of renewable energy, energy savings and grid interconnection. BirdLife Europe (Box 1) demands action at EU level in the areas of climate change mitigation, energy saving, renewables, bioenergy and infrastructure to put Europe at the forefront of building ecological resilience into its climate and energy policies to 2030.

We need an ecosystems-based approach to climate change adaptation, to cope with the inevitable warming we will experience due to past emissions. But to make adaptation a realistic proposition we need ambitious mitigation commitments and action. Climate change risk mitigation is the focus of this document.

BOX 1 • BirdLife Saving wildlife and the environment

BirdLife Europe is a Partnership of 49 national conservation organisations working in every EU Member State and across Europe and Central Asia. We are one of the six regional secretariats of BirdLife International, which works across the world to protect nature and end biodiversity loss.

The BirdLife Europe Partnership is a leader in biodiversity conservation, delivering high impact and long-term conservation for the benefit of nature and people. With over two million members and 4,000

The headline climate and energy targets proposed in the EU's 2030 package are inadequate. The emission reduction target, in particular, needs to be improved. The measures put in place to achieve the targets must be made to succeed - to limit the extent of climate impacts on people and wildlife over this century and beyond. However the policies and investments that result from them can also have significant negative implications for today's biodiversity. These can occur, for example, through loss of habitats to bioenergy schemes intensifying existing agricultural and forestry practices, or collision risks to birds caused by wind farms and power lines. It is vital that the EU learns from experience implementing its 2020 climate and energy package when developing policies for the period 2020-30.

This document explains why the EU needs to develop its 2030 climate and energy package into a set of targets and implementing frameworks that will deliver an energy revolution in harmony with nature. Nothing less is sufficient to prevent runaway climate change and irreversible damage to our life-supporting ecosystems.

staff, and with over 4,100 wildlife sites covering more than 320,000 hectares, we are a major force for conservation on the ground.

We also work to improve EU legislation and targets relating to the environment and biodiversity. Climate change is a huge threat to birds and wildlife. We want to see a rapid and ecologically resilient transition to a renewables-based future, in which the threat of climate change recedes and wildlife can flourish.

Climate change, ecosystems and human welfare

We know that extreme temperatures and weather, combined with intensive land use, can destroy ecosystems and associated farmland and communities. Climate change threatens people directly through impacts on our health, homes and livelihoods. Climate change also threatens other species and their ecosystems – and in so doing compounds these direct risks to people (Box 2). As we tackle the causes of climate change, and adapt to that change we cannot avoid, maintaining and supporting functioning ecosystems will be the key to survival – for birds, wildlife and people.

The globally agreed limit of warming is 2°C, but even this amount of warming will cause some severe impacts - with some regions of Europe experiencing more severe extremes with damaging effects under this global scenario. If emissions are not cut steeply, the world could see 4°C of warming by 2100. The impacts for society and ecosystems would be terrifying (Box 2).

Climate action needs ecological resilience

Global emissions of greenhouse gases need to peak and decline rapidly if we are to avoid the risks highlighted by scientists above. The EU aims to cut its emissions by at least 80% by 2050, and has committed to at least 40% fewer emissions by 2030 to make that possible. However this is less than the 90-95% cut needed to stay on track to contribute our fair share towards global cuts, and to stay below 2°C.

BOX 2 • Consequences of large temperature increase The scientific consensus

In its most recent report (2014) the Intergovernmental Panel on Climate Change (IPCC) reaffirmed that global greenhouse gas emissions continue to grow apace and that, without additional mitigation efforts, global average surface temperature will rise by between 3.7°C and 4.8°C by 2100. However, it also concluded that it was possible to keep the temperature below the globally agreed goal of 2°C if mitigation efforts are stepped up.

The IPCC describe “with high confidence” the risks of 4°C warming in stark terms, as follows. A 4°C world in 2100 will:

The EU’s share of global greenhouse gas emissions is about 10%. This share is falling as the EU reduces its own emissions and others, notably from the emerging economies, continue to grow. However, continued EU leadership on the climate issue is essential given our historic responsibility for past emissions, and to show the world that it is possible to decarbonise an advanced economy.

We need massive investment in renewables, energy saving and energy infrastructures to make this possible, and we need to manage land use and forestry for carbon and biodiversity gains. Ecosystems are integral to the carbon cycle and to human welfare. People and biodiversity will have to adapt to climate change: this demands ecological (and societal) resilience.

Healthy ecosystems and their services (the benefits that people receive from nature) should play a key part in helping people adapt to such climate change impacts.

EU’s nature legislation, network of Natura 2000 sites and achievement of the favourable conservation status of priority species and habitats are all essential tools to maintain healthy and resilient ecosystems in the EU. Avoiding climate eco-disaster is not just about cutting emissions fast. It is also about how we cut emissions and adapt to climate change, and how we maintain and build resilience in the process. Actions we take to limit emissions, and to cope with some of the impacts, must be nature-friendly. That means they must be conceived, planned, designed, built and operated with pursuit of an environmentally sound transition to a low carbon society.

- › “...compromise normal human activities, including growing food or working outdoors”.
- › “...pose large risks to food security globally and regionally”.
- › Cause a “substantial increase in extinction risk for terrestrial and freshwater species...”.
- › Have “...significant impacts on coral reef ecosystems”.
- › “...imply a high risk of extensive loss of biodiversity with concomitant loss of ecosystem services”.
- › Cause “...large increases in exposure to water stress, fluvial and coastal flooding...”.

The IPCC stresses that, “negative impacts on crop yields, and disruption of ecosystem function and services would represent large, potentially compounding impacts of climate change on society generally and on the global economy.”

Source: IPCC WGII Report 2014. Part A, p. 63

1 GREENHOUSE GAS MITIGATION

The global climate challenge

To stand a good chance (better than 66%) of keeping temperature rise to less than the globally agreed goal of 2°C requires total cumulative emissions to be no more than about 3,670 billion tonnes of carbon dioxide equivalent, or 2,900 billion tonnes of carbon dioxide allowing for the effect of other greenhouse gases. We have already used up about two thirds of this carbon dioxide emissions budget and so we have only about 1,000 billion tonnes left for the future.

According to the IPCC there are two main ways of staying within this very tight budget: either peak emissions soon and then decline emissions rapidly; or peak later and then use large scale carbon dioxide removal (CDR). In the IPCC's report on mitigation, CDR typically involves either bioenergy with carbon capture and storage (BECCS) or afforestation (usually monoculture plantations) on a very large scale. About half of these scenarios envisage land use change of more than a billion hectares, and one scenario envisages 6.3 billion hectares of land use change. This is about half of the earth's 13 billion ha land area.

Such scenarios, aside from being utterly unrealistic and impossible to realize without massive social upheavals, would also be catastrophic for wildlife. The world and the EU cannot afford to contemplate this scenario, so we must push to pursue early peaking with a rapid decline in emissions to net zero from 1990 levels by the middle of this century or shortly afterwards.

A logical pathway to stay below two degrees is to phase out fossil fuel emissions by 2050, leaving a remnant of other emissions at between 5 and 10% from activities such as food production in poorer countries.

What's missing, and what's BirdLife doing in Europe?

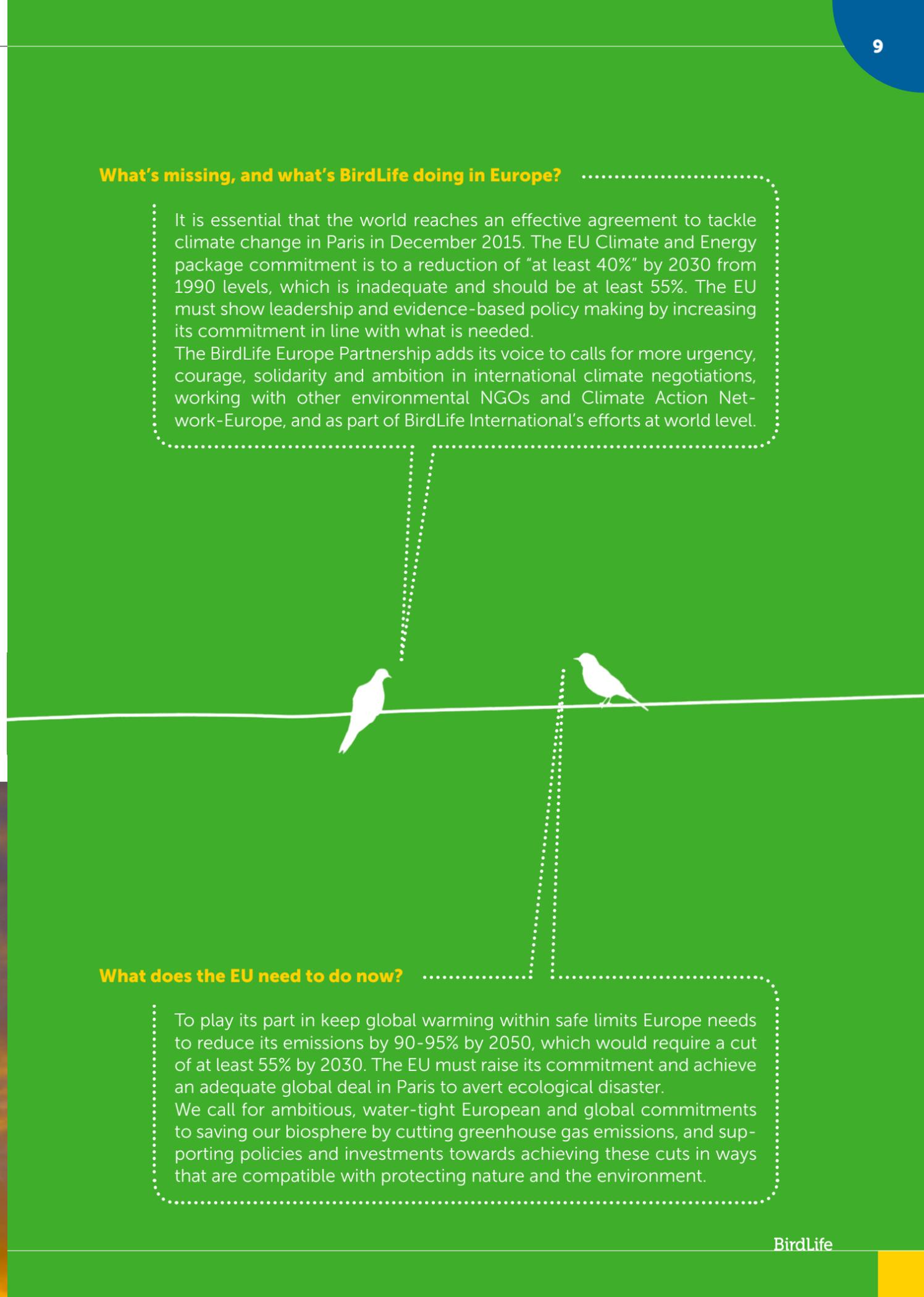
It is essential that the world reaches an effective agreement to tackle climate change in Paris in December 2015. The EU Climate and Energy package commitment is to a reduction of "at least 40%" by 2030 from 1990 levels, which is inadequate and should be at least 55%. The EU must show leadership and evidence-based policy making by increasing its commitment in line with what is needed.

The BirdLife Europe Partnership adds its voice to calls for more urgency, courage, solidarity and ambition in international climate negotiations, working with other environmental NGOs and Climate Action Network-Europe, and as part of BirdLife International's efforts at world level.

What does the EU need to do now?

To play its part in keep global warming within safe limits Europe needs to reduce its emissions by 90-95% by 2050, which would require a cut of at least 55% by 2030. The EU must raise its commitment and achieve an adequate global deal in Paris to avert ecological disaster.

We call for ambitious, water-tight European and global commitments to saving our biosphere by cutting greenhouse gas emissions, and supporting policies and investments towards achieving these cuts in ways that are compatible with protecting nature and the environment.



2 ACCOUNTING FOR EMISSIONS FROM LAND AND FORESTRY

The global land use and forestry challenge

Emissions from land use, land use changes and forestry (LULUCF) make up about a quarter of all human induced emissions. To meet overall goals for limiting climate change it is thus essential to drastically reduce emissions from this sector. These emissions must therefore be fully and comprehensively accounted for by all developed and emerging economies, as opposed to the current situation where many land use categories are not accounted for at all.

Emission reductions are also needed from agriculture and agricultural land whilst preserving our agro-ecosystems and cutting water pollution, soil degradation and biodiversity loss. Action taken to limit emissions can also have biodiversity benefits and *vice versa*. For example, grassland protection and peatland restoration saves both habitats and greenhouse gas emissions; using less nitrogen fertilisers reduces nitrous oxide emissions and helps to limit run off into streams and rivers.

Changes in some sectors also directly affect biodiversity, for example under bioenergy uses.



What's missing, and what's BirdLife doing in Europe?

Until recently, under the international UN rules, the EU and its member states did not have to account for any LULUCF activities. This encouraged governments to account for activities that gave them credits (emission reductions or removals) but not for activities that gave them debits (emission increases) – thereby making a nonsense of the system. Recently, it was agreed internationally that **accounting for forest management** (by far the largest activity in some countries) **should be mandatory**, although this step forward was negated by allowing countries to account however they liked, with many EU countries choosing to account against a business as usual projection which hides real emissions. The current EU rules make accounting for cropland and grazing land management mandatory after 2020 and in a way that reflects actual emissions – “what the atmosphere sees”. We thus support these rules and wish them to be included in any effort sharing decision concluded as part of the 2030 package, along with non-carbon dioxide emissions from agriculture. Under full and accurate accounting rules, we would wish these emissions to be interchangeable with emissions from other sources. However the **EU currently uses the flawed international rules** for forest management and so we would not wish forest management to be included with emissions from other sources in an effort sharing decision as part of the 2030 package, unless the rules are changed in future. BirdLife Europe works in international climate negotiations and with Partner NGOs to achieve full and comprehensive accounting of LULUCF emissions and removals. We are currently consulting the Commission and some member states on the **inclusion of LULUCF in the 2030 package**, and will intensify this work as a legislative proposal begins to emerge.

What does the EU need to do now?

We need to ensure LULUCF commitments really deliver emissions reductions, by ensuring accounting mechanisms are watertight and accurate, and the framework enables genuine win-win solutions for biodiversity and carbon sequestration. **Robust rules are needed for all relevant sectors:** cropland and grazing land management, non-carbon dioxide emissions from agriculture and forest management. Where the accounting rules are robust, the sector should be fully included in the overall 2030 climate package, with emissions and removals from LULUCF activities counting towards the overall target. If, however, the accounting rules are flawed for any sector, their inclusion could undermine the overall package. In this event LULUCF emissions should be covered by separate legislation to reduce emissions from that sector.

3 ENERGY EFFICIENCY AND SAVING

The energy saving challenge

Cutting energy demand is critical to meeting our climate goals in harmony with nature. Deep cuts are indispensable to reduce emissions at the pace required, and to limit ecological impacts caused by overall land use, infrastructure and raw materials requirements.

Investments in industrial processes, the building sector, transport and other energy consuming infrastructures are typically long-lived. Therefore ambitious energy saving policies are needed now, to avoid inefficient investments and lock-in to future emissions, costs and import dependency. The more ambitious the EU is on energy saving, the bigger the benefits for climate, nature, employment, energy security and the economy.

Investments to save energy, such as improved insulation in housing, do not in themselves cause significant additional risks for birds and wildlife and biodiversity. Energy efficiency and savings need far greater weight in the EU's 2030 package and its energy transition.



What's missing, and what's BirdLife doing in Europe?

The "at least" 27% target is too low, and is simply "indicative". We have called for a binding target for energy savings of at least 40%. Ambition must be raised, and we need a very robust implementation framework. We support the lead of other NGOs who are focusing on this, contributing to pressure to ensure the EU proposes an ambitious legal framework for efficiency to achieve well beyond a 27% reduction.



What does the EU need to do now?

A 27% energy savings target means no additional measures. In fact 27% would mean that in the period 2020–30, Europe will become less efficient than expected under a business as usual scenario. To make its contribution to keeping global warming within safe limits, Europe needs to reduce its emissions by 90–95% by 2050. The **required cut of emissions of at least 55% by 2030** is manageable only if there is an effective complementary strategy for promoting energy savings (at least 40% end use) as well as renewable energy systems (at least 45%). The EU needs to **fully implement the Energy Efficiency Directive (EED)** in all member states, especially Articles 4 and 7. Article 4 of the EED requires member states (MSs) to define long-term strategies for stimulating renovations in their building sectors. This provides them with the opportunity to realise the full savings potential of their entire building stock (not just the public buildings emphasised in Article 5). The EU must increase, with immediate effect, its historically low renovation rates, and ultimately reduce significantly the energy consumption of the building stock by 2050.

Comprehensive **national renovation roadmaps** should be developed, to provide a well-planned, realistic yet ambitious approach. Renovation strategies must be robust and designed to put all actors on the right track towards reaching an 80% reduction of the energy demand of the EU's buildings by 2050, as recommended by the European Parliament and other authorities. Article 7 not only requires MSs to set an energy end-use savings target for the period 2014–2020, but also puts in place the criteria and conditions for eligible measures and how savings can be counted towards the target. Only if those measurement and verification requirements are strictly applied will MSs be able to count their energy savings towards the target. In order to implement ambitious energy efficiency programmes in line with high standards for project viability and sustainability, **MSs will need to ensure that adequate financing** is available to those programmes. Initially this could come from public sources of finance, such as National Energy Efficiency Funds (NEEFs), but the aim should be to shift toward greater levels of private sector finance provision, as energy efficiency markets become better-established.

4 ENERGY AND RENEWABLES

The energy challenge

Fossil energy use is the single greatest contributor to global greenhouse gas emissions. While nuclear energy and carbon capture can provide low carbon energy, high costs, environmental risks and public opposition are likely to limit investment.

Europe has huge potential to emerge as a global leader in clean, sustainable renewable energy. A global shift towards 100% use of renewable energy will be needed over this century, and should be achieved in Europe by 2050.



What's missing, and what's BirdLife doing in Europe?

The 2009 Renewable Energy Directive has been a success in terms of stimulating investment in renewables across Europe. However this has been achieved without sufficient safeguards to ensure the technologies used are genuinely low carbon (principally in the biofuels and bio-energy sectors) and that they are deployed in locations where impacts on nature are avoided. For the 2020-2030 period the EU will lack legally binding obligations on Member States to deliver renewables.

The **new governance mechanisms** introduced to achieve the 2030 renewable energy sources (RES) target **must** not only stimulate investment – they must also ensure national and regional energy plans are developed to avoid and **minimise impacts on nature**. Strategic environmental assessment of national and regional plans provides the framework for developing plans more openly and with more acceptable impacts, and with greater public support as a result.

BirdLife advocates EU policies for ambitious deployment of renewable energy in harmony with the natural environment. We are working to help ensure EU agreements on renewables to 2030 promote sufficient and well-planned **investments in nature friendly technologies**, to ensure delivery on the ground and the emissions cuts needed without unacceptable impacts on wildlife and habitats. We want to ensure related initiatives such as the Energy Union pursue “sustainability” meaningfully, in addition to serving energy security and cost goals.

What does the EU need to do now?

It is vital that Europe learns from the successes and also some of the drawbacks of the current EU framework for renewables, effective to 2020. Binding renewables targets have been the central driver of the high level of innovation and investment seen in the renewable sectors today. In the absence of binding national targets post-2020 **it is imperative that the EU and Member States create effective mechanisms** for RES delivery at the scale and pace required. Lessons regarding the consequences on RES policies for effective climate change mitigation and for nature protection must also be embedded in the 2030 framework for renewables.

Furthermore, an EU-wide initiative is needed to promote the universal installation of **small-scale renewable electricity** installations such as photovoltaic panels and heat pumps located at or near the point of consumption. Together with the need for investments in new large infrastructure discussed below, this would require significant funding for a new **“smart grid” approach**: to develop grid capabilities, promote the uptake of batteries to maximise storage in off-peak periods, and improved demand management. This approach would allow for many millions of small, intermittent electricity sources to coexist with centralised energy networks.

European Commission proposals for governance of the 2030 package, and for development of the Energy Union, must give serious attention to all three elements of the **“energy trilemma”**: security, affordability and sustainability. “Sustainability” must no longer be interpreted to mean only cutting greenhouse gas emissions. That means the proposals must include mechanisms to ensure national and regional renewable energy plans are developed using strategic environmental assessment procedures, to ensure they are designed to avoid and **minimise impacts on wildlife and nature**.

5 BIOENERGY

The bioenergy challenge

According to the European Biomass Association, bioenergy such as crops, wood and biogenic waste accounted for over half of EU renewables in 2012. The strong push for increased use risks exceeding the sustainable supply of raw materials and of available land, and can have detrimental impacts on ecosystems such as forests and grasslands, within the EU and beyond. The current climate policy framework also ignores the greenhouse gas emissions released from biomass burning, and falsely credits bioenergy for producing zero carbon emissions. In some cases, bioenergy can be worse than the fossil fuels it replaces for avoiding dangerous climate change.



What's missing, and what's BirdLife doing in Europe?

Current EU policies do not set any safeguards for the production and use of biomass for energy, other than for biofuels and bioliquids. Even the existing safeguards for these fuels are not sufficient, as the incredible boom in first generation biofuels on prime agricultural land has shown. Public incentives and subsidies are given to the use of all kinds of biomass for energy, including food and feed crops, whole trees and even to biomass that fails to deliver greenhouse gas savings. The new set of policies must ensure that bioenergy is only used where it is ecologically sustainable, delivers genuine GHG savings and where it does not significantly increase our global land use footprint.

What does the EU need to do now?

The 2030 climate policy framework should include sustainability standards for all forms of bioenergy and fully account for the true greenhouse gas emissions from its use. **Limits** for the share of bioenergy within the target for renewable energy are needed to ensure that national and European energy plans are realistic, **based on the availability of sustainable supply** and respect environmental limits. Policy solutions are needed that will allow the decarbonisation of the transport sector without further deployment of first generation biofuels or targets for volumes of renewable energy that should be used in the sector. Solutions for the decarbonisation of transportation need to start from upgrading efficiency and reducing demand, plus longer term systemic changes such as electrification in road and rail. Air quality problems in EU cities, largely due to excess traffic which in turn causes non-compliance with EU air quality legislation, add weight to the need for a new approach to transport energy needs.

6 POWER LINES AND SMART ENERGY INFRASTRUCTURE

The energy infrastructure challenge

The transition to a largely renewables-based energy system will require massive investment in power lines across Europe, both in local distribution systems and in interconnectors between nations, and in making energy networks "smarter". Other energy infrastructures such as gas pipelines are promoted by the EU as a way to improve Europe's energy security.

Power lines can create risks for birds through collisions and electrocutions. However if they are well planned to avoid the most sensitive locations, and incorporate mitigation measures such as deflectors and insulation, these risks can be largely eliminated. BirdLife Partners across Europe work hard with grid operators to identify and eliminate risks caused by past investments - ones made when knowledge of the risks and effective mitigation measures was less advanced. As Europe develops new grid infrastructure for the shift from fossil to renewable energy it is essential that we do not repeat the mistakes of the past.



What's missing, and what's BirdLife doing in Europe?

EU "projects of common interest" (PCIs) have been identified as the key delivery mechanism for priority energy infrastructures. Currently there are **inadequate mechanisms in the PCI selection process** to avoid very environmentally damaging projects receiving priority status. The current framework also does too little to **promote smart grids** that would enable demand management and the installation of mini and micro-renewables which pose little or no biodiversity risk. Raising finance to invest in the infrastructures Europe needs for decarbonisation is a major challenge. Grid operators have repeatedly called for a **stable regulatory framework** for investment, to improve access to capital. This includes a stable framework for environmental permitting. Transmission system operators across Europe have joined BirdLife and other environmental NGOs in calling for full implementation of existing nature protection legislation (the Birds and Habitats Directives). They have made it clear it is neither necessary nor helpful to cut corners with biodiversity protection to enable delivery of PCIs. BirdLife wants to ensure that the need for **new major low carbon infrastructure** across the EU is well demonstrated in all cases, and that it is developed in harmony with nature. We have worked with the umbrella group for grid operators, ENTSO-E, to improve the way they take impacts on nature into account in their system planning. In our publication *Connecting Energy, Protecting Nature*, we explain how the EU can deliver essential infrastructure with lower impacts and greater public support. We will continue working industry and other NGOs, through the Renewables Grid Initiative, to ensure EU grid development serves climate and nature protection priorities.

What does the EU need to do now?

It is essential that planning for EU energy infrastructure is based on energy system scenarios in which the EU achieves its climate targets. To date in both the gas and electricity sectors the **EU has been "planning for failure"** in this respect, with inflated demand assumptions for gas and other fossil energy in Europe's generation capacity. Greater use must be made within the PCI framework to promote smart grids, demand management and distributed small scale renewable electricity supply. EU energy **infrastructure plans need to be "nature-proofed"**. When projects are being assessed for inclusion in infrastructure plans at EU level it is essential that risks to the natural environment are taken into account transparently. DG Environment needs to do more to scrutinise priority projects and filter out those that are incompatible with nature protection. National infrastructure plans should be developed using strategic environmental assessment. In seeking to enhance delivery of PCIs, the EU should do more to enhance transparency and public participation, and to minimise impacts on nature. Where projects would cause significant harm to protected areas or species, concerns raised by NGOs and others must be better recognised in the PCI selection processes. This will improve public acceptance and accelerate delivery.

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WILL POLITICIANS
LISTEN TO US?

THEY SHOULD,
THEY BETTER...

