

*October 2020*

## **Agriculture**

### [Reducing agricultural ammonia emissions: benefits and costs](#)

Ammonia (NH<sub>3</sub>) emissions associated with the agriculture sector contribute to the production of fine particulate matter (PM<sub>2.5</sub>) pollution and may be associated with premature mortality. This study assesses the economic costs and benefits associated with reducing emissions in the agricultural sector. To do this, it uses emissions data from 2016 to assess the costs and benefits of achieving the 2020 ammonia emission reduction commitments, as set out in the National Emission reduction Commitments Directive in relation to four abatement options. The results suggest that compliance with the directive may be associated with significant reductions in premature mortality, and that the economic benefits of avoiding premature mortality might outweigh the costs of abatement.

### [How to deliver on the EU Farm to Fork's protein transition objectives](#)

As the EU decision-makers argue over the direction for the urgently needed transition in the livestock sector, how can they align the most relevant policies with the 'Farm to Fork' objectives? The scientific, environmental and public health communities are coming to the consensus that livestock production and general consumption trends are not sustainable. This is summed up well by the RISE Foundation report that describes the EU's livestock production as not being "within a safe operating space".

### [Do improved pollination services outweigh the economic disadvantages of farming smaller fields?](#)

With the current intensification in agricultural activity there has been an expansion in field sizes and the loss of permanent green field edges and other semi-natural habitats. From an economic perspective, the increase in field size improves agricultural efficiency — mainly due to cost savings. However, recent evidence suggests that increasing field size may decrease the ecosystem services provided by farmland biodiversity — but this trade-off is rarely considered. This study quantifies the economic and ecological effects of field-size changes for an agricultural region in Germany.

### [Intercropping technique may improve agricultural sustainability and productivity](#)

Producing sufficient food supplies for our growing population is a major global challenge. Intercropping, an agricultural technique whereby multiple crop species are cultivated in the same field, may be more sustainable than mono-crop practices, resulting in a greater yield per unit of land and fertiliser than sole crops. This study analyses the effect of intercropping on yield gain, exploring the effects of different crop species combinations, temporal and spatial arrangements and fertiliser input.

### [The 6 essentials for keeping the CAP's green ambition alive](#)

The environmental and climate ambition of the future Common Agricultural Policy (CAP) is increasingly under threat as the European Parliament and AGRIFISH Council finalise their positions on the legal texts. This runs counter to the clear progressive direction of travel set out in the European Green Deal which has been endorsed by both the Parliament and the Council at the highest level, write policy analysts from IEEP.

## **Air Quality**

### [Deadline to stop UK becoming a gas guzzler 'dumping ground'](#)

T&E is warning that the United Kingdom could become the dumping ground for gas guzzling new cars if a piece of Brexit legislation is not in force by the end of this year. It has described the legislation as 'little more than a sticking plaster', and says the UK government is falling behind the clock in its efforts to phase out petrol and diesel vehicles.

## **Biodiversity**

### [New State of Nature report points to persisting pressures on Europe's nature](#)

The European Commission has published its latest assessment of the state of nature in the European Union. It provides a comprehensive overview of the situation of Europe's most vulnerable species and habitats

protected under EU nature laws. Decline of protected habitats and species still continues, caused mostly by intensive agriculture, urbanisation, unsustainable forestry activities and changes to freshwater habitats.

#### [Nations fall short on biodiversity despite protected area growth – IUCN co-authored study](#)

National governments have fallen short on delivering conservation commitments for protected and conserved areas under the UN Convention on Biological Diversity (CBD), despite the expansion in protected areas over the last decade, according to a new analysis.

#### [Pollinators: importance for nature and human well-being, drivers of decline and the need for monitoring](#)

This brief highlights the importance of pollinators for food production and nature, covering pollination of both crops and wild plants. It also explores the drivers of pollinator decline and the role of monitoring in driving the actions to reverse it. The report is written in the context of the EU Pollinators Initiative, a strategy for the EU and its Member States to address the decline of pollinators.

#### [Increasing grassland species improves pollination and may impact on crop yields](#)

Grasslands cover 30–40% of European agricultural areas. Agri-environmental schemes leading to even small changes in grassland biodiversity could elicit extensive benefits. A new study on working farms in southwest England highlights the contribution of the plant diversity of the grassland to the abundance and diversity of insect pollinators and their potential to increase crop yields. The researchers make recommendations for which species to include in seed mixes.

#### [Research and policy may need to prioritise in efforts to protect biodiversity and ensure food security](#)

To best protect ecosystems and human well-being, there is a need to prioritise how the scarce resources of time, funding and human labour should be allocated to be most effective. This study applies a prioritisation framework to 16 prominent environmental challenges in the areas of biodiversity and food security, based on three criteria: importance (scale), neglect (lack of research) and tractability (e.g. economic feasibility).

### **Climate Action**

#### [EU climate law: MEPs want to increase 2030 emissions reduction target to 60%](#)

All member states must become climate neutral by 2050, says Parliament in a vote on the EU climate law, calling for ambitious 2030 and 2040 emissions reduction targets. The new law aims to transform political promises that the EU will become climate neutral by 2050 into a binding obligation and to give European citizens and businesses the legal certainty and predictability they need to plan for the transformation. MEPs insist that both the EU and all member states individually must become climate-neutral by 2050 and that thereafter the EU shall achieve “negative emissions”. They also call for sufficient financing to achieve this.

### **Energy**

#### [State of the Energy Union: Progress made on the clean energy transition and a basis for green recovery](#)

The European Commission has adopted the 2020 State of the Energy Union Report and its accompanying documents focused on different aspects of energy policy. The Report is the first one since the adoption of the European Green Deal, and looks at the Energy Union's contribution to Europe's long-term climate goals.

### **Green Recovery**

#### [Green refuges for enabling cities' preparedness for future pandemics and global change.](#)

Urban parks and green open spaces provide opportunities for urban citizens to enjoy and connect with nature, improving health and wellbeing. The COVID-19 pandemic has particularly highlighted the importance of these spaces for urban residents' physical and mental health and wellbeing. However, the pandemic has also raised questions about equitable access to green spaces in cities, particularly for the population groups most at risk. These issues are explored in a new factsheet from the ENABLE project, which looks at improving green and blue infrastructure in cities.

### **Forestry/ Woodland**

#### [Future EU Forest strategy: High-quality management of EU forests and woodlands](#)

The EU should promote forest management models that seek to ensure forests are environmentally, societally and economically sustainable, MEPs have said. The Commission's post-2020 EU Forest Strategy,

due out at the beginning of 2021, should be independent and self-standing, properly aligned with the European Green Deal, and ensure that forests can continue to play a multifunctional role, MEPs say in a non-legislative resolution.

## **Freshwater**

### [Scientists map stress on freshwater species in European lakes and rivers](#)

Many European freshwater bodies are unlikely to meet the 2027 targets of the Water Framework Directive. This Europe-wide study assesses multiple types of freshwater stressor (physical, biological or chemical constraints on an ecosystem) to quantify the frequency, interactions and impacts of these on freshwater plants and animals. By mapping stressors' effects on scales — starting from single lake or river to an entire basin — such assessment can inform ecosystem management decisions.

## **Marine**

### [Baltic Sea tourism: the effects of deteriorating environmental quality on visitor intent](#)

The Baltic Sea provides many ecosystem services for surrounding countries, from supporting biodiversity to providing food, inedible goods and recreational opportunity to helping to regulate our climate and atmosphere<sup>1</sup>. However, these services are being threatened by ongoing environmental degradation via coastal erosion, eutrophication, and more. This study explores how potential future changes in environmental conditions would affect the recreational benefits provided by the Baltic Sea, by surveying 4800 people in Finland, Germany and Latvia on how improvement or deterioration in various environmental quality attributes would affect future visitor intent.

### [Identifying chemicals of emerging concern in the marine environment](#)

Contamination of the marine environment is an issue of growing concern. In the EU, Member States are required to monitor contaminant levels in their marine region, and to support efforts to achieve and maintain the good environmental status of marine waters under the Marine Strategy Framework Directive. A study using samples of mussels and fish has explored which chemicals of emerging concern (CEC) are relevant in the German coastal environment and identified a need for greater monitoring of emerging flame retardants and long-chain perfluoroalkyl substances in the North and Baltic Seas.

## **Plastics**

### [Environmental impacts of plastics and micro-plastics use, waste and pollution: EU and national measures](#)

This study, commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs, focuses on the pervasive use of plastics and reviews the rising consensus on the potential eco-toxicological impacts of these materials, in particular of smaller plastic particles, dubbed microplastics. It discusses possible mitigation strategies aimed at curtailing the prevalence of (micro)plastics, as well as emerging alternatives and their environmental adequacy.

## **Transport**

### [The Unsustainability of the Electric Car](#)

Shifting to electric vehicles while maintaining current travelling habits will not deliver emissions reductions required by European Green Deal and Paris Agreement. Margarita Mediavilla and Khaled Diab examine the truly sustainable options for the future of transport.