

Report of Symposium Reducing land take: examples from abroad

27 September 2023, The Hague (NL) and online

Aim and scope of the event

The European objective to achieve ‘No Net Land Take in 2050’ (NNLT) took spatial planners in the Netherlands by surprise. Other member states, however, have been actively trying to reduce their urban development for years. What can we learn from each other? That was the topic of the PBL/ESPOL symposium ‘Reducing land take – examples from abroad’ on September 27. This event brought Dutch policymakers and researchers together with counterparts in neighbouring countries. In this sense, it was akin to the ESPOL ‘peer learning’ seminars: the focus was on exchanging experiences so that the Dutch could take the next steps in policy development and monitoring.

The NNLT symposium drew a broad audience: roughly 150 people attended (of which about two-thirds online), mostly academics and policymakers at various levels and fields. There were a few journalists, students and independent experts participating as well. Approximately 80% of the audience was from the Netherlands. Marc Hanou (chair of the department of spatial planning and environmental quality at PBL) was the acting host and moderator. In his welcome word, he explained the role of PBL as an independent research institute for national policy, and Marjan van Herwijnen then explained the ESPOL programme in similar terms but at the European level.

The agenda was then presented:

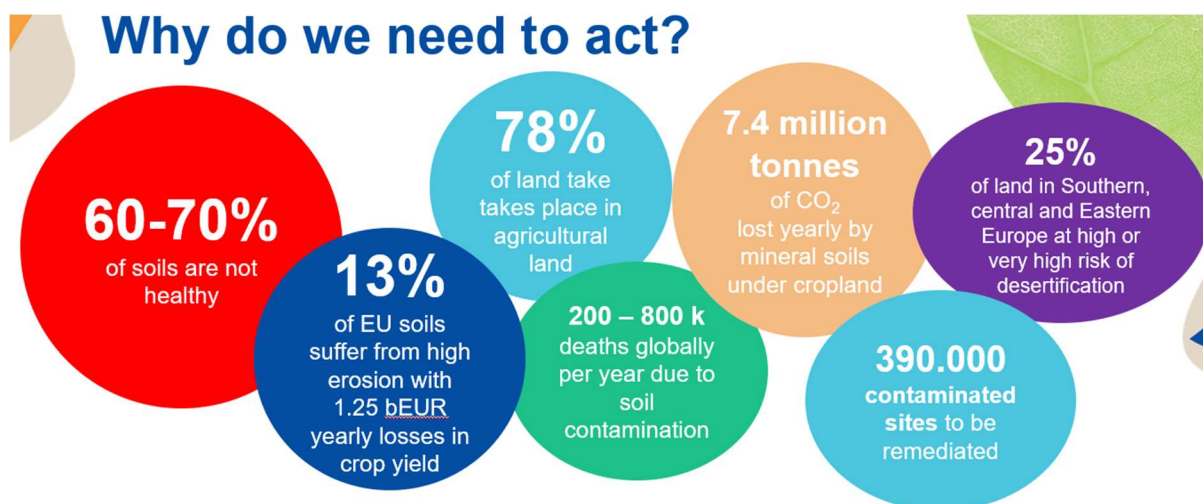
13.00-13.05	Welcome (Marc Hanou, PBL / Marjan van Herwijnen, ESPOL)
13.05-13.20	Soil Monitoring Law proposal (Mirco Barbero, European Commission)
13.20-13.35	Land take in Europe: evidence and issues (David Evers, PBL, ESPOL)
13.35-13.45	Q&A
13.45-14.00	Flanders (Peter Lacoere, Univ. Ghent)
14.00-14.15	Germany (Anna Hellings, BBSR)
14.15-14.30	Luxembourg (Robert Wealer, Ministry of Energy and Spatial Planning)
14.30-14.45	Coffee break
14.45-15.30	Break-out workshops (cases + EC)
15.30-15.50	Lessons learned and reflection by Dutch policymakers
15.50-16.00	Q&A and wrap-up

For the sake of readability, this report will not go through each agenda item individually. Instead, questions posed to a particular speaker during a Q&A and the workshop contents and reflection are bundled.

European perspective

Keynote presentation by Mirco Barbero (European Commission, DG Environment)

This presentation set the scene as regards the need for protecting soil in Europe and the policymaking process surrounding this. This started with a positioning of the NNLT target in the correct policy context. It has been a goal since the 2011 Roadmap on a resource-efficient Europe, but gained more importance with the adoption of the European Green Deal in 2019. One of the pillars of the EGD is to preserve and restore ecosystems and biodiversity, which was elaborated in the 2020 EU Biodiversity Strategy and 2021 EU Soil Strategy, which specifically mentions NNLT. The latter contained a proposal for a directive in 2023.



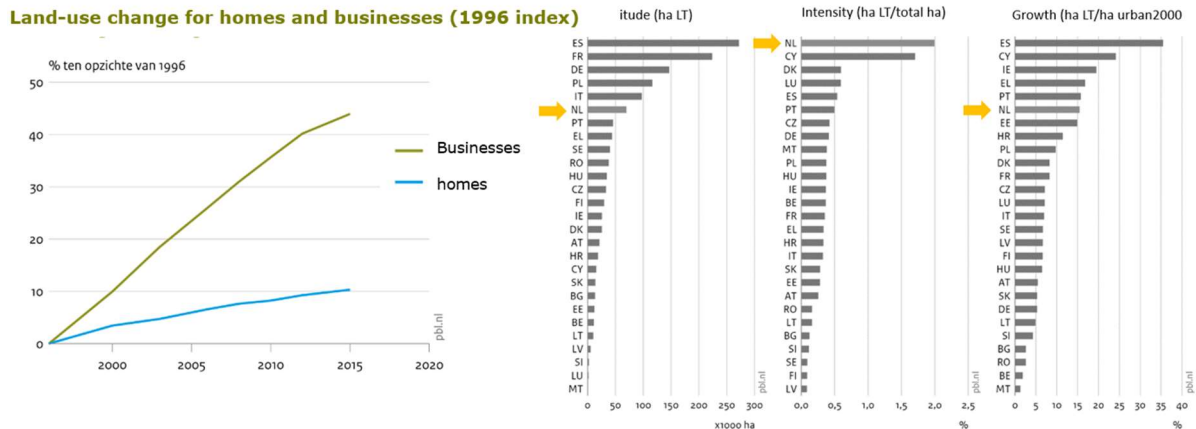
In July 2023 the proposal for a [Soil Monitoring Law](#) was published. This strives to reverse the deterioration of soil quality in the EU and reach a healthy status by 2050. This is in line with NNLT, although the regulatory emphasis is on monitoring rather than reaching the target. Member states are requested to voluntarily reduce land take by avoiding, reusing, minimizing and compensating for greenfield development and phasing out financial incentives for land take.



Finally, the speaker invited all those interested to participate to the European Commission's platform to exchange views and information on land take. They can do this by sending an email to: env-soil@ec.europa.eu.

Keynote presentation by David Evers (PBL/ESPON contact point NL)

The presentation began with calculations by the ESPON SUPER project concerning land take in Europe. This was over 1 million hectares over the 2000-2018 period, or about 250 football fields per day. This is obviously much more than zero. Most of this land came from agriculture and to a lesser extent nature and became primarily urban fabric (mostly housing), industrial (also commercial) and construction sites. Land was also taken for parks and recreation. The rate of land take has progressively decreased over time.



The Netherlands ranks among the countries with the highest land take in Europe (10ha/day). In terms of size, it has the highest intensity in the EU27 in 2000-2018. During this period, the share of land developed for businesses grew much faster than residential, which corresponds to a Dutch debate on big-box development along highways.



The second part of the presentation concerned unresolved issues that were important for monitoring. One concerned problematic Corine classifications. Many urban green and recreation areas have good soil quality/ecosystem services while some agricultural functions (horticulture, livestock sheds) are quite poor in this respect. Renewable energy is another grey area. Finally, there are problems registering small-scale urban development. Sometimes this is coded as urban sometimes it remains rural. In both cases, it can result in erroneous land take calculations.

The presentation ended with the contention that NNLT needed spatial planners for implementation, which cannot be taken for granted. A hard generic norm clashes with the comprehensive integrated approach. More explanation and perhaps different terminology and approaches may be needed.

Q&A: the relationship between NNLT and sustainability was discussed. Amsterdam is striving to live within planetary boundaries according to the 'donut city' model. This can be undermined if parks and recreation areas are considered urban, because NNLT can then encourage building on these areas (which could conflict with the Nature Restoration Act). Another question regarded NNLT in the PBL scenarios. Calculations for the urbanization scenarios [has already been published](#) and NNLT in the integrated scenarios has been calculated but not yet published. Contact: david.evers@pbl.nl

Workshop: the workshop was attended by about 20 participants physically and 40 online. According to Mirco Barbero (European Commission), the discussion was 'reassuring' in that most participants saw the need for protecting the soil. The main question posed was which practices would be helpful for implementing the Soil Monitoring Law. The main points raised were:

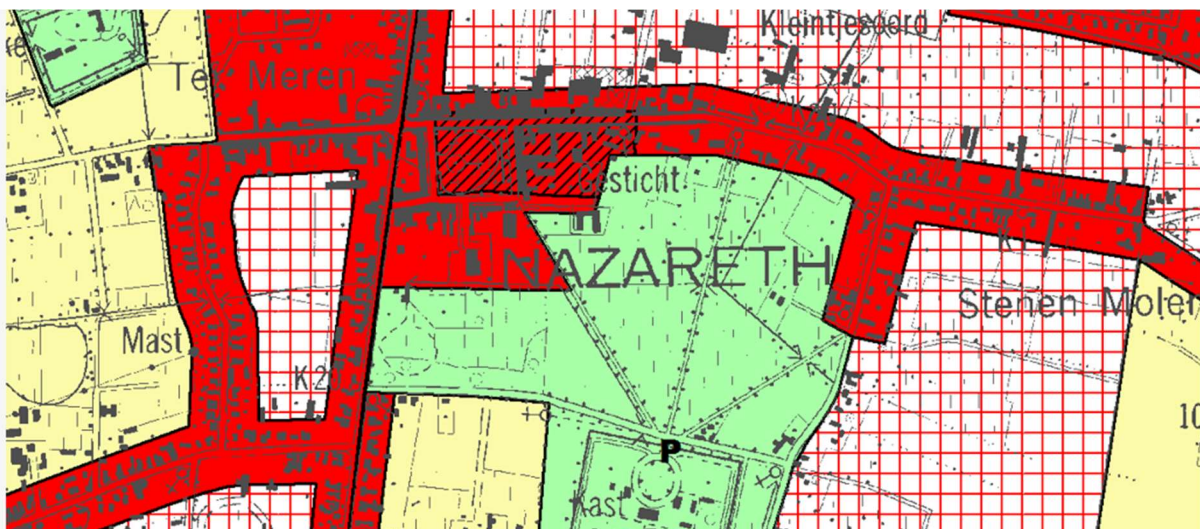
- Ecosystem services is a key concept that spatial land planners should increasingly integrate in their language, way of thinking and plans.
- It is disturbing that the land take definition has now changed after so much work has been done by some countries to set targets, monitoring and develop action plans based on the previous definition (from non-urban to urban); however, that work is not lost, it can be built upon and it's now the moment to move forward from a land take concept only addressing loss of agricultural production from addressing the loss of each ecosystem service.
- SML provisions on land take raise concerns in NL about the estimated 1 million housing that has to be found for the increasing population.

Experiences from abroad

This was followed by three presentations from experts from neighbouring countries.

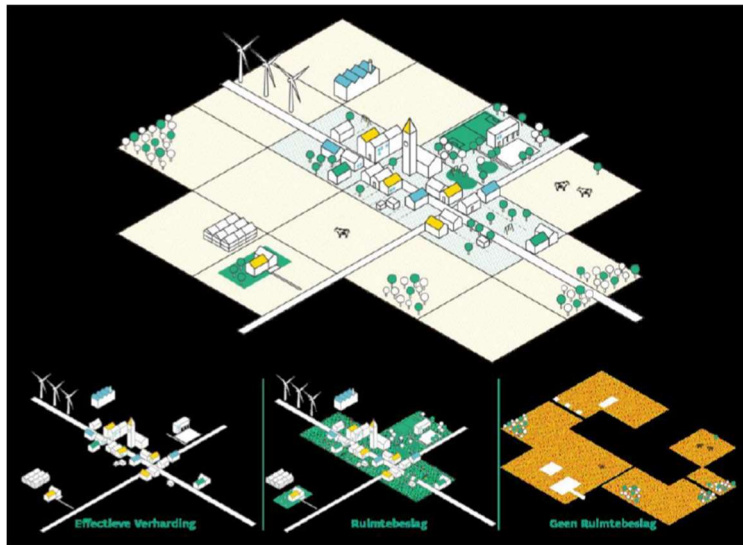
Flanders by Peter Lacoere (HOGENT)

Flanders is heavily urbanized: about a third of its land mass can be considered 'taken'. This has very gradually decreased since 2000 and is about 6ha/day. One of the main impediments for achieving NNLT is that much rural land has been zoned as urban (thus granting development rights) in plans made in the 1970s and 1980s. At present, the government is considering buying back these rights.



There is a NNLT target for 2050 and even for 2040. Flanders has a working definition for land take which includes built-up agricultural areas (the speaker expressed concern about changing definitions

in the SML). There is political progress towards this goal, but also impediments, such as disagreement surrounding compensation for landowners. Contact: peter.lacoere@hogent.be



Workshop: there was a large discussion about comparing the Netherlands and Flanders. One very interesting point raised was that the urban structure is less dense in Flanders, making it easier to densify and therefore achieve NNLT. There was also a discussion about whether non-built land zoned as urban should already be considered land take (it's not).

Germany by Anna Hellings (BBSR)

Germany had rapid urbanization following the reunification. In the 1990s it was over 100ha/day. Since the turn of the century, it set a national target to reduce land take to 30 ha/day. The deadline was initially 2020 in the National Sustainability Strategy in 2002, but recently moved to 2030. The target enjoys widespread support, but since Germany is a federal state, it depends on lower tiers of government for implementation. Not all state, regional or local governments have incorporated this goal into their policies. Some states have set their own targets.

POLITICAL GENESIS OF THE 'SPATIAL TURN'



Laws, Regulations

BauGB amendment: „Land and soil should be used sparingly and carefully“ (Soil Protection Clause)

1986

2013

BauGB amendment: "urban development should primarily take place through measures of internal development".

2007

BauGB amendment: **Development plans for internal development**

1970

1980

1990

2000

2010

2020

1982

Federal Soil Protection Concept: "Reversing the trend in land consumption"

2007

Biodiversity Strategy: **Internal-External 3:1**

Federal Environmental Agency: **triple inner development**

2022

1971

Environmental Programme
1971: "increasing demand for land ...overtaxes the natural basis of life".

National sustainability strategy: **no reduction in settlement density**

2021

2002

National Sustainability Strategy: **30 hectare target**

Concepts and Programmes

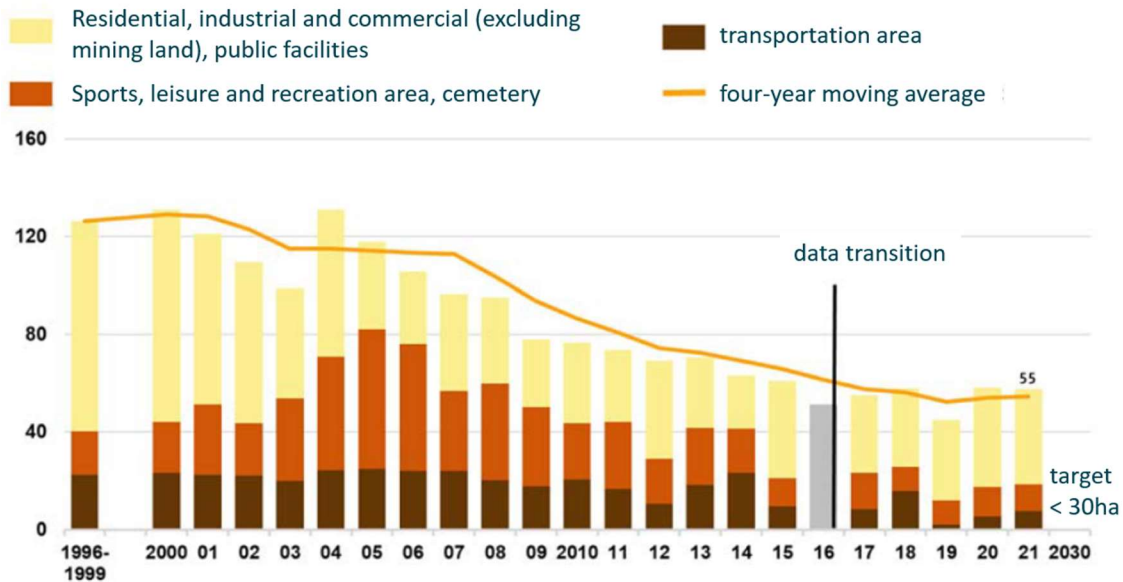
EU Soil Protection Strategy: **Net Zero Target**

2021

56

Land take has steadily decreased to about 50 ha/day so it has not yet reached the target. NNLT in 2050 poses a considerable challenge. There are large variations in the country. Some areas already have achieved NNLT, mostly very urban, while other places are still expanding, including areas with shrinking populations. Germany has an [online dashboard](#) for this.

Growth in settlement and transport area in ha per day

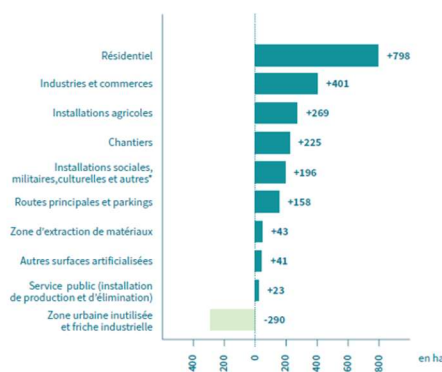


Workshop: there was a discussion about definitions. Should renewable energy be considered land take? What is rural? Land take is not highest in deep rural areas, but nearby cities. In addition, more research is needed to see what actually caused the reduction in land take.

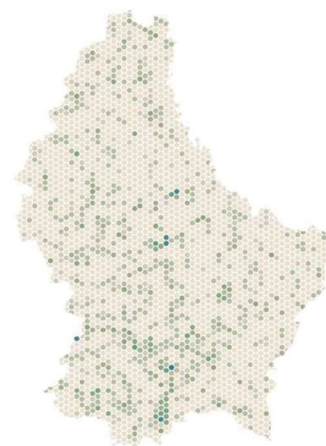
Luxembourg by Robert Wealer (Ministry of Energy and Spatial Planning)

There is a lot of land take in Luxembourg due to its status as an open economy. Many people commute from abroad to work. Most of this development was for homes (in contrast to the Netherlands). Agricultural buildings are included in the definition of urban.

→ Change in land use of artificialised classes between 2007 and 2018 (in ha)



Artificial growth between 2007 and 2018 by km²

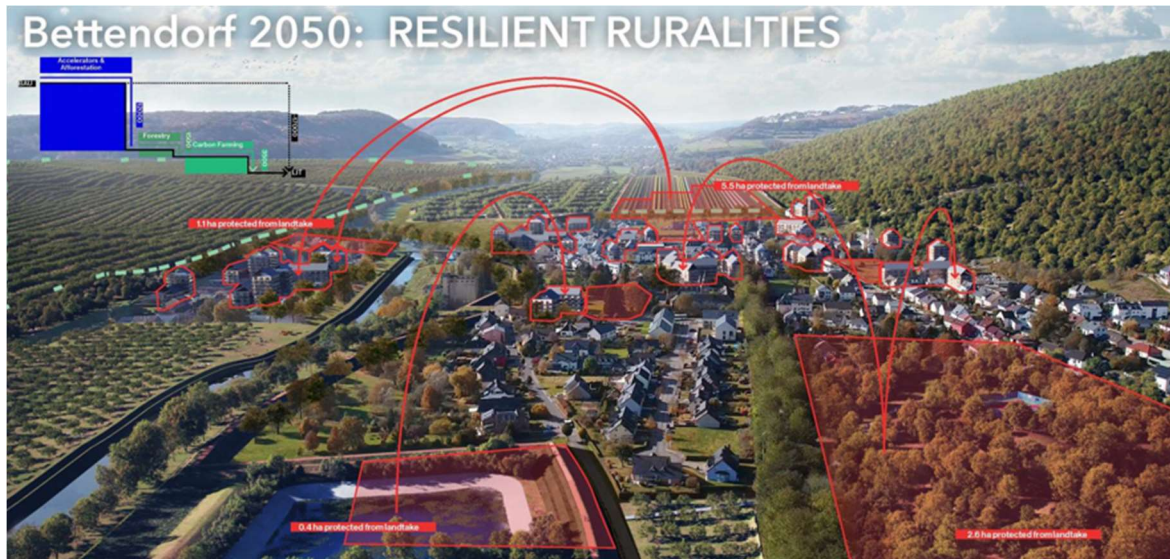


The average daily rate of land take was 5.000 m², or 0.5 ha, between 1999 and 2018.

2018

Auteur: DfTer 2021 - Valeurs sur base de LIS-L 2018

The country has developed a strategy called PDAT to reach 0.5ha/day land take by 2035, which is being tightened. NNLT is considered to fit the concept of well-being. The PDAT focuses on reusing land, such as regeneration and densification and contains concrete examples of how this can be achieved. One example, which will be the topic of the workshop, is to transfer development rights.



Workshop: a study was done on a village, showing where and how building would likely occur on the basis of existing zoning plans: large homes on the edge of town and along the main access roadway. The plans had been drawn up in the 1980s and development rights already allocated. A TDR scheme was proposed to give landowners development opportunities at empty sites in the village centre or by adding stories to existing buildings. There was a discussion about whether this scheme fit with current housing preferences in Luxembourg, which would affect the profitability of the alternative locations. The Flemish strategy of buying back the rights was seen as too expensive and the Dutch (Utrecht) strategy of downzoning without compensation was seen as infeasible.

Reflection by Dutch policymakers

Ron Doods (Ministry of Internal Affairs)

It was said at the last seminar that the Dutch were 'in denial' about NNLT. We have now left that behind us. Now we are feeling three things at once: relieved, confused and nervous. Relieved because the Soil Monitoring Law because seems clear and quantitative. The confusion regards the definitions and open issues, but these seem manageable, especially in deliberation. The anxiety regards NNLT with respect to current planning policy. We have the 'ladder' for sustainable urbanization in addition to others, which are 'comply or explain' policies, which can conflict with NNLT hierarchy, particularly the notion of compensation. This triggers apprehensions with respect to the current nitrates directive problems.

Silko Mergenthal (Ministry of Infrastructure and Water Management)

I would like to add a feeling to those mentioned: enthusiasm. With this proposal we have something to look forward to for improving our soil. Another national policy is to prioritize water and soil in planning decisions, which even includes a wish to reduce soil sealing (without a binding rule). I'm thankful to ESPON/PBL for organizing this because the Netherlands can learn from other countries.

The notion of ecosystem services is a good concept because it makes a link between everyday life and the natural systems that are left. Moreover, it allows us to think beyond 'net' hectares land take (quantitative approach) when considering compensation: we should be ensuring that the ecosystem services do not deteriorate. This opens up new possibilities such as vertical roofs, water infiltration solutions, etc. in NNLT.

Next steps

We have made a clear step forward on this issue. It is no longer being ignored but actively considered by Dutch planners and policymakers. This seminar has given us food for thought to take the next steps. It is also obvious that NNLT is here to stay, so we will continue to research this topic and organize events. Please stay in touch with us. Our contact at PBL is: david.evers@pbl.nl