SURFACE: International Standards and Strategies for the Reduction of Land Consumption

Summary of Virtual Symposium: 4 February 2022, 09:15 a.m. – 01:00 p.m. CET

Fit for 2050? Strategies for achieving the EU's 'no net land take' goal

Background

The goal of 'no net land take by 2050' proclaimed by the EU Commission in 2011 within the Roadmap to a Resource Efficient Europe, is part of the European Union's 7th Environmental Action Programme and has been confirmed by the recently adopted Soil Strategy of the European Commission. Furthermore, EU Directive 2014/52/EU stipulates that Environmental Impact Assessments (EIAs) should consider 'land' in addition to 'soil' as environmental asset. Thus, land as an environmental resource plays an important role in European environmental policy approaches.

In reality, however, settlements and infrastructure projects continue to spread and "consume" more than 500 km² (50,000 ha) of previously undeveloped land within the EU every year. Furthermore, the transition to a bio-based economy fuelled by renewable energies and resources will come along with additional land demands. Already now, land take is unevenly distributed within and between EU Member States, and reducing it is a serious challenge in the face of economic aspirations, demographic changes and an undersupply of adequate housing and infrastructure in some regions. In addition, there are persistent challenges in measuring and recording land take that hinder reduction and monitoring.

On February 4, 2022, about 140 participants from several European countries attended the virtual symposium 'Fit for 2050? Strategies for achieving the EU's 'no net land take' goal'. It provided a platform both for exchange on the challenges related to achieving a non-net land take and for the presentation and discussion of policy approaches in selected EU Member States. Finally, a panel discussion was held with representatives of the Commission and Member States on the goal of 'non-net land take' in the context of national sustainability efforts and the European Green Deal.

The symposium was also the final event of the SURFACE project, which has been running at the Helmholtz-Centre for Environmental Research (UFZ) in Leipzig, Germany since 2017 and is funded by the Federal Environment Agency. The SURFACE project has assessed the status of national goals, strategies and policy approaches to reduce land take and promote a sustainable urban development.

Against this background, important results of the SURFACE project and inputs from external speakers on the following key issues were presented at the symposium:

- Persisting challenges in monitoring and reducing land take
- Policy strategies for soil protection and 'no net land take' in the EU and selected member states,
- A panel discussion to put 'no net land take'-goal in the context of other sustainability targets and the European Green Deal.

Opening of the Symposium

The SURFACE project leader Christoph Schröter-Schlaack, Helmholtz Centre for Environmental Research – UFZ, opened the virtual symposium and presented the objectives as well as the agenda of the event. Afterwards, Christian Kühn, State Secretary of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection welcomed the participants in a video message. Using the recent devastating flood events in Germany as an example, he emphasised the relevance of the topic of land take reduction and sustainable urban development for the new German government. Mr. Kühn welcomed the opportunity for inter-European networking and knowledge transfer created by the SURFACE project and closed with best wishes for the virtual symposium.

Block I: Persisting challenges in monitoring and reducing land take

Christoph Schröter-Schlaack opened the first thematic block with a summary of the results of the SURFACE and an overview of the course of the four-year project. At the core of the project were two written expert surveys, which were complemented by literature research and several workshops with national and international experts. The first survey was dedicated to the investigation of goals, strategies and policies for reducing land take at the international, EU and national levels in more than twenty countries in Europe (and the world). In the course of this inventory, interesting legal, planning and economic policy instruments for reducing land take were identified. In the assessment process, terminological differences and demarcation difficulties between different, often synonymously used terms for land take became apparent. Mr. Schröter-Schlaack pointed out that this is a challenge both for comparative studies of different national measures as well as for their harmonisation and the operationalisation and implementation of international frameworks.

The results of the second survey of the SURFACE project were then presented in more detail by Eva-Maria Schatz, a lawyer working at the Department of Environmental law at UFZ. The second survey was dedicated to assessing the impact of a concrete regulatory impulse to reduce land take and mitigate its negative environmental, economic and social consequences: the amendment of the EU Environmental Impact Assessment (EIA) Directive adopted in 2014, which added the land factor to the list of environmental factors to be considered (Directive 2014/52/EU, Article 3). In this case, it was possible to draw on more than 20 experts feedbacks from 11 European countries. Overall, the experts assessed the steering power of the EIA Directive for a noticeable reduction of land take - at least so far - as low. Ms Schatz showed that the differences in the national implementation of the amending directive are also due to the terminological differences in the terms used for land and soil. Furthermore, she explained reasons why EIA, as a project-related assessment, is only able to reduce land take to a limited extent. Additionally, the expert survey showed that there are other systemic reasons (lack of awareness of the problem of land take and soil degradation, conflicting incentives in the land use planning and governance system, trade-offs of land take reduction with other sustainability goals, e.g. housing) that stand in the way of a stronger impact of the EIA.

Stefan Fina from the Research Institute for Regional and Urban Development of RWTH Aachen University followed this up by explaining the difficulty of data collection, as multiple approaches and methods of data collection and analysis make it difficult to compare and apply the results. Using the example of Germany, he demonstrated the different data situation based on the difference between the Federal Statistical Office and the data of the EEA Copernicus in the recording of new urban land. Furthermore, he showed different interpretations of the topic land take and clarified the mismatch

between national and international interpretation for policy development. Finally, he emphasized the importance of precise indicators and data sets for planning and monitoring.

The Q&A section that followed addressed, among other things, the potential e role of the Copernicus high-resolution layers for a more precise monitoring of land take in Europe, the problem of classifying urban green spaces as land take, as well as lacking governance mechanism to foster compliance of communities and municipalities with the quantified policy targets for land take reduction at national level.

Block II: Policy strategies towards 'no net land take'

The second block of the symposium was dedicated to policy strategies to reduce land take at European level and in selected member states. Humberto Delgado Rosa, Director for Biodiversity, DG Environment at the European Commission, opened the block with an input on the recently launched soil strategy of the European Union and its relevance for land take. He stressed the importance of soil as the basis for many ecosystem services. In view of the finite nature of land and soil and the still unabated pressures of use, he stressed the importance of a land use hierarchy, where more degraded soils are used first, and the primacy of a circular use of soils and land over the new take of more natural land. He also announced that the EU plans to adopt a Soil Health Law in 2023. Similar to other EU environmental legislation, this law will set certain minimum values for assessing the health and functionality of soils, which will be systematically monitored and reported on by member states.

Martin Schamann from the Federal Ministry of Agriculture, Regions and Tourism presented the current status of Austria's first Soil Strategy, which, despite its title, also aims to reduce land take. In 2020, about 7% of Austria's land area was developed, and there is a growing awareness of the importance of soil and the need for ambitious policy goals for soil protection and land take reduction. Against this background, Mr. Schamann expects the adoption of the Austrian Soil Strategy to become a milestone for Austrian spatial planning by advancing the goal of reducing land take, unsealing land and setting quantitative targets for soil protection. The strategy will include, among other things, a harmonised database on land use, a nationwide uniform monitoring system for land take and an action plan with concrete activities, milestones and target horizons for implementation by 2030.

The last contribution in this block of the event was given by Eddy Wille from the Public Waste Agency of Flanders (Land Management Department) on the strategy of curbing land take in Flanders, Belgium. He presented the Flemish government's targets, which include reducing net land take by settlements to zero by 2040 despite an expected population growth of about fifteen percent. The strategies to reduce land take are based on the mitigation hierarchy, i.e. avoidance, minimisation of impacts as well as compensation. One focus of activities in Flanders is circular land use through sophisticated recycling of brownfield sites.

In the subsequent round of questions, the possibilities and limits of compensating for land take through the reuse of brownfield sites were first discussed. In particular, the danger of a simplified justification of new land take in view of the possibility of compensation was problematised. Regardless of the risks, however, compensation was considered an indispensable flexible instrument for achieving the no net land take goal. A second set of questions revolved around the EU soil protection law announced by Mr Delgado Rosa. However, in view of the current state of planning, it was still too early to answer detailed questions.

Block III: The 'no net land take goal' in the context of sustainability and the European Green Deal

The third block of the symposium was organised as a panel discussion moderated by Bernd Hansjürgens, Head of the Soil Commission at the German Federal Environment Agency and Head of the Research Unit 'Environment and Society' at UFZ. In addition to Humberto Delgado Rosa,Martin Schamann and Eddy Wille, Dirk Messner, President of the German Environment Agency joined the panel as a discussant.

Bernd Hansjürgens introduced the topic of the discussion by highlighting the role of healthy soils and climate-friendly land use for European sustainability efforts. It is clear that there are multiple synergies between sustainable land use and, for example, local adaptation to climate change, biodiversity conservation and quality of life in urban areas. On the other hand, necessary steps of a societal change towards sustainability, e.g. in energy and raw material supply, can also have significant impacts on land use and land take. Against this backdrop, the panel discussed the ongoing challenges in combating land take and explored the trade-off between soil protection and reduced land take with other European and national sustainability goals.

In an opening round, Mr Messner was asked about the challenges and difficulties in reducing land take in Germany and whether there are any new challenges with regard to the Green Deal and European sustainability efforts. Mr Messner stressed that the newly elected German government gives much reason to hope for improvement. Both the goals set in the new coalition agreement and the planned cooperation between different ministries and policy departments could open up new opportunities for synergies and joint approaches at the policy level in the future.

With regard to the attempts to develop a soil protection strategy in Austria, Mr. Schamann was asked to what extent the European Soil Strategy provides impulses for the national efforts and where there are challenges in the implementation. Mr. Schamann explained that the EU's formulation of goals is a great support for national goals in that it helps, among other things, not to lose sight of the big picture and provides a convincing rationale for the necessity and advantageousness of a careful use of soils and land. Moreover, it is optimistic that the goals can also be achieved, as the necessary policy instruments for implementation are available. However, it is still too early to judge the actual success.

Against the background of the enormous land recycling potential in Flanders, Eddy Wille was asked to what extent a recycling strategy is sufficient to achieve the set target of having no net land consumption in Flanders by 2040. Mr Wille clarified that recycling is not enough and that minimising new land take is also essential. Cooperation with business, housing and agriculture is particularly important here. In addition, there are considerations to exploit more synergies in land use: for example, the areas of landfills in Flanders could be used for reforestation or the production of renewable energy.

Soil protection is just one of many environmental issues, one of many sustainability challenges that the European Green Deal addresses. Against this background, Mr Delgado Rosa was asked where he sees important trade-offs that need to be addressed. Mr. Delgado Rosa stressed that the European Soil Strategy rather focuses on synergies and defines soil protection as a solution to many problems and soils and land as an essential part of natural capital. Accordingly, sustainability dialogues with all stakeholders are of great importance to moderate competing uses given the scarcity of this natural capital.

In the further course of the panel discussion, the possibilities of valuing land and soil and its ecosystem services, compensating for the impacts of land take, developing alliances in a green economy as well as approaches to solving the challenges of sustainable urban development were discussed.

Closing the Symposium

Dirk Messner closed the virtual symposium with some conclusions from the point of view of the German Federal Environment Agency. He emphasised how important it was to continue the public debate on the sustainable use of land and soils that was facilitated by the SURFACE project in order to create further social awareness for the topic. In addition, there is still a great need for accompanying research. Policy integration and priority setting in politics are particularly important. This is imperative, as the land factor is crucial for the central sustainability challenges of climate protection and adaptation to climate change, biodiversity conservation and creating sustainable agri-food systems globally but also at European and national level.