



AND

**Locate25** |   
THE NATIONAL GEOSPATIAL CONFERENCE

Collaboration, Innovation and Resilience:  
Championing a Digital Generation

Presented at the FIG Working Week 2025,  
6-10 April 2025 in Brisbane, Australia



**Geospatial**  
Council of Australia

Brisbane, Australia 6-10 April



# The surveyor and the trajectory of land sobriety in France **Episode 1**

Towards a Comprehensive Legal and Practical Framework  
for Soil Management

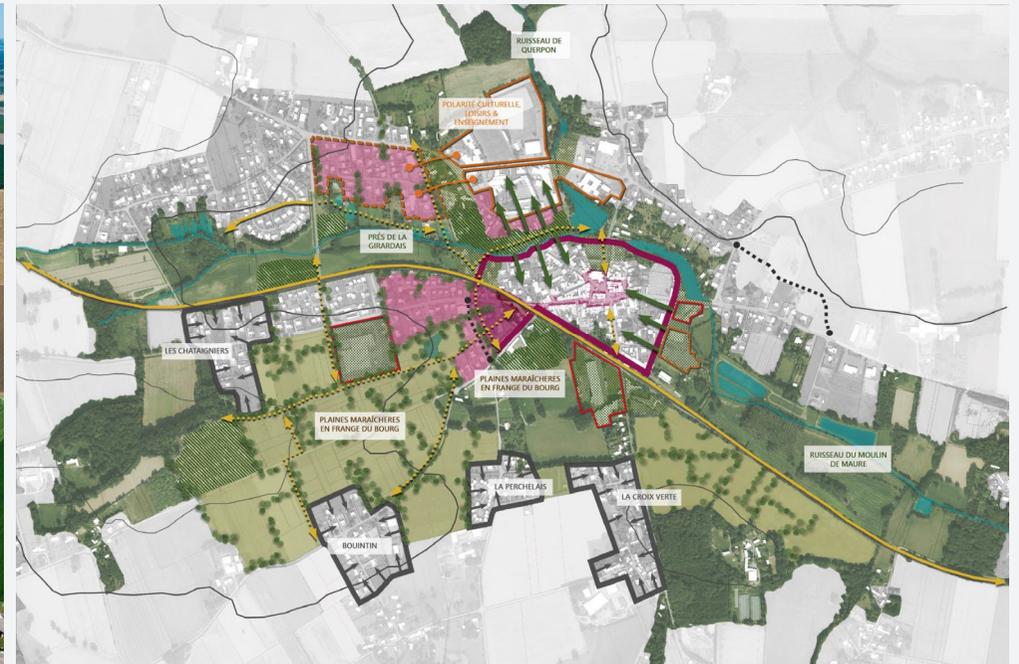
**ALAJOUANINE Audrey, OGE-France**



**GÉOMÈTRE-EXPERT**  
GARANT D'UN CADRE DE VIE DURABLE

# COMBATING URBAN SPRAWL AND THE EFFECTS OF CLIMATE CHANGE

## THE EMERGENCE OF NATIONAL POLICIES AT EUROPEAN LEVEL



# LAND SOBRIETY (or Zero Net Land Take), a National Objective

● **Law « Grenelle 2 »  
17th July 2010 :  
Reducing space  
consumption**

Obligation to carry out  
an analysis of previous  
space consumption

● **Law «ALUR» du 24th  
March 2014: optimise  
construction within  
already urbanised  
areas**

Obligation to carry out  
a densification study of  
urbanised areas

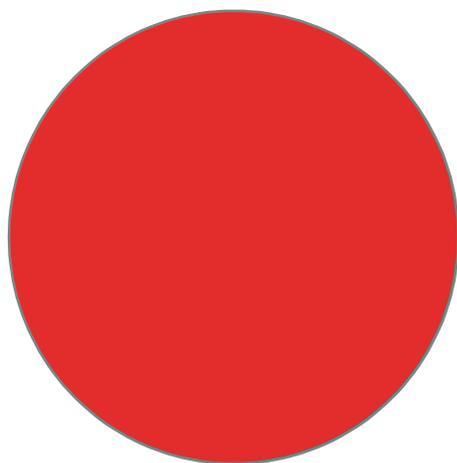
● **Law « Climate & Resilience » 22nd  
August 2021: combating climate  
change and building resilience to its  
effects**

In order to achieve the national objective  
of no net artificialisation of land by 2050,  
the rate of artificialisation of land must be  
halved by 2030, taking into account the  
total consumption of space observed  
between 2010 and 2021. This reduction in  
artificialisation should then be halved each  
decade until 2050.



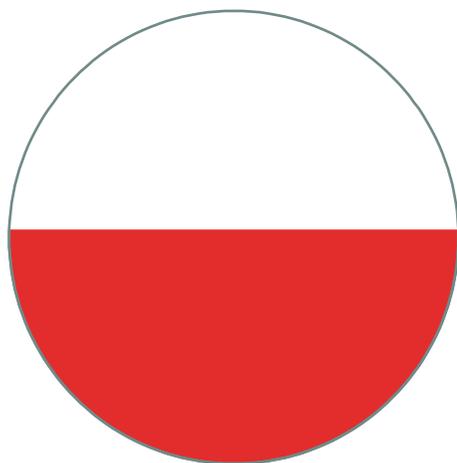
# TIMELINES OF LAND SOBRIETY

2021



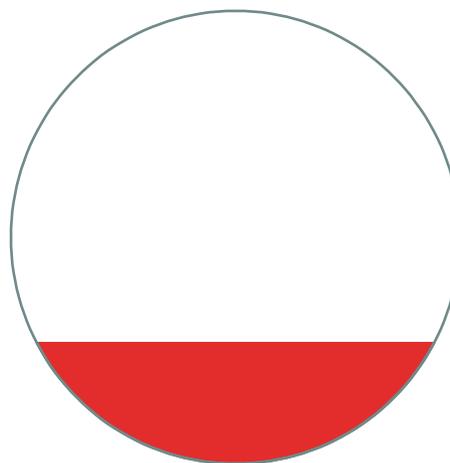
HALVE THE **CONSUMPTION**  
OF NATURAL,  
AGRICULTURAL AND  
FOREST AREAS OVER THE  
LAST 10 YEARS

2031



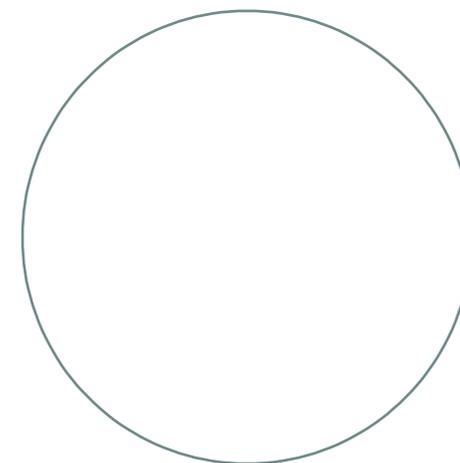
DEFINE A TARGET FOR  
REDUCING THE RATE OF  
**ARTIFICIALISATION** IN 10-  
YEAR INCREMENTS

2040



ACHIEVE THE OBJECTIVE OF  
**ZERO NET**  
**ARTIFICIALISATION /**  
**LAND SOBRIETY**

2050



# DEFINITIONS

## SPACE CONSUMPTION

*the consumption of natural, agricultural and forestry areas is understood to mean the actual creation or extension of urbanised areas in the area concerned*

## ARTIFICIALISATION

*the lasting alteration of all or part of a soil's ecological functions, in particular its biological, hydric and climatic functions, as well as its agronomic potential, as a result of its occupation or use.*

Space consumption ?



Artificialisation ?



Space consumption ?



Artificialisation ?



# DEFINITIONS

## RENATURATION

*Soil renaturation, or desartificialisation, consists of actions or operations to restore or improve the functionality of a soil, with the effect of transforming it.*

## NET ARTIFICIALISATION

*Net Artificialisation is defined as the balance of artificialisation and renaturation recorded over a given area and period.*

### ARTIFICIALISATION



+

### RENATURATION



= **Land Sobriety**

**PROPOSALS FOR A HUMANLY ACCEPTABLE  
TRAJECTORY OF LAND SOBRIETY**



**GÉOMÈTRE-EXPERT**  
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**The surveyor and the trajectory of **land sobriety in France****

**METHODOLOGY**

**Episode 1**

**Towards a Comprehensive Legal and Practical Framework for Soil Management**

**Episode 2**

**Integrating Soil Management into Sustainable Land Use Planning**

**Episode 3**

**Enhancing Urban Planning through Adaptive and Inclusive Strategies**

**EXAMPLES**

**Episode 4**

**A Practical Case Study of Urban Renaturation and De-artificialization**

**Episode 5**

**A Practical Case Study of Urban Renewal**

## Defining Soil Legally

Submit for debate a legal definition of soil in accordance with the provisions of the Environmental Code, as follows:

A living soil can provide a large number of ecosystem services, including :

- **A habitat function:** the soil's capacity to act as a habitat for living organisms and to contribute to the conservation of biodiversity.
- **A regulating function:** the soil's ability to regulate substance and energy cycles.
- **A production function:** the soil's capacity to produce biomass.
- **A reservoir function:** the soil's capacity to store raw materials (water, geothermal energy, carbon).
- **A support function:** the soil's ability to serve as a foundation for development and construction.
- **An archiving function:** the soil's capacity

A man wearing a light blue denim shirt, dark trousers, and a light-colored cap is crouching in a field. He is holding a small amount of soil in his hands, looking down at it intently. The background shows a field of young plants under a bright, hazy sky, suggesting a sunrise or sunset.

## Enhancing Soil Knowledge

**Implement a global approach and a methodology for understanding the soil, its predicted changes and its capacity to evolve.**

- Provide local authorities and contracting authorities with tool(s) for multi multi-criteria evaluation of the quality of the soils
- To be able to assess the functions of habitat regulation, production and source of raw materials.
- Make a prior inventory of existing initiatives underway and take advantage of this comprehensive global approach to on a national scale
- Set up a simple procedure procedure for organising information gathering and soil knowledge.
- Supply and make available sources of information

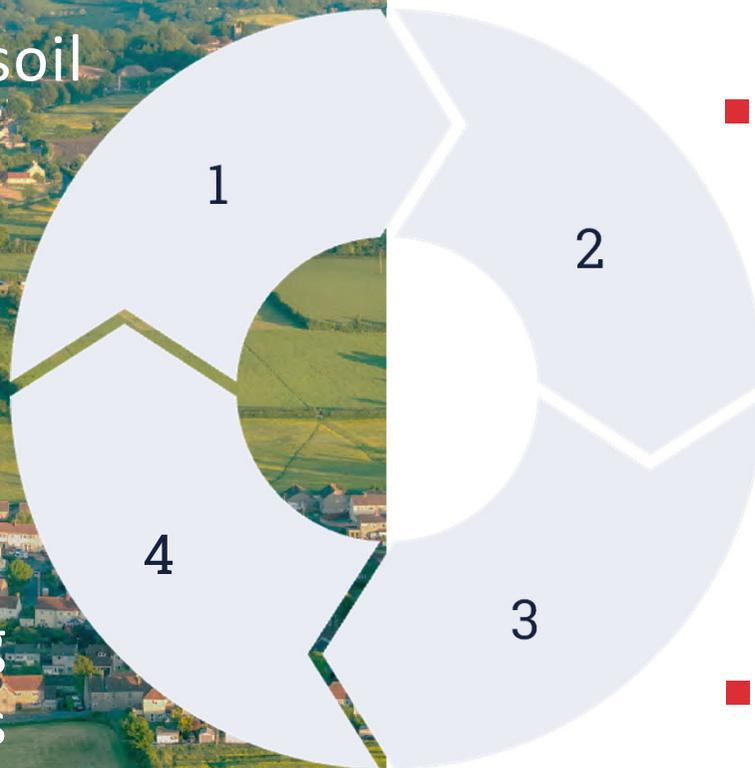
# Towards sustainable soil management

■ A legal definition of soil

■ Data centralization

Ensuring sustainable living environments

■ Improving planning



**PROPOSALS FOR A HUMANLY ACCEPTABLE  
TRAJECTORY OF LAND SOBRIETY**



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**Thank You For Your Attention**



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