

No net land take by 2050 in Wallonia?

Vers une fin de l'artificialisation des sols d'ici 2050 en Wallonie?

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Conférence Intersoil 2020
Le 3 mars 2020

Acknowledgement

Research « *Gérer le territoire avec parcimonie* » (2018-2019):

- **Financed by Wallonia through the « CPDT »**
(Conférence Permanente du Développement Territorial)
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Plan of the presentation:

- 1) Definitions
- 2) Diagnosis
- 3) Objectives of the Walloon Region
- 4) Strategy & tools?



1) Definitions

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« Land take »? (FR: *Artificialisation des sols*)

1) Definitions



« Land take »? (FR: Artificialisation des sols)

European Environmental Agency:

Change in the amount of agricultural, forest and other semi-natural and natural land taken by urban and other artificial land development. It includes areas sealed by construction and urban infrastructure, as well as urban green areas, and sport and leisure facilities. The main drivers of land take are grouped in processes resulting in the extension of: housing, services and recreation; industrial and commercial sites; transport networks and infrastructures; mines, quarries and waste dumpsites; construction sites.

1) Definitions



Land use

vs.

Land cover?

Agriculture,
Housing,
Economic activities,

...

Buildings,
Lawn,
Trees,

...

1) Definitions

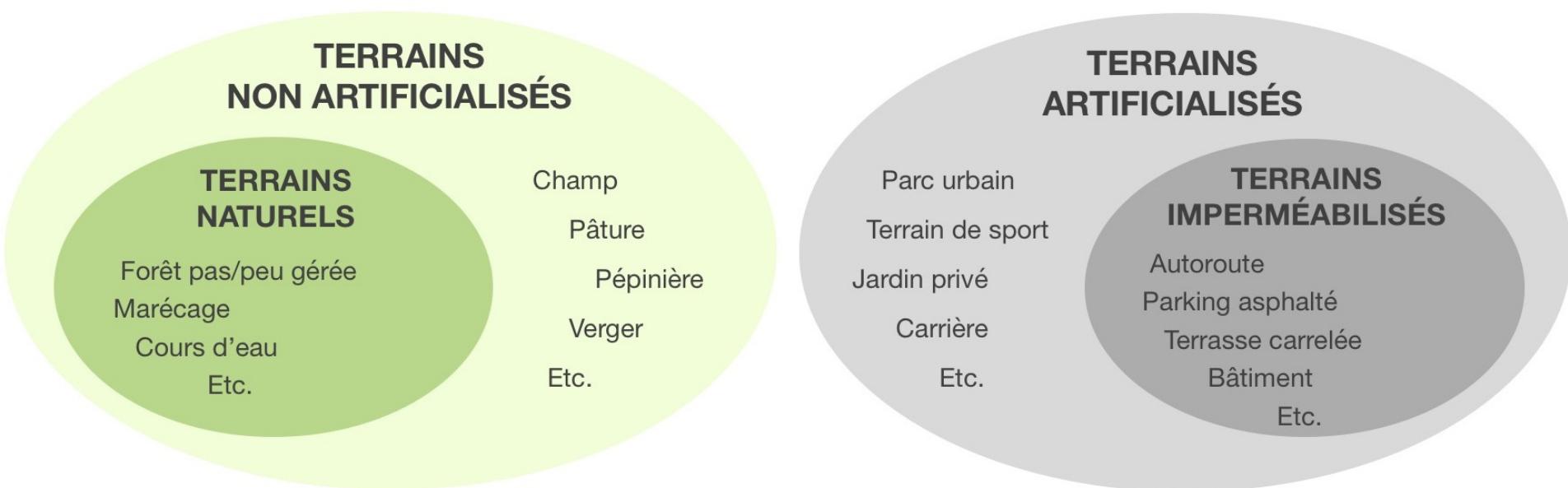


Land take

vs.

Soil sealing?

1) Definitions



1) Definitions



Limits of the “land take” concept?

“**Urban green infrastructures**” providing various **ecosystem services** are considered as « taken ». Yet they are weak urban functions that need to be promoted and protected face to other, stronger urban functions (e.g. housing, commerce...).

1) Definitions



Monitoring of « land take »?

EU:

CORINE Land Cover:

Remote sensing > Land Cover > Land Use

Resolution: 25 ha (5ha for change observation)

Wallonia:

Land register (« *Cadastre* »)

Resolution: parcel

1) Definitions



Monitoring of « land take »?

EU:

CORINE Land Cover:

Remote sensing > Land Cover > Land Use

Resolution: 25 ha (5ha for change observation)

Wallonia:

Land register (« *Cadastre* »)

Resolution: parcel > **Limits !**

1) Definitions



« Urban Sprawl »?

3 dimensions:

- Land take
- Spatial distribution (sprawl, crumbling...)
- Efficiency

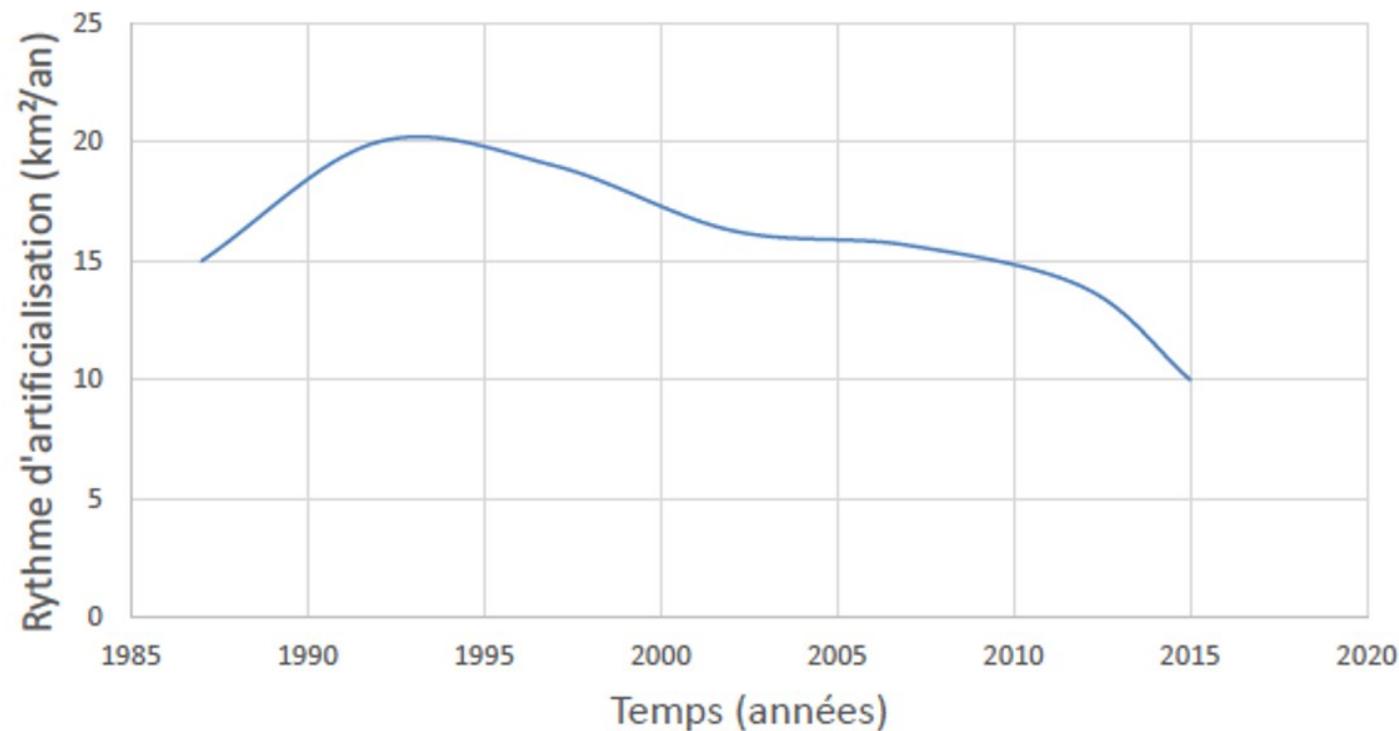
« Urban sprawl is a prime example of the tragedy of the commons. The benefits of using land go to a single citizen or commercial outlet while the detrimental effects are shared by society » (EU Commission, 2016).



2) Diagnosis

2) Diagnosis

Evolution du rythme d'artificialisation

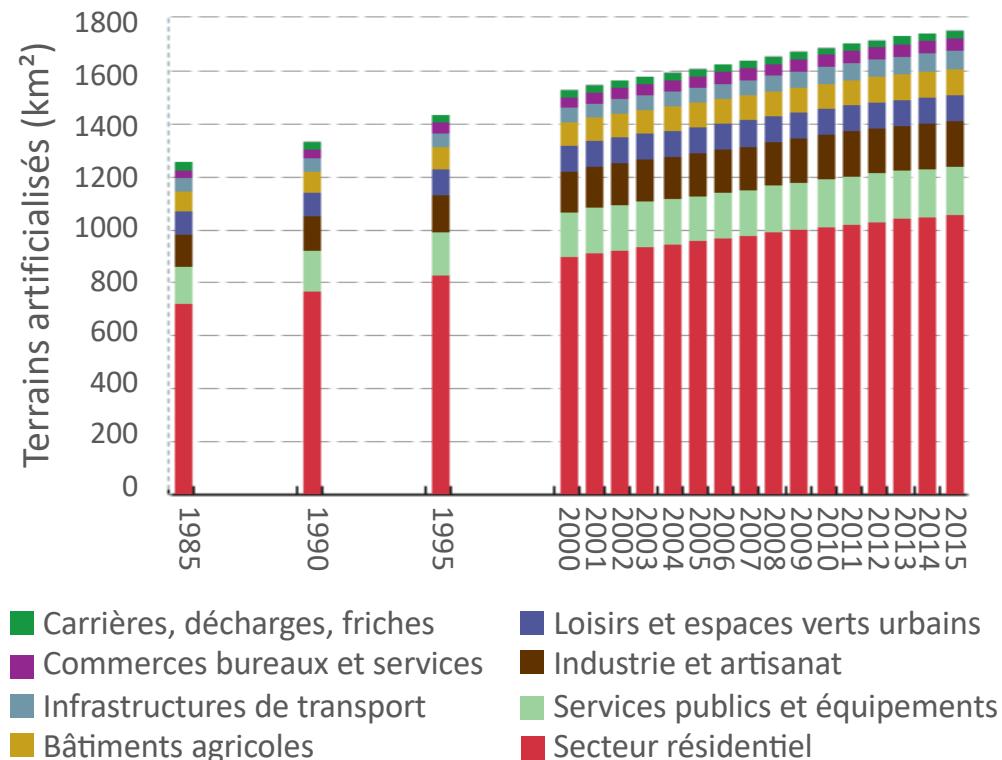


CPDT, 2018 – Sources : SPF Finances – AGDP (base de données Bodem/Sol) ; SPF Economie – DG Statistique

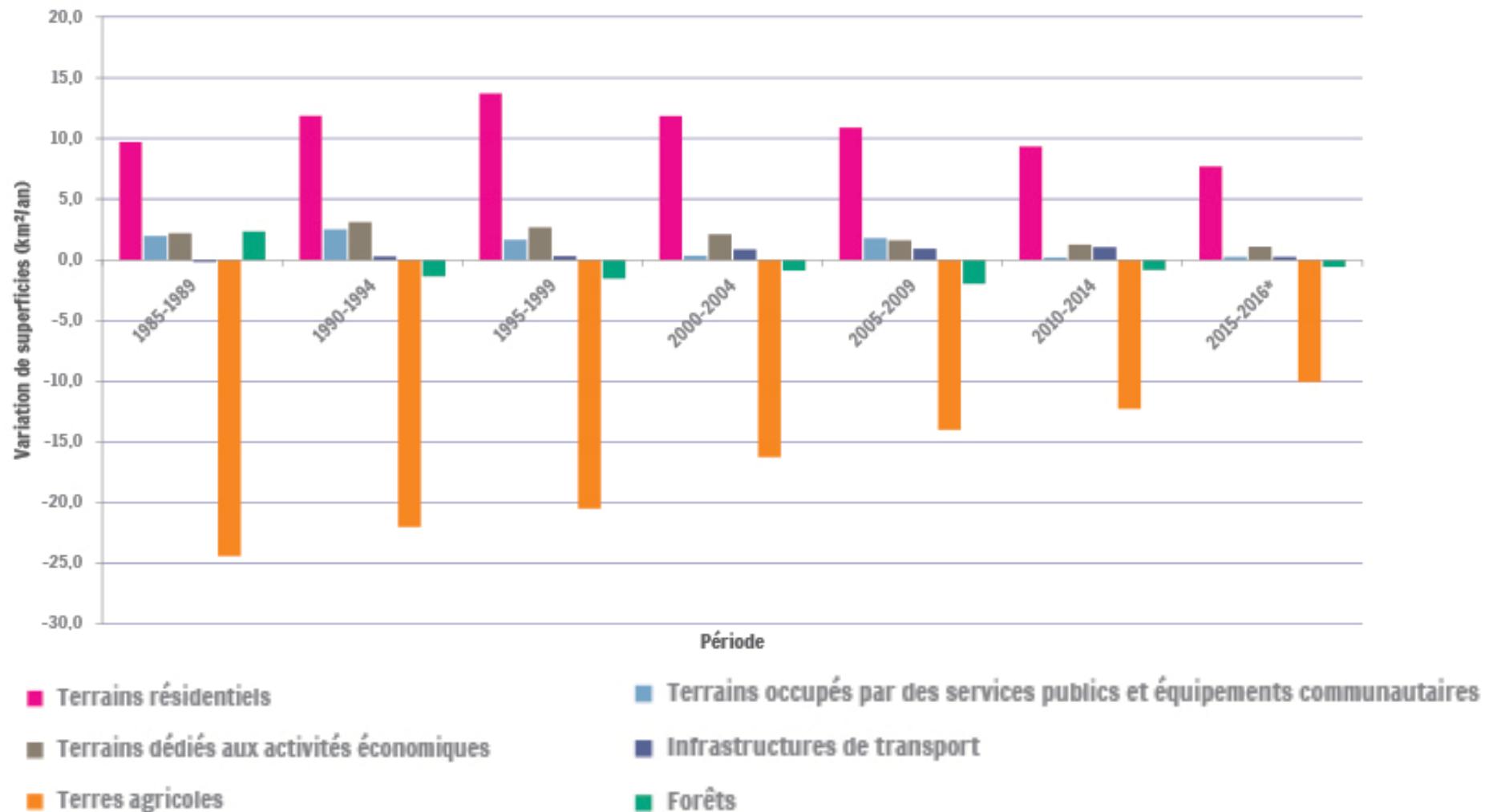
2) Diagnosis



Superficie artificialisée (REEW, 2017)



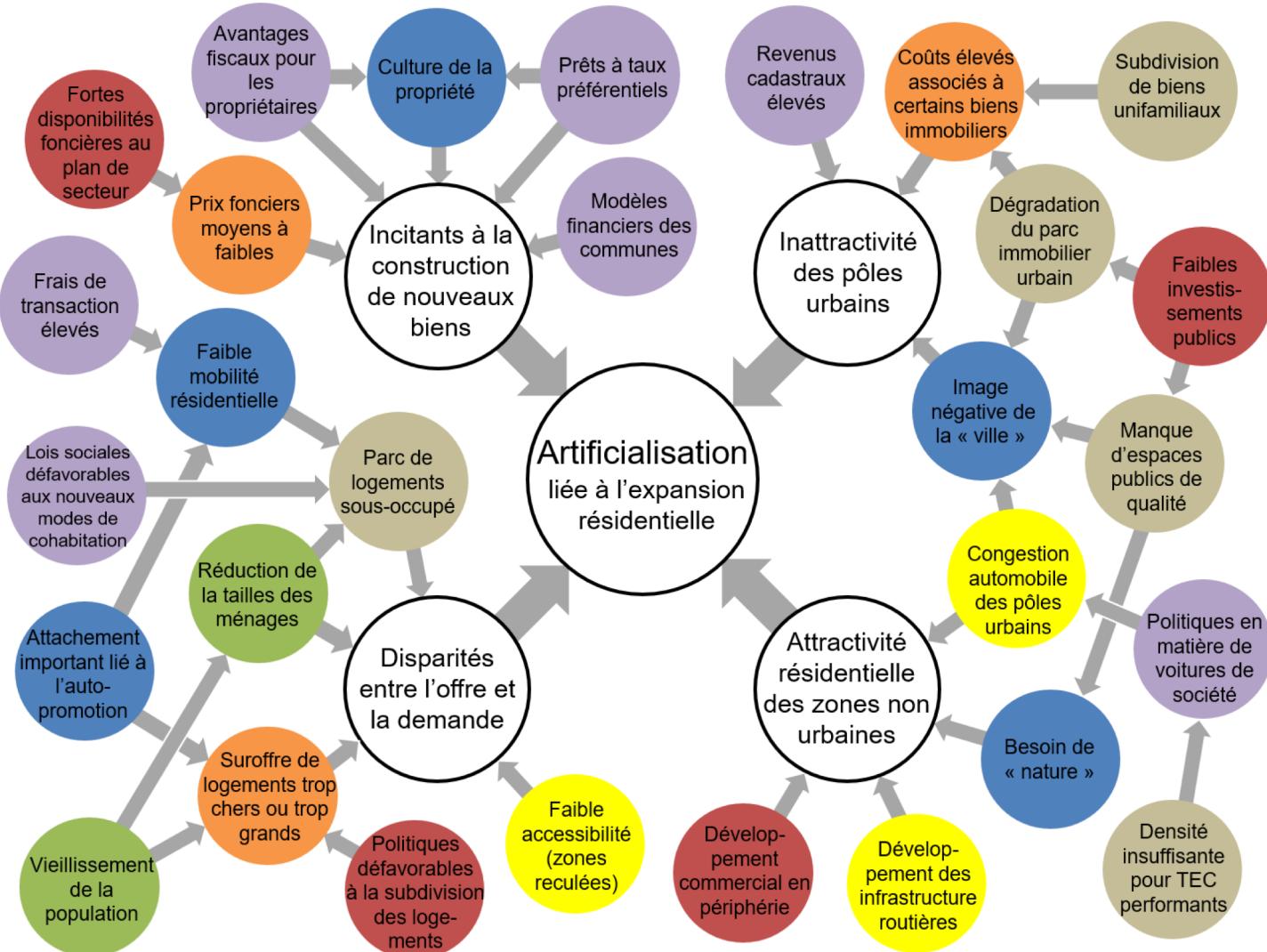
2) Diagnosis



CPDT, 2018 – Sources : IWEPS Fiche Artificialisation du sol ; dernières données régionales disponibles au 01/09/2018

2) Diagnosis

Approche systémique de l'artificialisation des sols (CPDT, 2018):



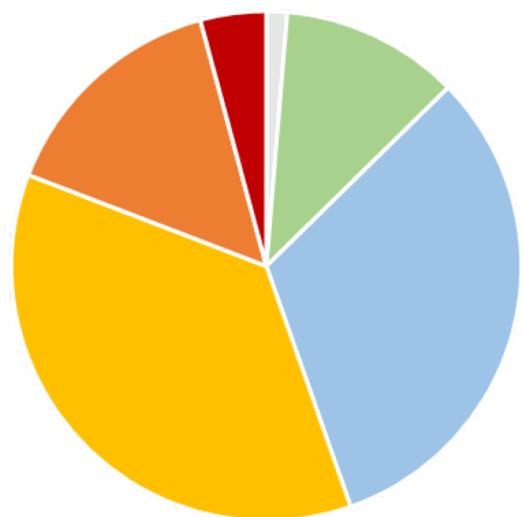
2) Diagnosis



Nombre de logements actuels :

1.553.749

Taille des logements actuels :



■ Pas de chambre

■ Deux chambres

■ Quatre chambres

■ Une chambre

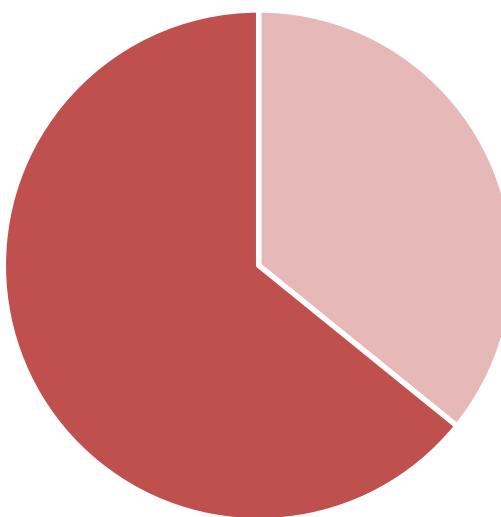
■ Trois chambres

■ Plus de quatre chambres

Nombre de ménages actuels :

1.576.749

Taille des ménages actuels :



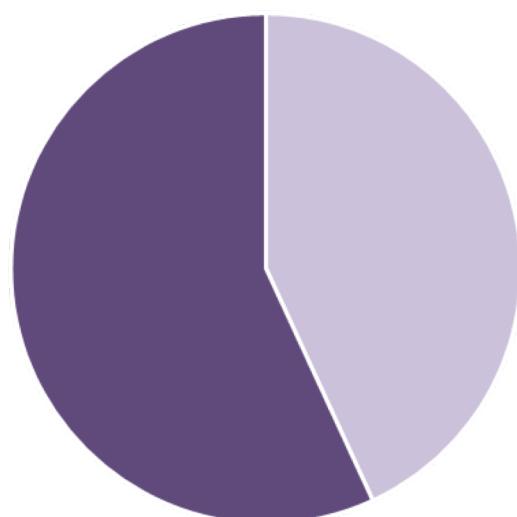
■ Ménage isolés 2018

■ Ménage non isolés 2018

Nombre de ménages attendus en 2050 :

1.832.654

Taille des ménages en 2050 :

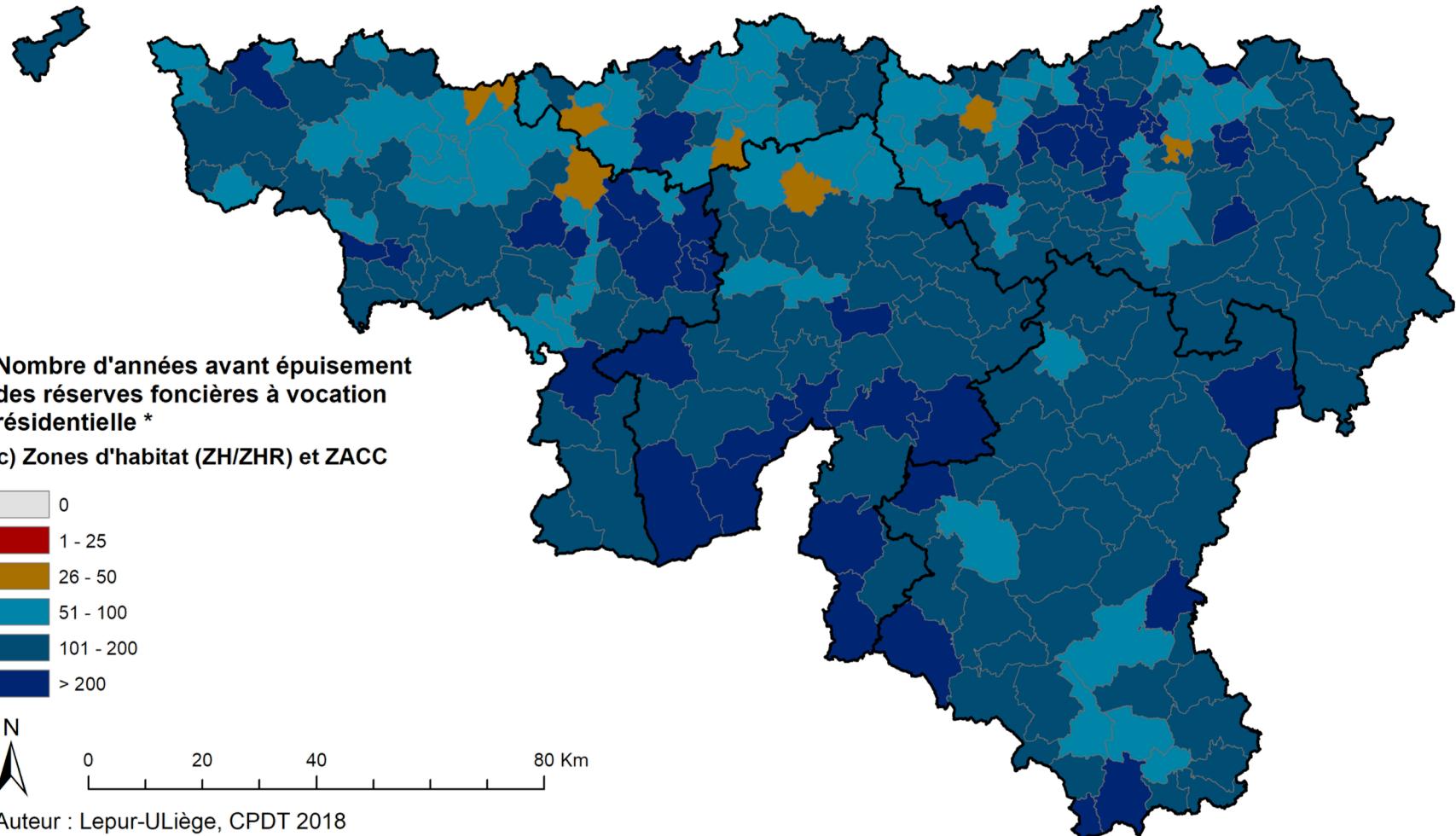


■ Ménages isolés 2050

■ Ménage non isolé 2050

CPDT, 2018 – Sources : Perspectives des ménages (BFP, 2017),
enquête qualité de l'habitat (CEHD, 2012), statistiques des logements (IWEPS)

2) Diagnosis



* A partir de 2017, dans l'hypothèse d'un scénario tendanciel basé sur la consommation observée de 2012 à 2017.

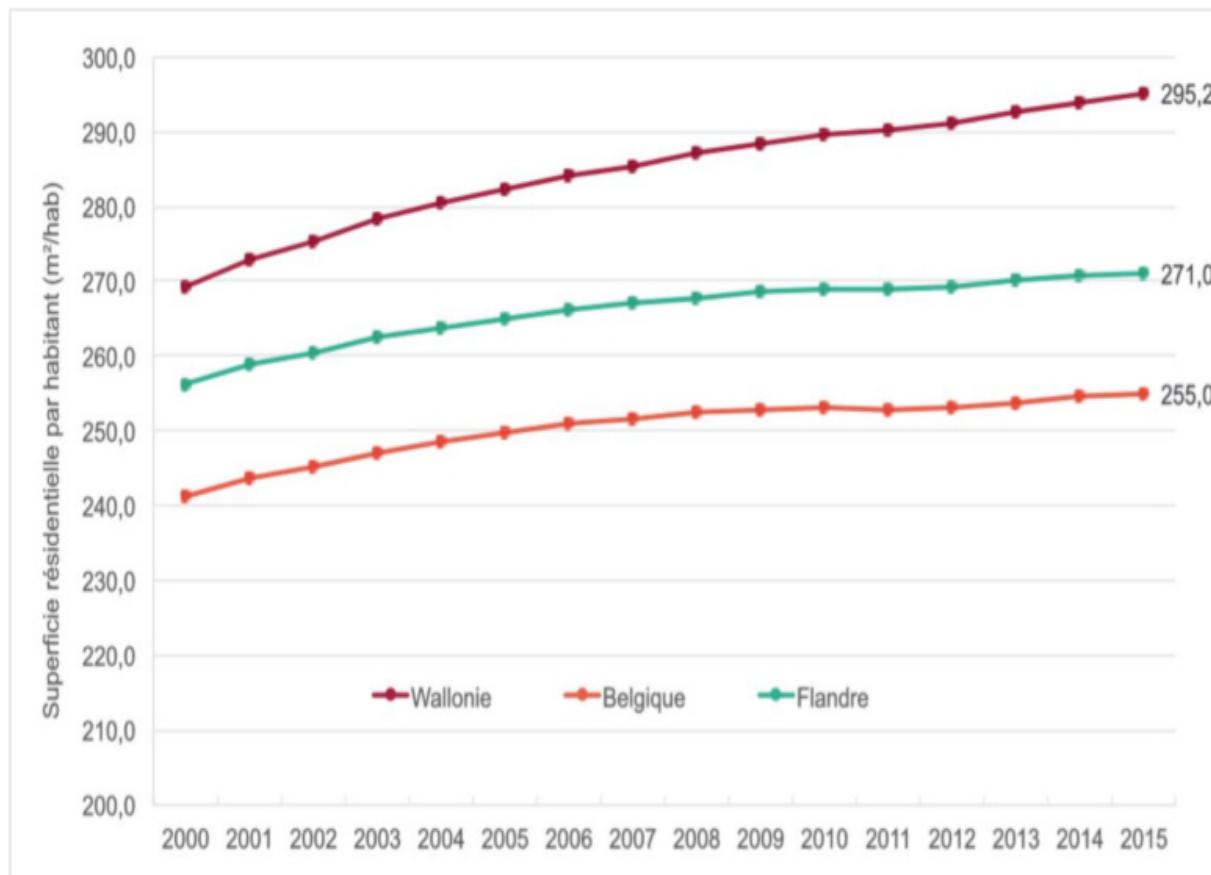
2) Diagnosis

	<u>Belgique, Wallonie</u>	<u>Belgique, Flandre</u>	<u>Luxembourg</u>	<u>Allemagne, Rhénanie- Palatinat</u>	<u>Allemagne, Rhénanie- du-Nord Westphalie</u>	<u>Suisse</u>
Disponibilités foncières (ha)	56 460	29 344	2 719	6 000	19 043	27 960
Population	3 602 206	6 477 804	590 700	4 052 803	17 890 100	8 431 702
Taux de disponibilité (ha/pour 1000 habitants)	15.7	4.5	5.1	1.5	1.1	3.3
Croissance moyenne annuelle relative de population (%)	0.49	0.60	2.46	0.11	0.39	1.19

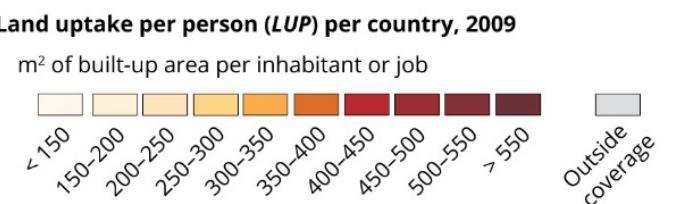
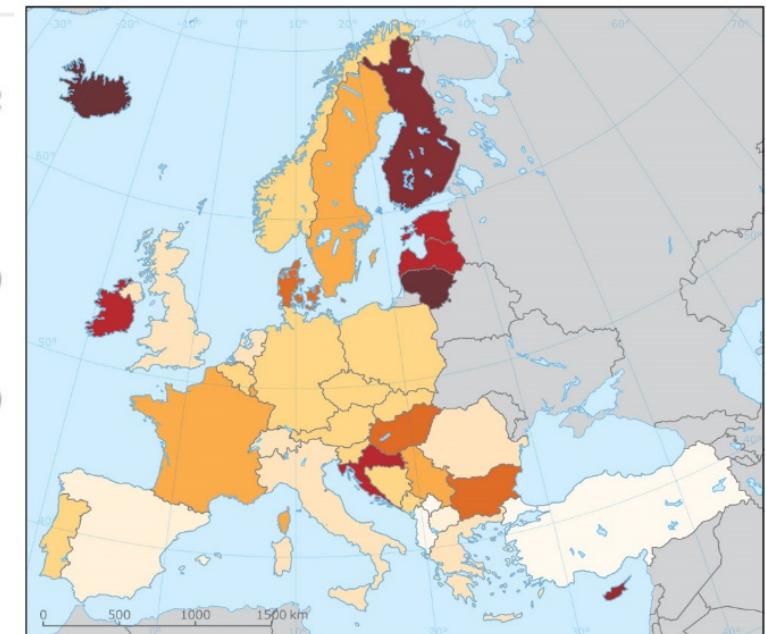
Lepur-ULiège, 2018. Années des données et sources : 2018 (Direction de l'Aménagement régional, 2018), 2016, entre 2010 et 2016 (Statbel, n.d.) pour la Wallonie ; 2016 (Departement Omgeving, n.d.), entre 2010 et 2016 (Statbel, n.d.) pour la Flandre ; 2013 (Observatoire de l'Habitat, 2015), 2013 et entre 2010 et 2013 (STATEC/CTIE, 2018) pour le Luxembourg ; 2014 (Lagemann, 2016), 2016 et entre 2016 et 2018 (Rheinland-Pfalz Statistisches Landesamt, 2016, 2018) pour la Rhénanie-Palatinat ; 2014 (Osterhage, Eichhorn, & Rönsch, 2015), 2017 et entre 2012 et 2017 (Information und Technik Nordrhein-Westfalen, 2016) pour la Rhénanie-du-Nord Westphalie ; 2017 (Giezendanner & Maurer Weisbrod, 2017), 2017 et entre 2010 et 2017 (Statpop, 2017) pour la Suisse.

2) Diagnosis

Superficie résidentielle par habitant:



Sources : Charlier et Reginster, 2017 - SPF
Economie/Direction générale Statistique, SPFF/AGDP



Sources : EEA & FOEN, 2016



3) Objectives

3) Objectives

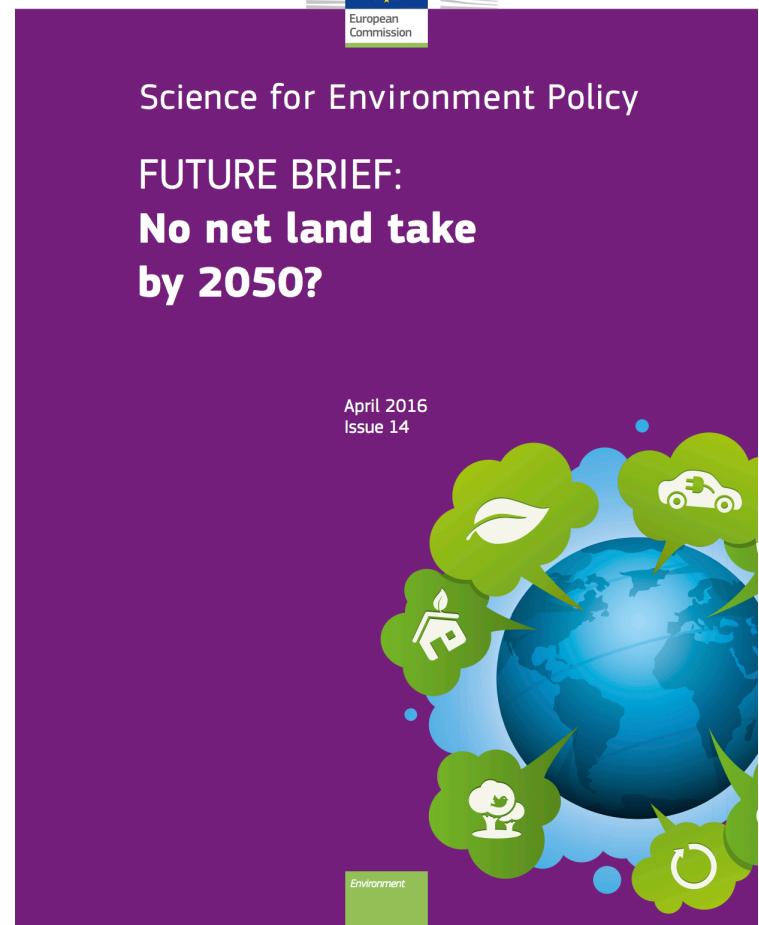
EU target:

No net land take by 2050
(EU Commission, 2011)



3) Objectives

> **EU operational objective :**
Average annual land
consumption limited to
1,6 square meter per capita
by 2020 !



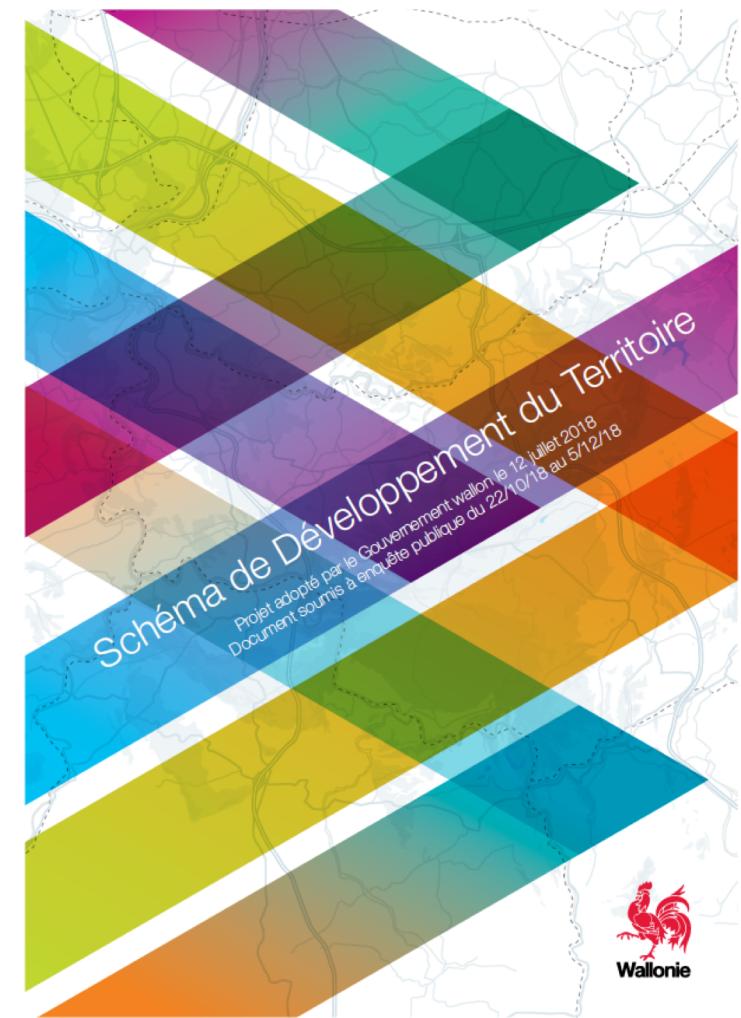
3) Objectives

Wallonia:

Objectives of the SDT* are to progressively reduce land take in order to:

- Limit it to 6 km²/year by 2030 (= half of the actual consumption)
- Tend towards 0 km²/year by 2050.

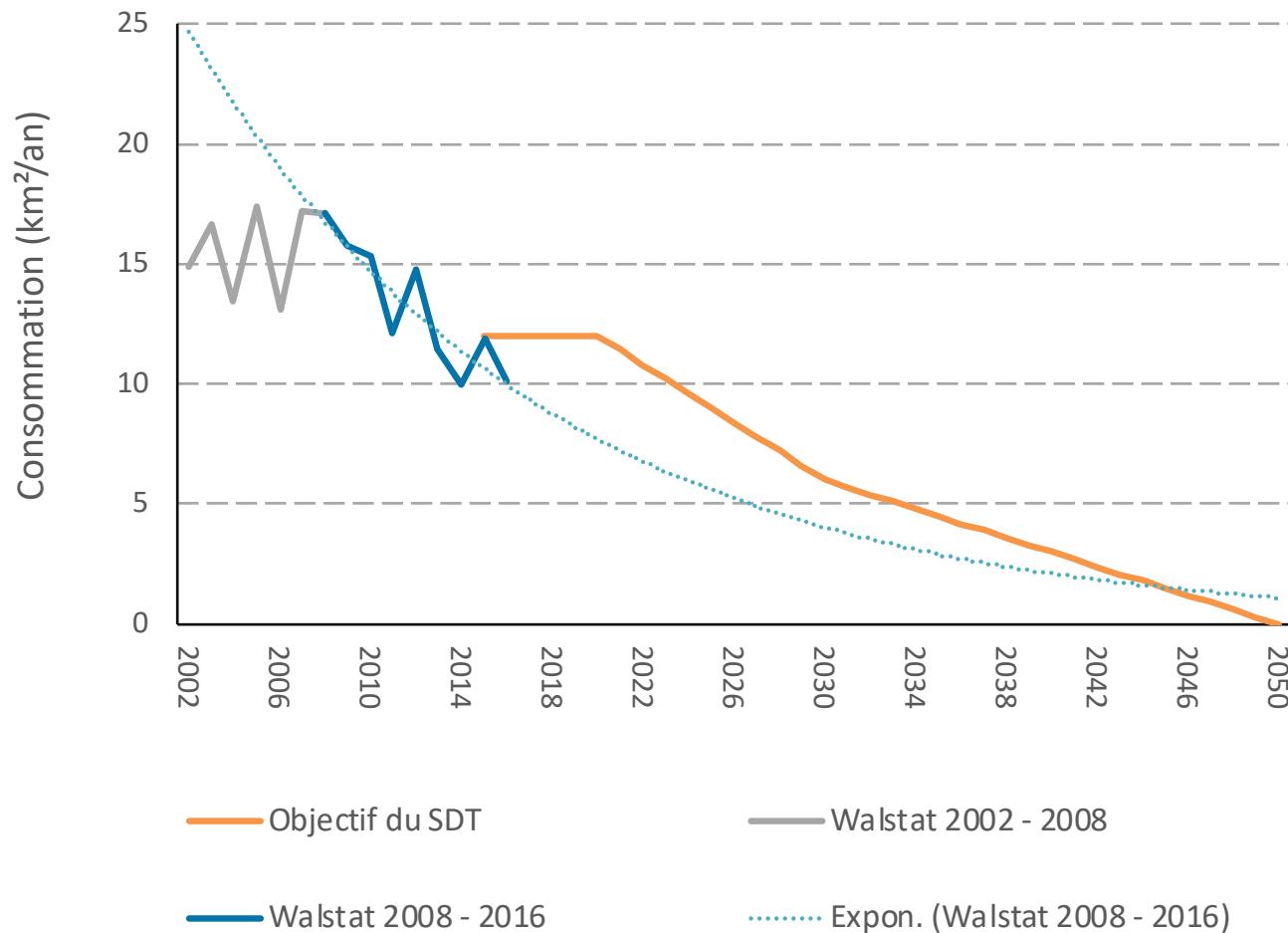
* *Schéma de Développement du Territoire*



3) Objectives



Objectives of the Walloon SDT:



3) Objectives



Other targets included in the SDT:

- **Housing:**

By 2030: At least 50% of new housing created on brownfield (e.g. demolition & reconstruction, reuse of existing buildings)

By 2050: 100% of new housing created on brownfield

- **Economic activities:**

By 2030: At least 30% of economic areas created on brownfield (demolition & reconstruction / reuse of existing buildings)

By 2050: 100% of economic areas created on brownfield

(+ Several targets related to urban sprawl: promotion of central locations and of areas well served by public transport)

3) Objectives



Objectives of the new Walloon government (DPR 2020-2024):

Stop **urban sprawl** by 2050 through the following objectives:

- Reduce and cap land take by 2025;
- Preserve as much as possible agricultural areas;
- Maintain, reuse or renovate existing buildings;
- Direct as much as possible new construction towards existing urban fabrics (urban, rural or periurban) well served by services and public transport;
- Restore biodiversity.

3) Objectives

Objectives in other countries/regions:

	Belgique, Wallonie (projet de SDT)	Belgique, Flandre	Luxembourg	Pays-Bas	Allemagne	Royaume- Uni	Suisse
Artificialisation (objectif quantitatif)	1,6 ha/j. en 2030 0 ha/j. en 2050	3 ha/j. en 2025 0 ha/j. en 2040	1 ha/j. en 2020	-	30 ha/j. en 2020 20 ha/j. en 2030	-	-
Logement (objectif quantitatif)	2030 : 50% des nouveaux log. en tissus bâtis 2050 : 75%	-	-	-	1 log. hors tissus urbains pour 3 log. en tissus urbains	60% des nouveaux log. sur <i>brown- fields</i>	Max. 20% de résidences secondaires par commune
Objectifs qualitatifs	-	Rendement spatial	-	Utilisation efficiente du sol	-	Evaluation continue des besoins fonciers	Densification des zones bâties



4) Strategy & tools?

4) Strategy & tools ?



Main challenges:

- Boost urban recycling
- Direct new construction towards existing urban fabrics
- Change general public values
- Regulate densities
- Ensure housing affordability
- Finance the policy
- ...

4) Strategy & tools ?



Five possible strategies (inspired by 2018 benchmarking):

- 1. Business as usual**
- 2. Authoritarian:** Change of land use plan by Regional Authorities (+ compensation for loss of value)
- 3. Swiss style:** Local Authorities asked by the Region to reduce the size of their buildable area (+ no compensation for loss of value)
- 4. Structural changes:** All kinds of measures, incl. fiscal measures (revision of land tax, Local Authorities' funding model, VAT, company car scheme...)
- 5. American style:** Local Authorities asked by the Region to reduce the size of their buildable area (+ market of development rights to compensate loss of value)

4) Strategy & tools ?



Perceptions collected during « Living Lab » workshops:

The ideal would be a mix of strategies 2 to 5:

Local Authorities need clear directions from the Region, but they should be able to decide themselves where the buildable area should be reduced. Compensations for loss of value are seen as legitimate but unaffordable, so the organisation of a market of development rights is perceived as a promising avenue (however raising several practical questions). This approach should be complemented with various fiscal measures (e.g. VAT reduced to 6% for demolition & reconstruction).

4) Strategy & tools ?



> Objectives of the 2019 research:

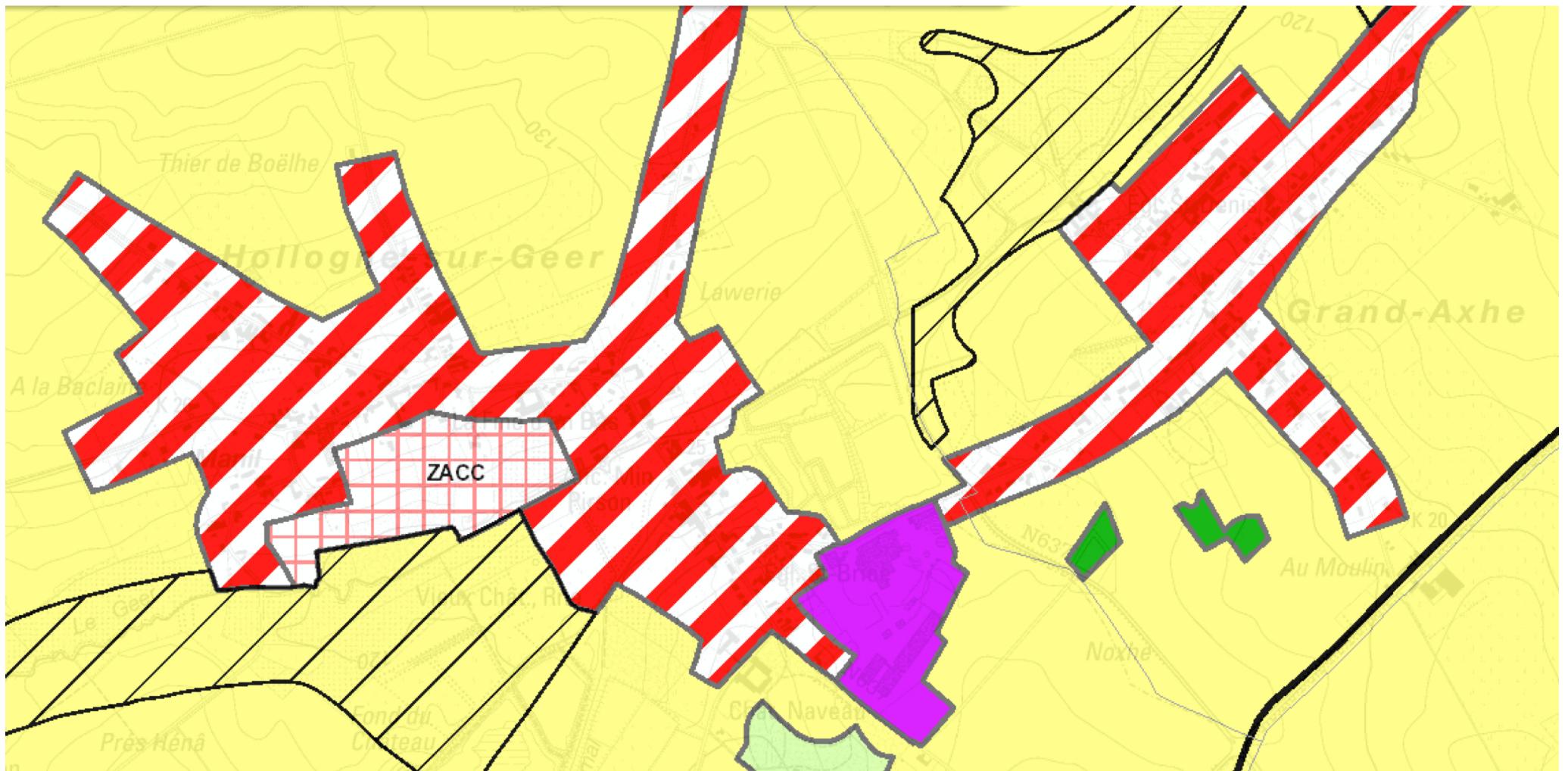
Decision support tool (multi-criteria analysis models) for:

- Spatial and sectorial specifications of the land take reduction objective
- Revising land use plan (*plan de secteur*) in order to reduce the size of the buildable area

+ Recommendations for measures to support implementation of the policy (planning tools, VAT reduction for land recycling, tax on sprawl, partial capture of the added value generated by higher densities, etc.)

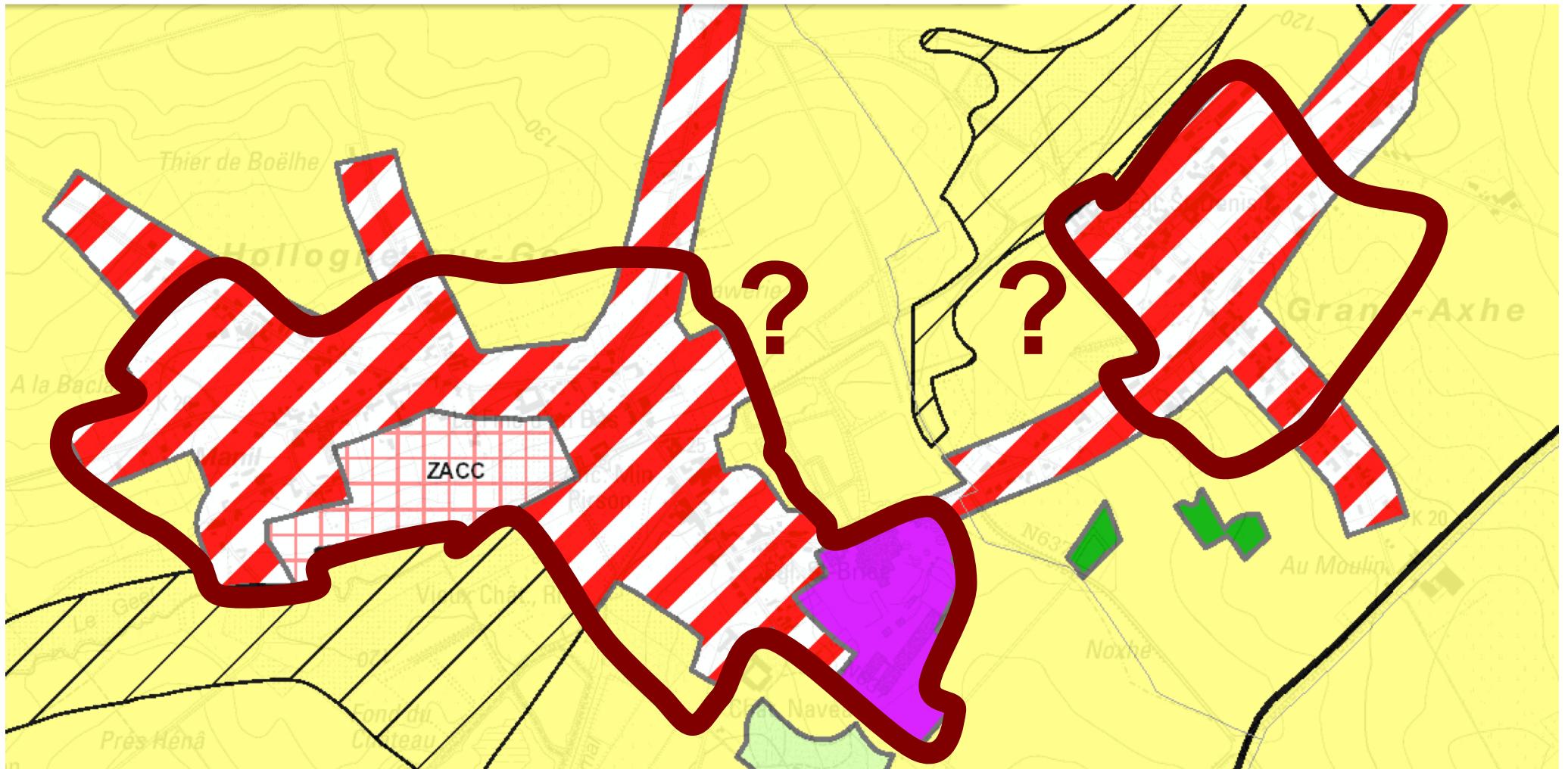
4) Strategy & tools ?

Planning tools to reduce the buildable area and contain urban sprawl ?



4) Strategy & tools ?

Planning tools to reduce the buildable area and contain urban sprawl ? « Settlement boundaries » ? (inspired from UK)



4) Strategy & tools ?



Refine the status of the buildable areas (inspired from Germany, Luxembourg...)?

- 1) Existing urban fabrics
- 2) Extension areas
- 3) Extension reserves (= temporary freezing)
- 4) Areas to be preserved

4) Strategy & tools ?



Advantages of planning tools aimed at containing urban sprawl:

- Legal certainty for developers
- Direct developments to the right places
- More efficiency for public services / amenities
- Protection of open countryside (from fragmentation)
- Based on regular assessment of land requirements

4) Strategy & tools ?



Risks associated to planning tools aimed at containing urban sprawl:

- Increase of land values
- Risk of density (need for regulation)
- Higher pressure on open spaces

4) Strategy & tools ?



Other tools: financial, governance, educational, etc.

- Raise awareness (change values and practices)
- Support recycling (of land and buildings)
- Discourage new construction out of existing urban fabrics
- Encourage functional mix in urban-rural polarities
- Develop urban green infrastructure (quality of life,...)
- Finance the policy (compensate depreciation thanks to a part of the added value generated)
- Ensure housing/land affordability



Thank you!

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