

Land cover 2012



Belgium 

September 2017

Photo: © Toni García, My City/EEA



Land cover 2012

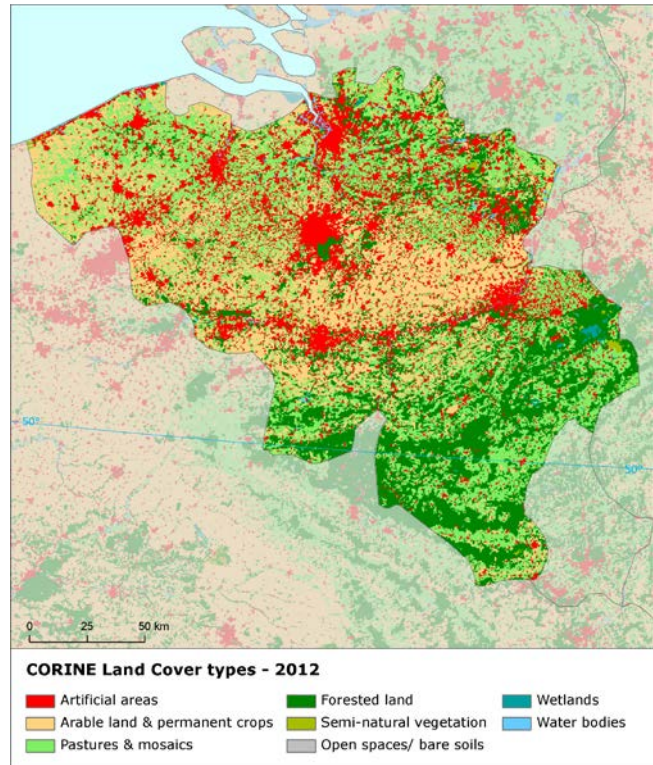
Overview of land cover & change 2006-2012

A stabilization of the land cover development in Belgium had been indicated already in previous periods. The pace of land cover change is very slow now and exactly the same as in the period 2000-2006. Belgium is a country with one of the lowest mean annual land cover change rates in Europe. Each year, only 0.1% of the total area is converted to different land cover classes. This means significant slowdown of the overall land cover development dynamics compared to period 1990-2000, during which the change in Belgium was more intensive (0.17% of the total area per year).

Forest creation and management together with the sprawl of economic sites and infrastructures remain the main change drivers in the country, which is a situation similar to previous time period.

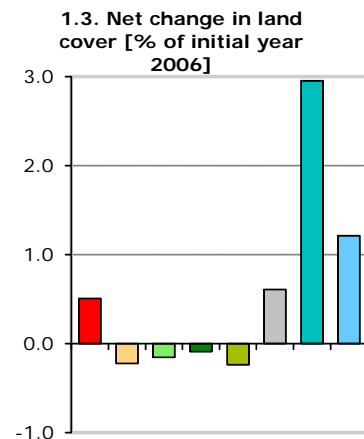
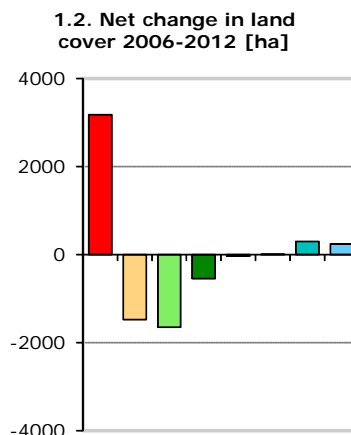
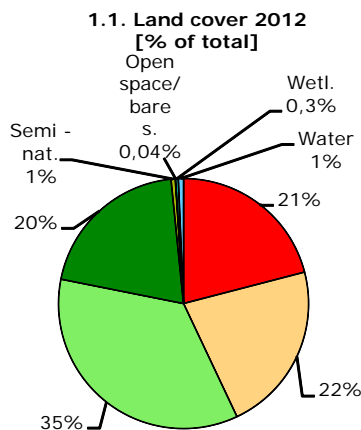
With forest management represented mostly by internal forest conversions, which brings no significant development to the landscape, the artificial development is the most powerful change driver in Belgium. However, the rate of Belgian artificial land take is very low, comparing to the European average.

Geographically, the artificial development is distributed uniformly over the whole country, while changes of forested land are concentrated in the south-eastern part of Belgium, which is characterised by predominance of natural land.



Note: The results presented here are based on a change analysis of 44 land cover types mapped consistently on a 1:100,000 scale across Europe over more than decade between 2000-2006-2012 - see Corine land cover (CLC) programme for details.

Number of years between CLC2006-CLC2012 data for Belgium: 6



■ Artificial areas
 ■ Arable land & permanent crops
 ■ Pastures & mosaics
 ■ Forested land
■ Semi-natural vegetation
 ■ Open spaces/ bare soils
 ■ Wetlands
 ■ Water bodies

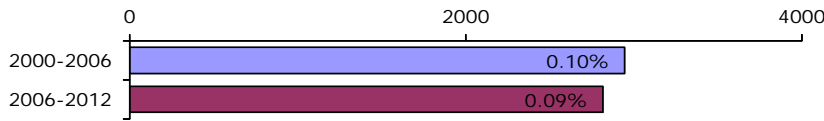
Summary balance table 2006-2012

	Artificial areas	Arable land & permanent crops	Pastures & mosaics	Forested land	Semi-natural vegetation	Open spaces/ bare soils	Wetlands	Water bodies	TOTAL [hundreds ha]
Land cover 2006	6280	6646	10602	6112	165	13	102	197	30116
Consumption of initial LC	12.5	15.9	17.7	116.9	4.3	0.0	0.3	1.5	169
Formation of new LC	44.3	1.1	1.1	111.4	3.9	0.1	3.3	3.8	169
Net Formation of LC	31.8	-14.8	-16.6	-5.5	-0.4	0.1	3.0	2.4	0
Net formation as % of initial year	0.5	-0.2	-0.2	-0.1	-0.2	0.6	3.0	1.2	
Total turnover of LC	56.8	17.0	18.8	228.2	8.2	0.1	3.6	5.3	338
Total turnover as % of initial year	0.9	0.3	0.2	3.7	5.0	0.6	3.5	2.7	1.1
Land cover 2012	6312	6631	10586	6106	164	13	105	199	30116

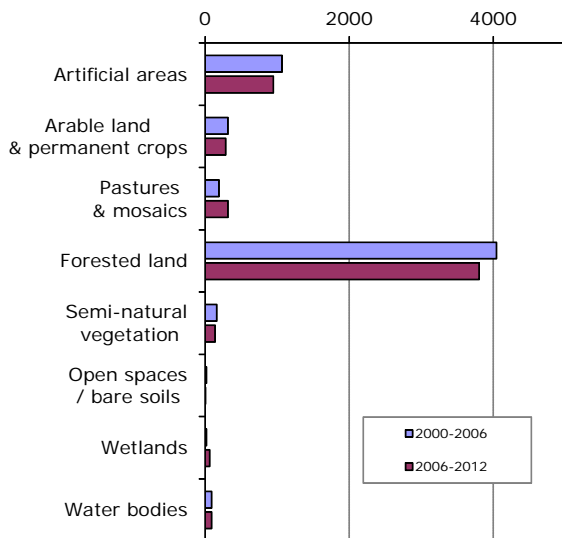
Belgium

Land cover trends comparison 2000-2006 vs. 2006-2012

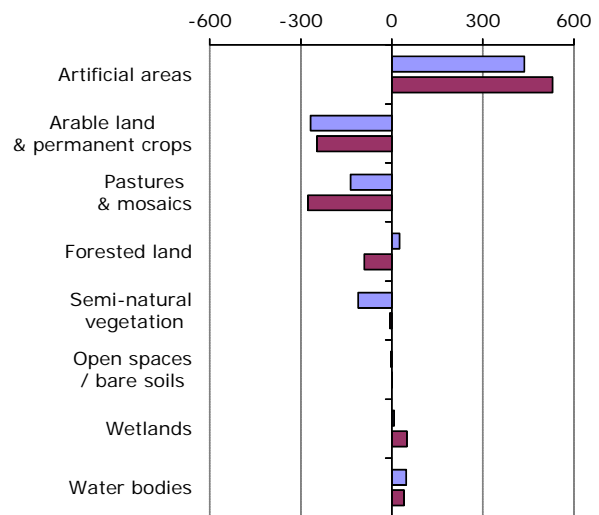
2.4. Annual land cover change
[ha/year, % of total area]



2.5. Annual turnover of LC types
[ha/year]

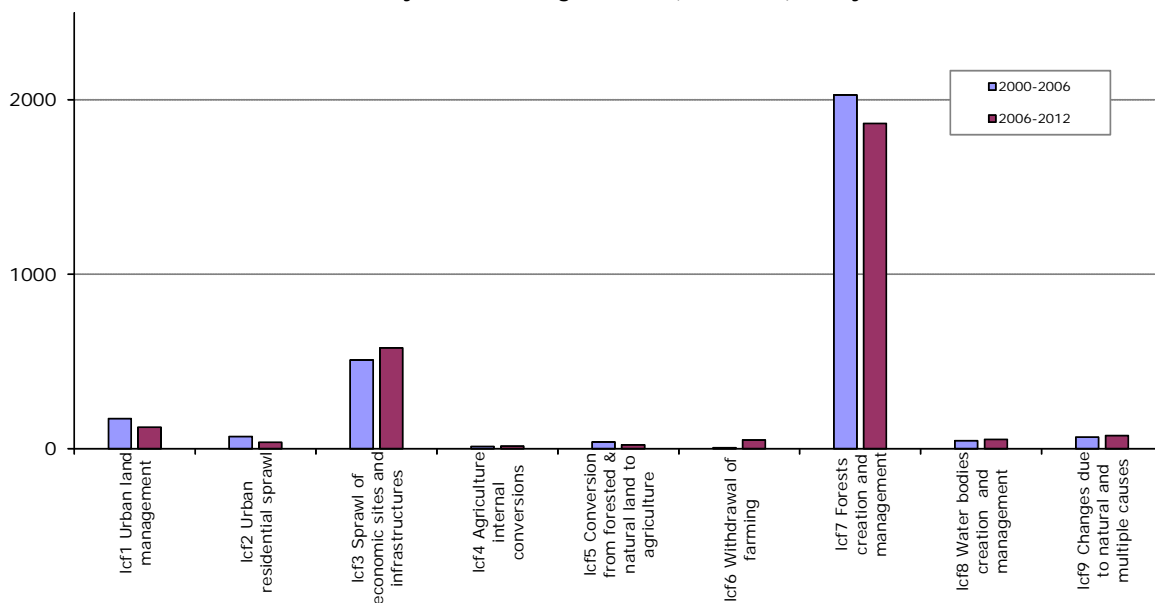


2.6. Net annual change of LC types [ha/year]

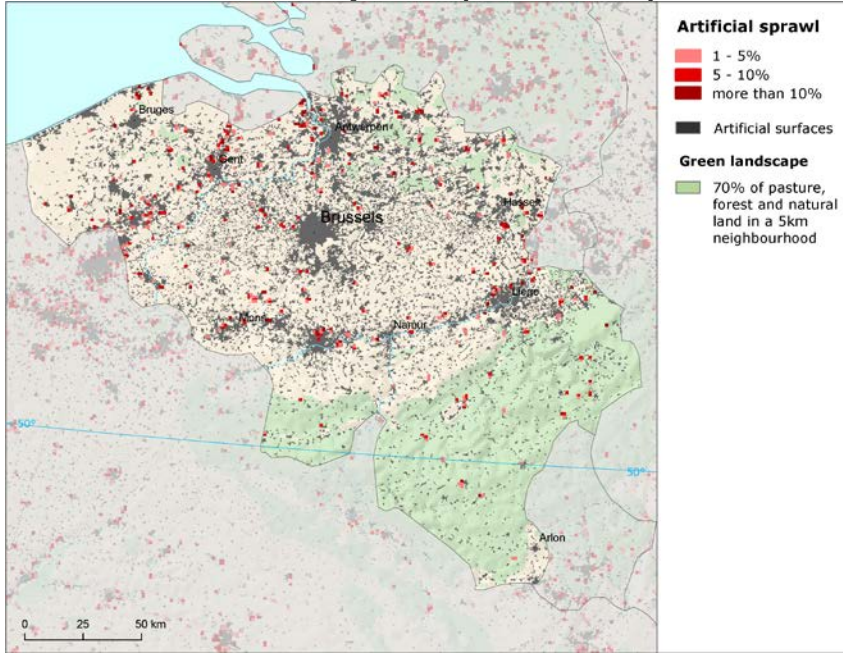


Summary trend figures		
	2000-2006	2006-2012
Annual land cover change [ha/year]	2946	2817
Annual land cover change as % of initial year	0.10%	0.09%
Land uptake by artificial development as mean annual change [ha/year]	579	614
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	428	492
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]	4	-44
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]	11	3
Forest & other woodland net formation as mean annual change [ha/year]	25	-91
Dry semi-natural land cover net formation as mean annual change [ha/year]	-114	-5
Wetlands & water bodies net formation as mean annual change [ha/year]	55	90

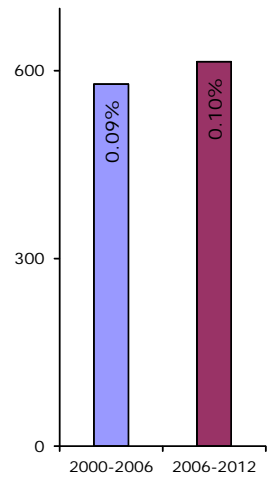
2.7. Intensity of main change drivers (LC FLOWS) [ha/year]



Artificial surfaces sprawl (2006-2012)



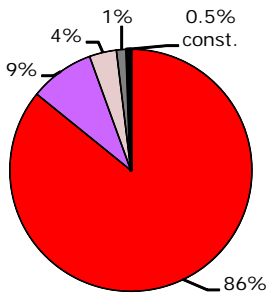
3.8. Artificial land take [ha/year, % of initial year]



Land take rate remains low

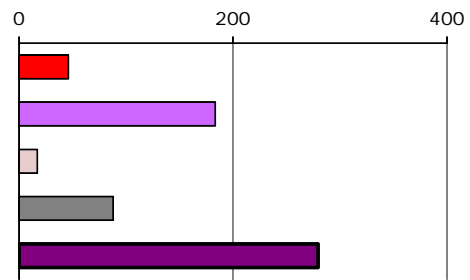
The artificial sprawl is the second most intensive driver of land cover development in the country and the most important one. However, the sprawl rate in Belgium is still very low in comparison with the European average. It is quite surprising that there is no significant sprawl observed around the capital city of Brussels (the situation was similar also in the period 2000-2006). In contrast to previous period, construction prevails in artificial development. The intensity of the sprawl of industrial/commercial areas, which was the strongest artificial flow in the 2000-2006, decreased and it became the second most significant driver in 2006-2012. On the other hand, the rate of land take by residential fabric is very low (only 6% of total sprawl). Agricultural land, with comparable share of arable land and pasture, is the main source for the artificial sprawl. There also occurs some amount of recycling of developed urban land in Belgium, although with lower intensity compared to previous period. This flow is represented mostly by the conversion of former construction sites into commercial or industrial units and diffuse residential fabric areas.

3.9. Artificial surfaces 2012 [% of total area]

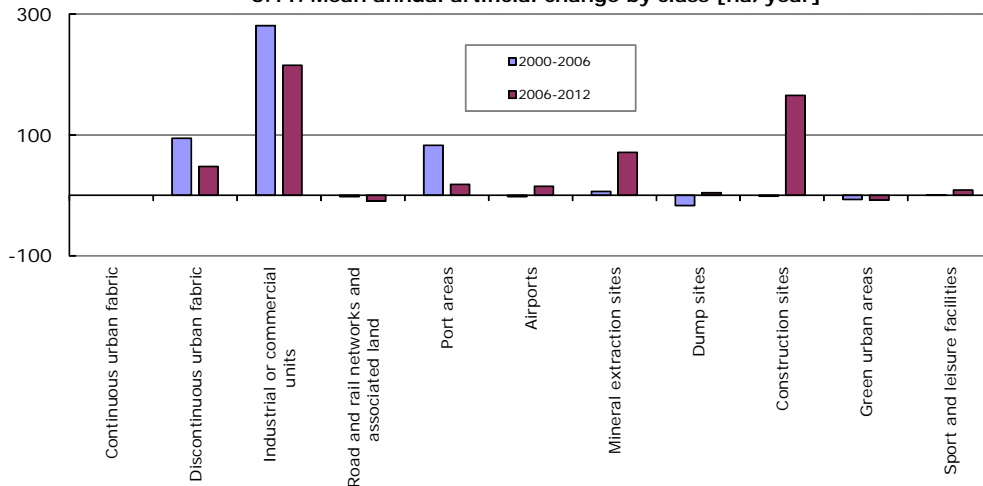


- Housing, services, recreation
- Industrial, commercial units
- Transport networks, infrastructures
- Mines, quarries, waste dumpsites
- Construction

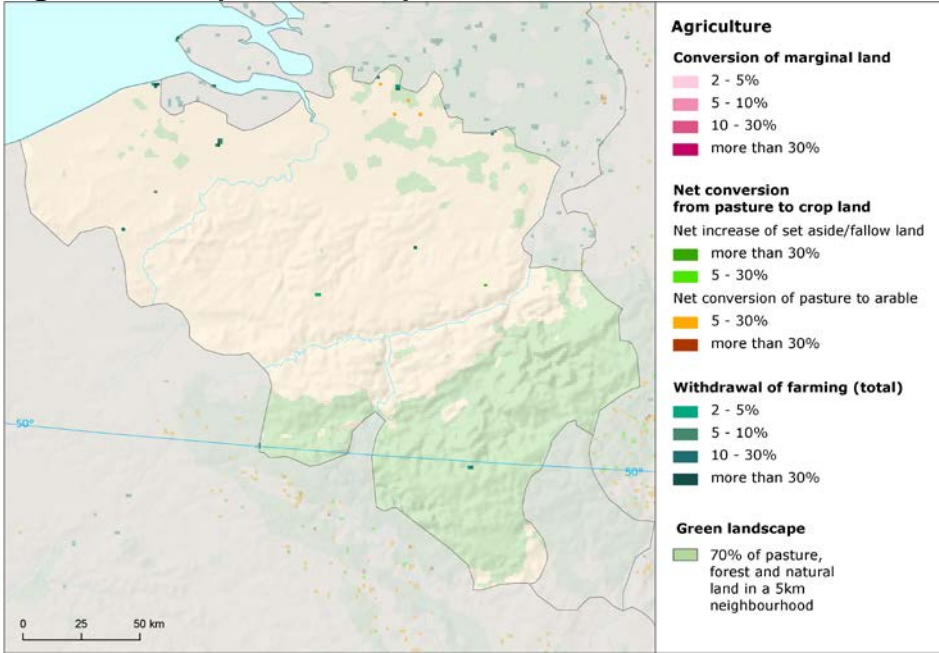
3.10. Artificial land take 2006-2012 [ha/year]



3.11. Mean annual artificial change by class [ha/year]



Agriculture (2006-2012)

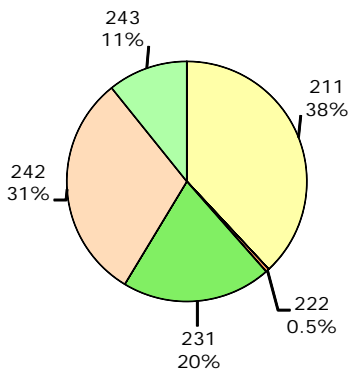


Long term stabilization

The situation in Belgian agriculture is stabilized in the long term, with no significant internal conversions. This stabilization was obvious already in previous period 2000-2006, characterized by a significant slowdown of especially conversion from pasture to arable or crop land, which was visible in the Belgian agriculture during the period 1990-2000.

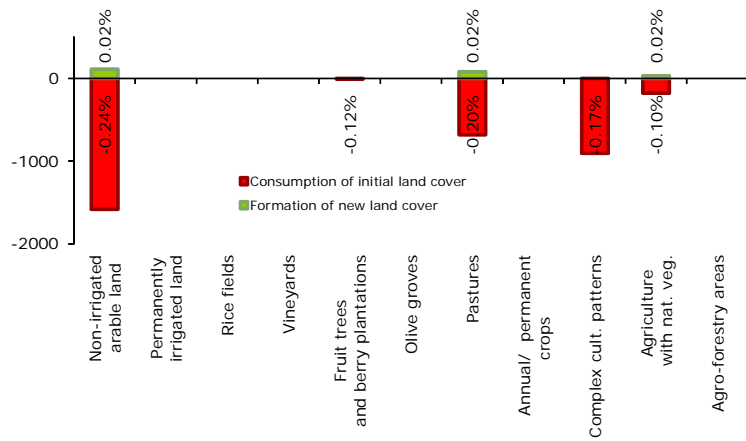
The consumption of agricultural land by sprawl continues with comparable intensity as in 2000-2006, and the agricultural land remains the main source for artificial land take in the country. Although the share of arable land on total agricultural land consumed by sprawl significantly decreased, compared to previous period, it is still highest from all agricultural classes. In contrast, the share of pastures and complex cultivation patterns on total agricultural area consumed by artificial land take is higher in the period 2006-2012.

4.12. Agricultural areas 2012 [% of total area]

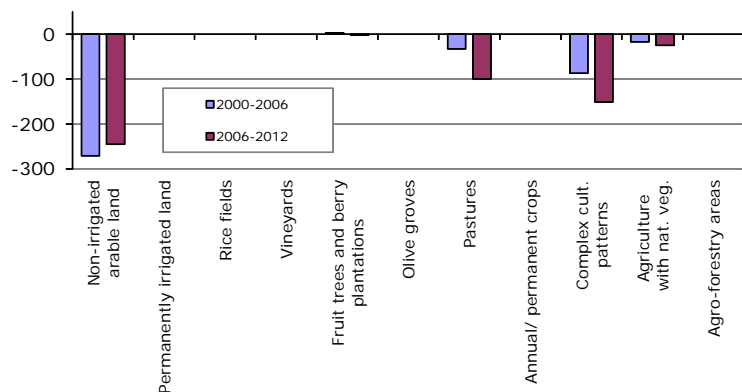


- 211 Non-irrigated arable land
- 212 Permanently irrigated land
- 213 Rice fields
- 221 Vineyards
- 222 Fruit trees and berry plantations
- 223 Olive groves
- 231 Pastures
- 241 Annual crops associated with permanent crops
- 242 Complex cultivation patterns
- 243 Agriculture land with significant areas of natural vegetation
- 244 Agro-forestry areas

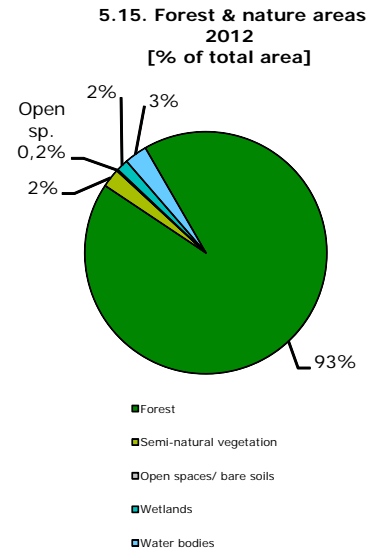
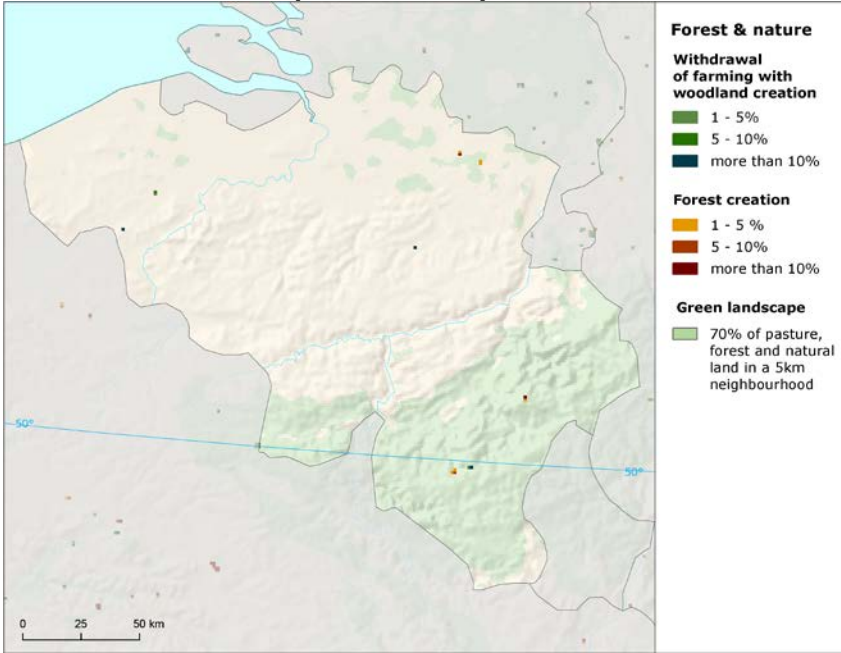
4.13. Development of agricultural areas 2006-2012 - detailed balance [ha]



4.14. Mean annual agricultural change by class [ha/year]



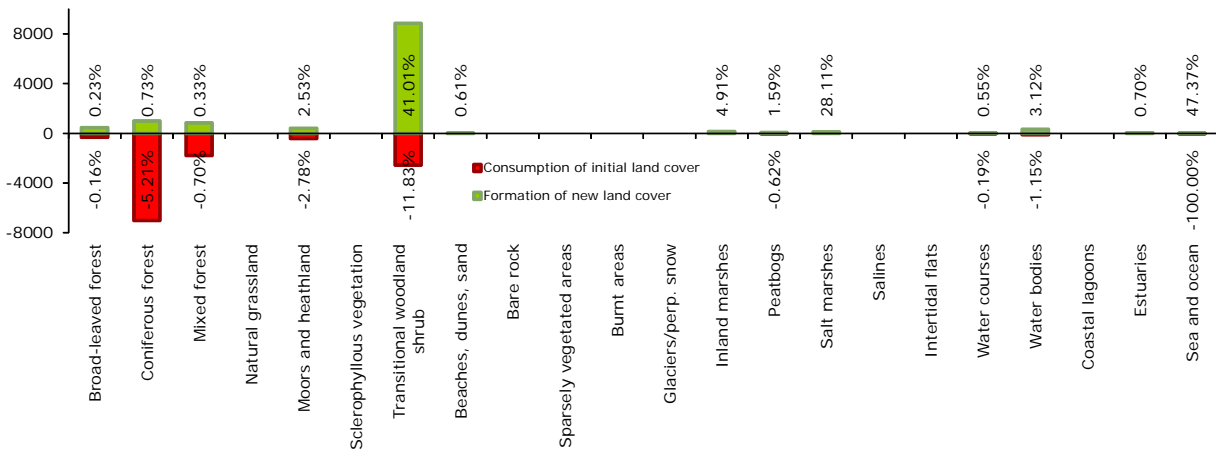
Forest & nature (2006-2012)



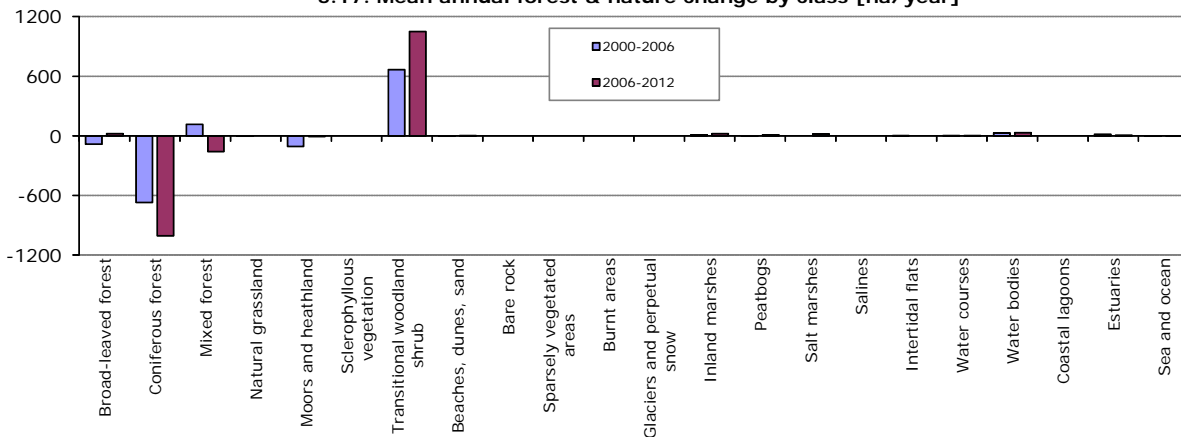
Consumption of forest

The only significant flow in the Belgian natural landscape, other than consumption by artificial land take, are internal changes of forested land, with prevailing recent felling and transitional woodland creation and consumption of mostly coniferous forest. All forest types – coniferous, broad-leaved and mixed have negative balance of net change, in contrast to transitional woodland and shrub, with significant formation of area (more than 51% of initial area in 2000). The main reason for this balance are the above mentioned recent felling and transitions, because the artificial land take consumes a comparable amount of forest and transitional woodland. Besides forested areas, also moors or heathlands and water bodies are frequently consumed by urban sprawl in Belgium, especially by new construction. However, the share of moors and heathlands on the total natural land consumed by sprawl is significantly lower than in previous period, in contrast to forested land, which was not consumed to such extent in the 2000-2006 period.

5.16. Development of forest & nature areas 2006-2012 – detailed balance [ha]



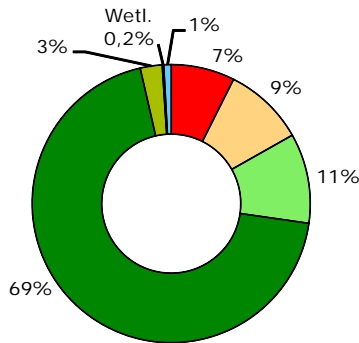
5.17. Mean annual forest & nature change by class [ha/year]



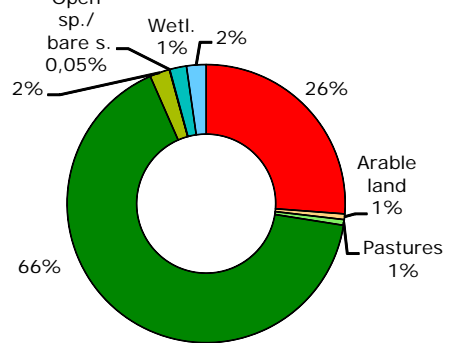
Annex: Land cover flows and trends

Land cover flows 2006-2012

6.18. Consumption of land cover 2006-2012 [% of total change area]

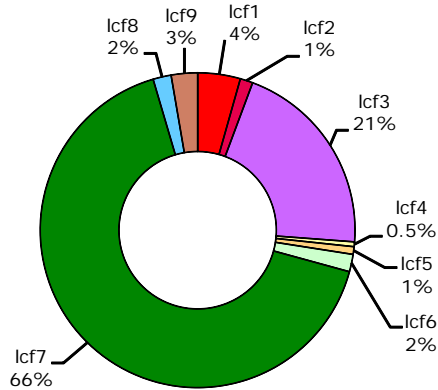


6.19. Formation of land cover 2006-2012 [% of total change area]



- Artificial areas
- Arable land & permanent crops
- Pastures & mosaics
- Forested land
- Semi-natural vegetation
- Open spaces/ bare soils
- Wetlands
- Water bodies

6.20. Drivers of change (LC FLOWS) 2006-2012 [% of total change area]

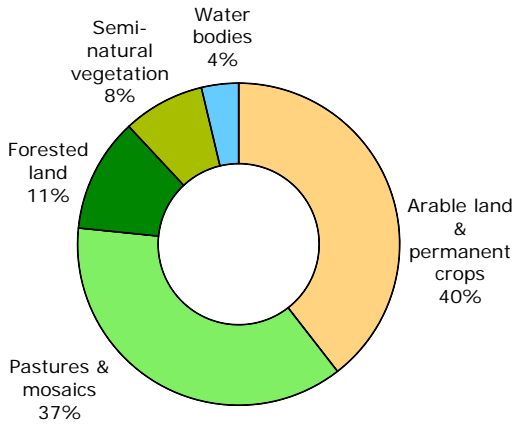


- Icf1 Urban land management
- Icf2 Urban residential sprawl
- Icf3 Sprawl of economic sites and infrastructures
- Icf4 Agriculture internal conversions
- Icf5 Conversion from forested & natural land to agriculture
- Icf6 Withdrawal of farming
- Icf7 Forests creation and management
- Icf8 Water bodies creation and management
- Icf9 Changes due to natural and multiple causes

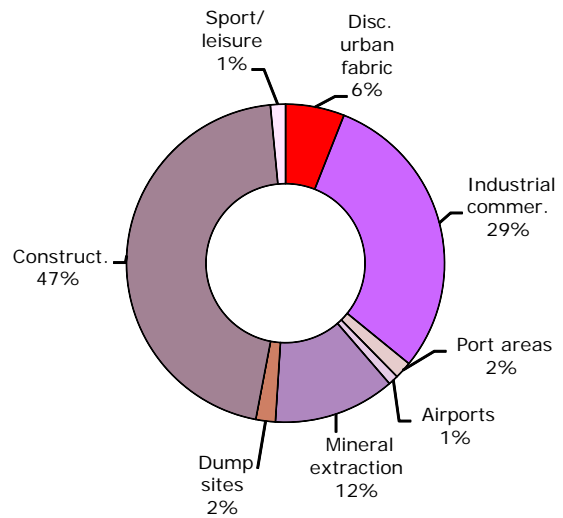
Belgium

Artificial areas

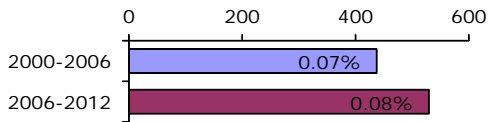
7.21. Consumption by artificial land take 2006-2012 [% of total]



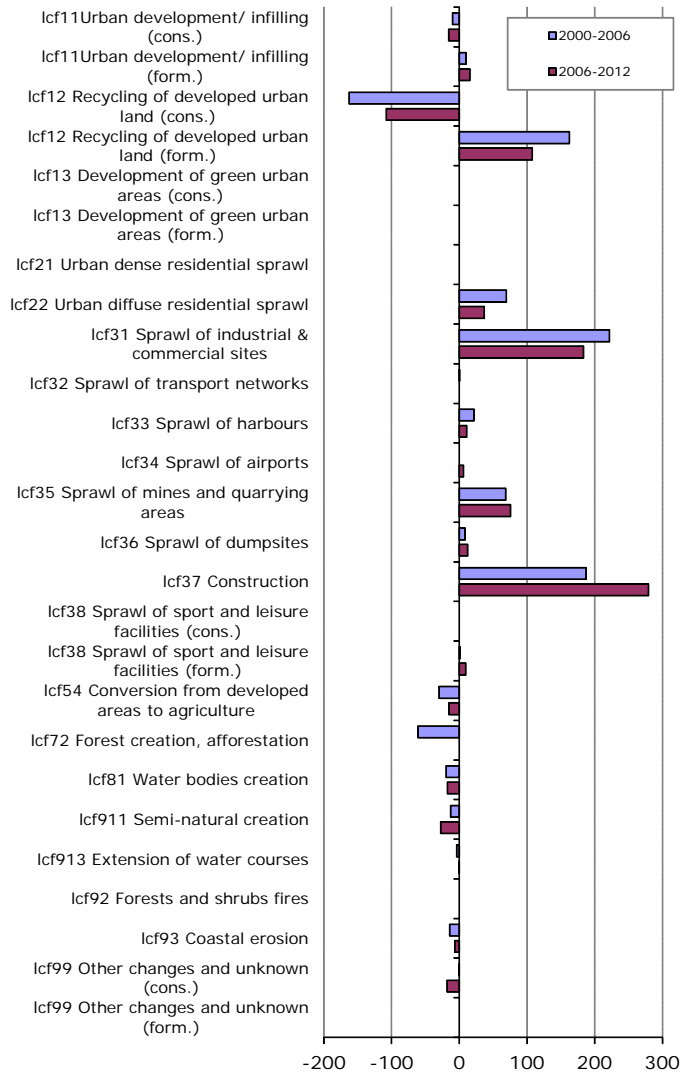
7.22. Formation by artificial land take 2006-2012 [% of total]



7.23. Net formation of artificial area [ha/year, % of initial year]



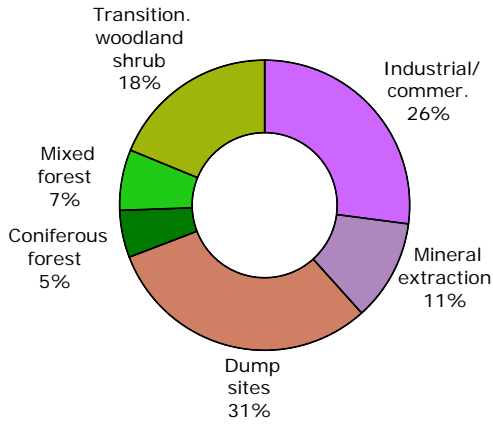
7.24. Artificial development by change drivers (LC FLOWS) [ha/year]



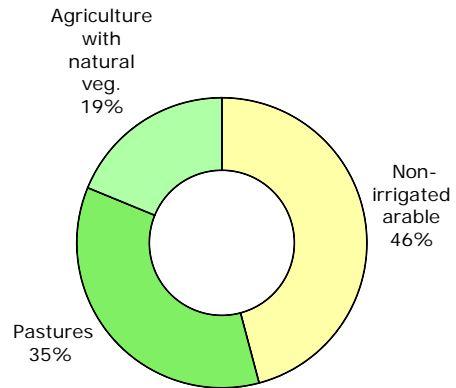
Belgium

Agriculture

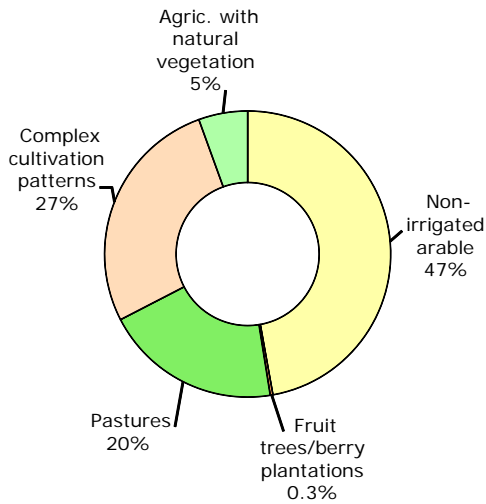
8.25. LC consumed by agriculture 2006-2012 [% of total]



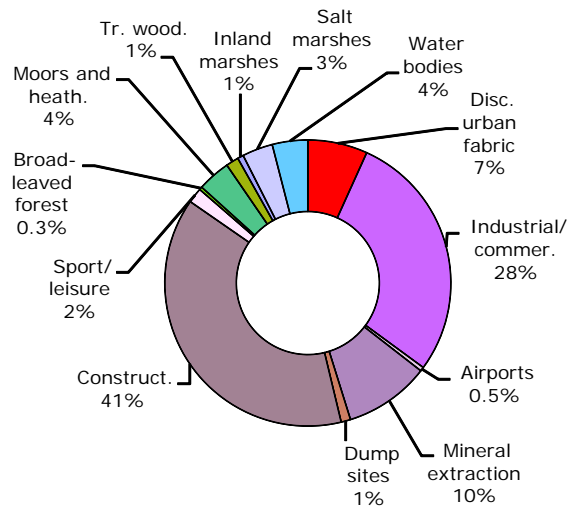
8.26. Formation of agricultural land from non-agriculture 2006-2012 [% of total]



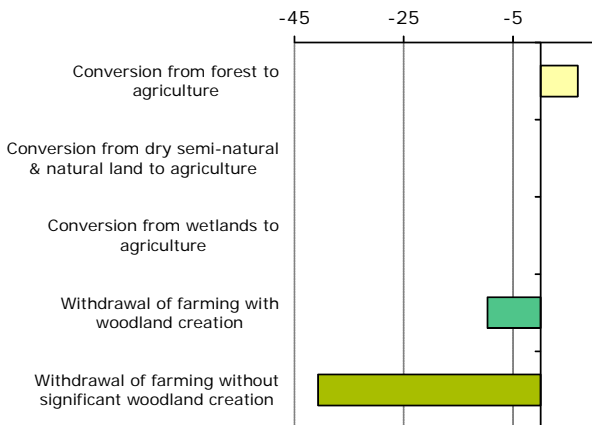
8.27. Consumption of agricultural land by non-agriculture 2006-2012 [% of total]



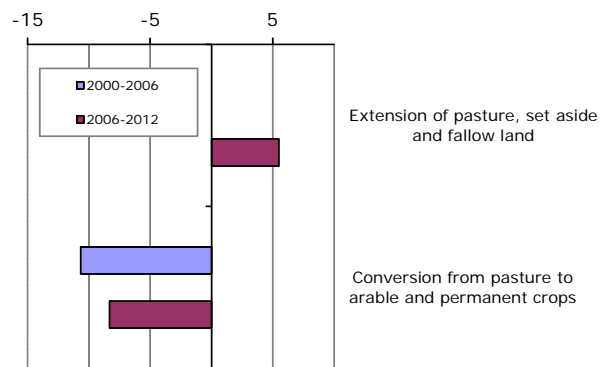
8.28. Formation of non-agricultural land from agriculture 2006-2012 [% of total]



8.29. Main annual conversions between agriculture and forests & semi-natural land 2006-2012 [ha/year]

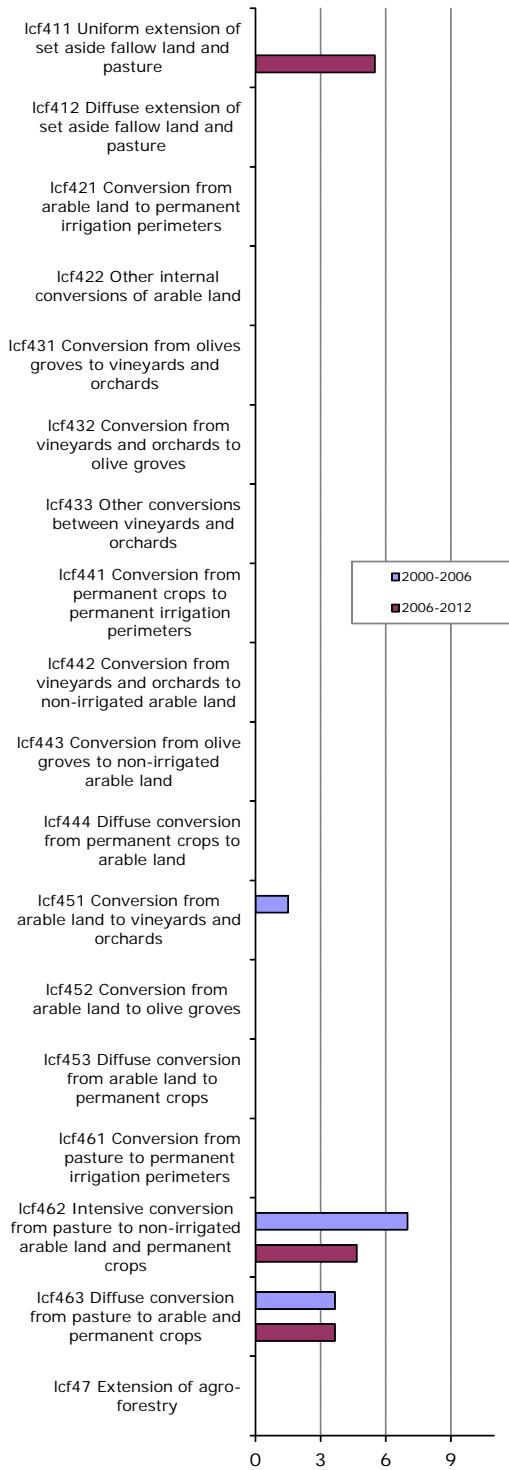


8.30. Mean annual conversion between arable land and pasture [ha/year]

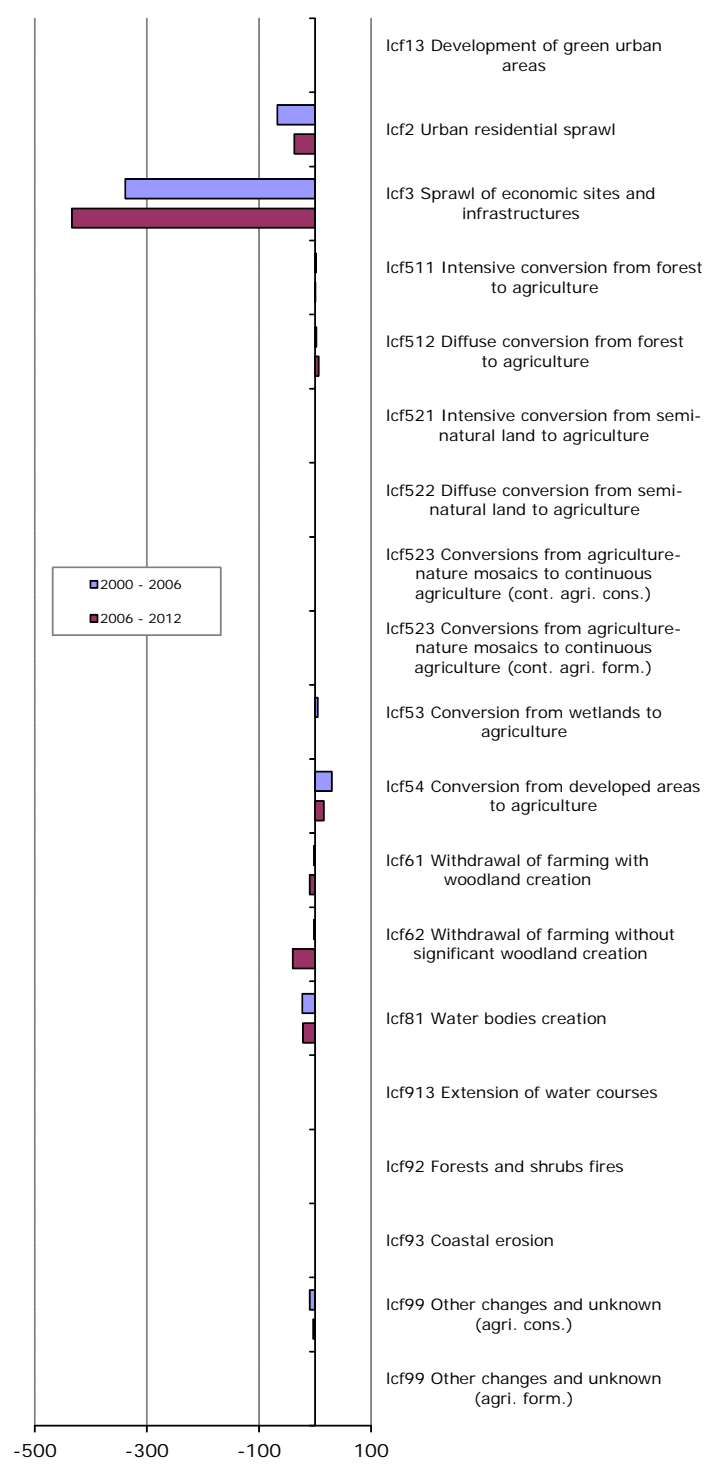


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9.31. Mean annual agriculture internal conversions [ha/year]

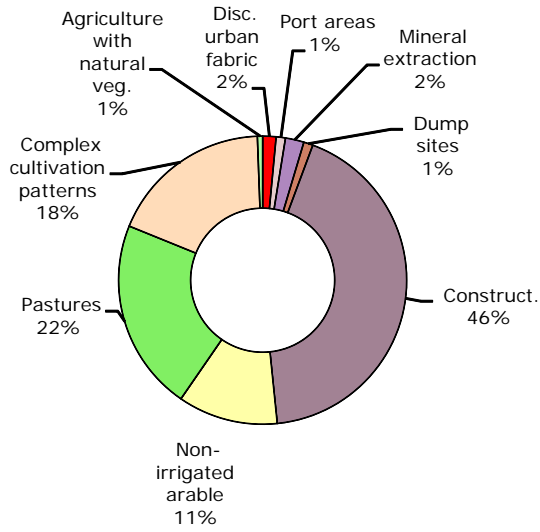


9.32. Mean annual conversions between agriculture and other LC types [ha/year]

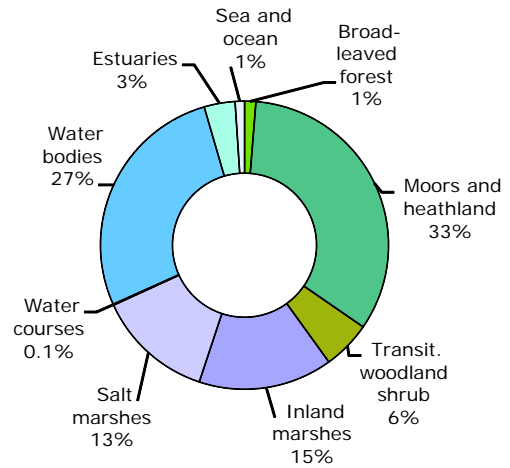


Forest & nature

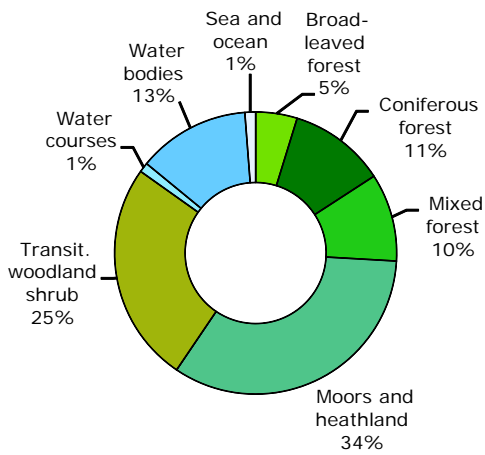
10.33. LC consumed by forest & nature 2006-2012 [% of total]



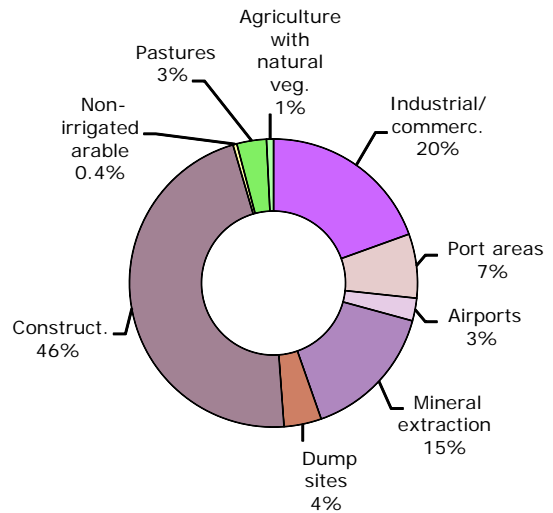
10.34. Formation of forest & nature land from non-forest /nature 2006-2012 [% of total]



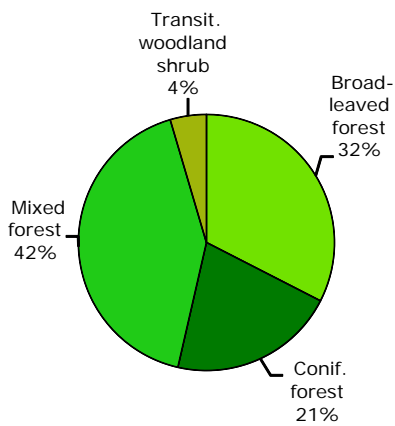
10.35. Consumption of forest & nature land by non-forest/nature 2006-2012 [% of total]



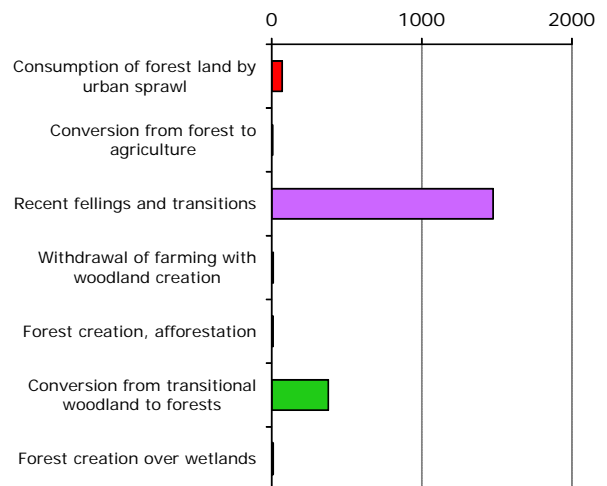
10.36. Formation of non-forest/nature land from forest & nature 2006-2012 [% of total]



10.37. Forested land 2012 [% of total area]

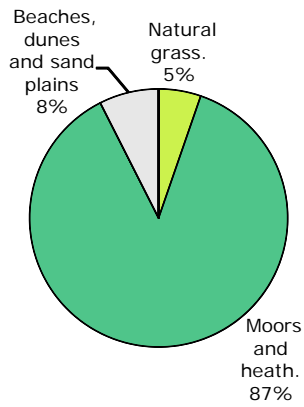


10.38. Main trends in woodland & forests consumption/formation 2006-2012 [ha/year]

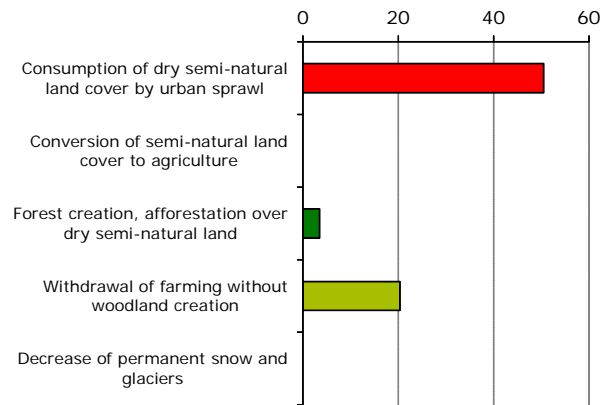


Belgium

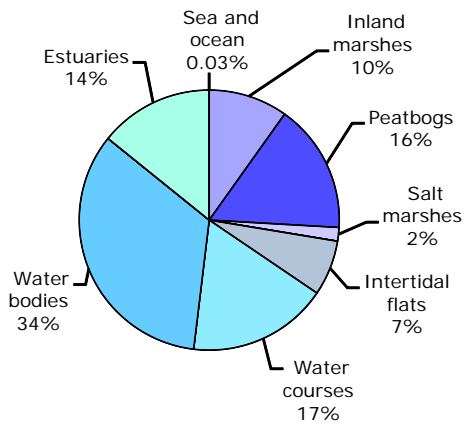
11.39. Dry semi-natural areas 2012
[% of total area]



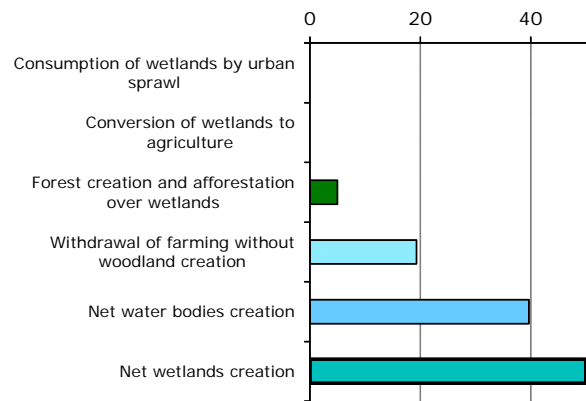
11.40. Main trends in dry semi-natural land consumption/formation 2006-2012
[ha/year]



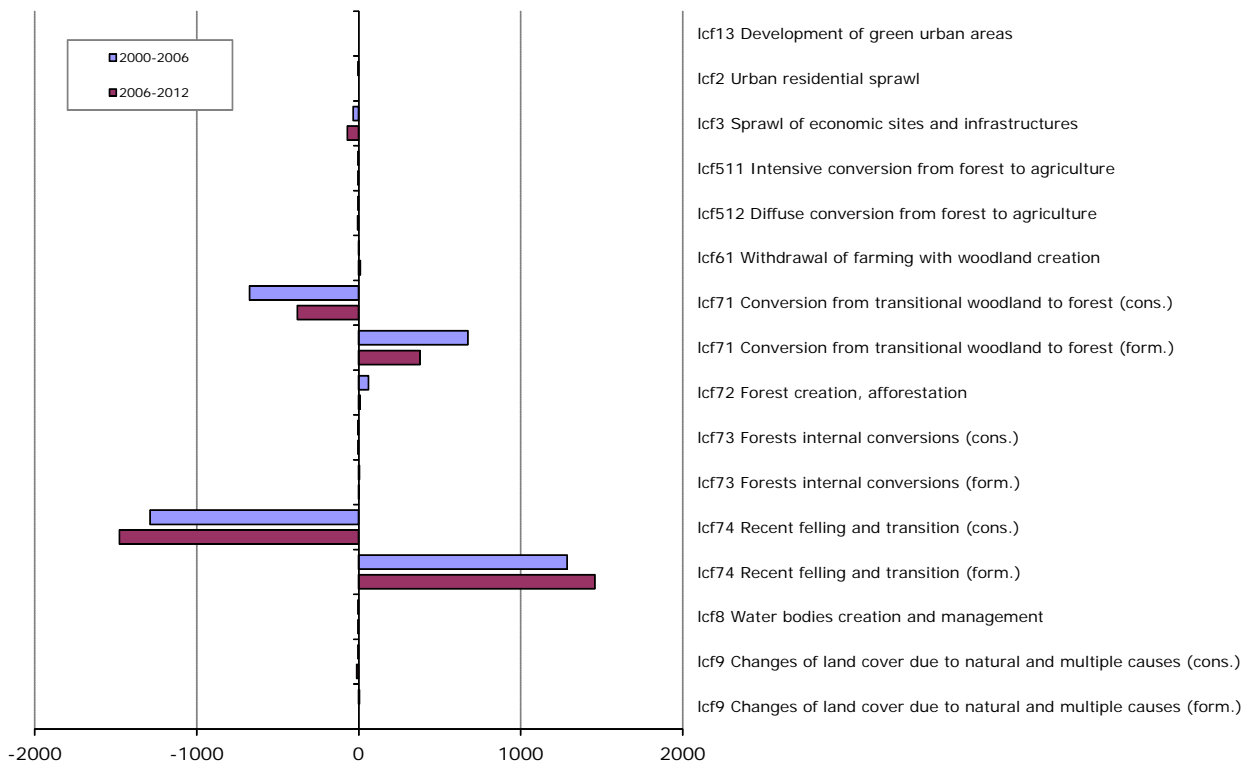
11.41. Wetlands & water 2012
[% of total area]



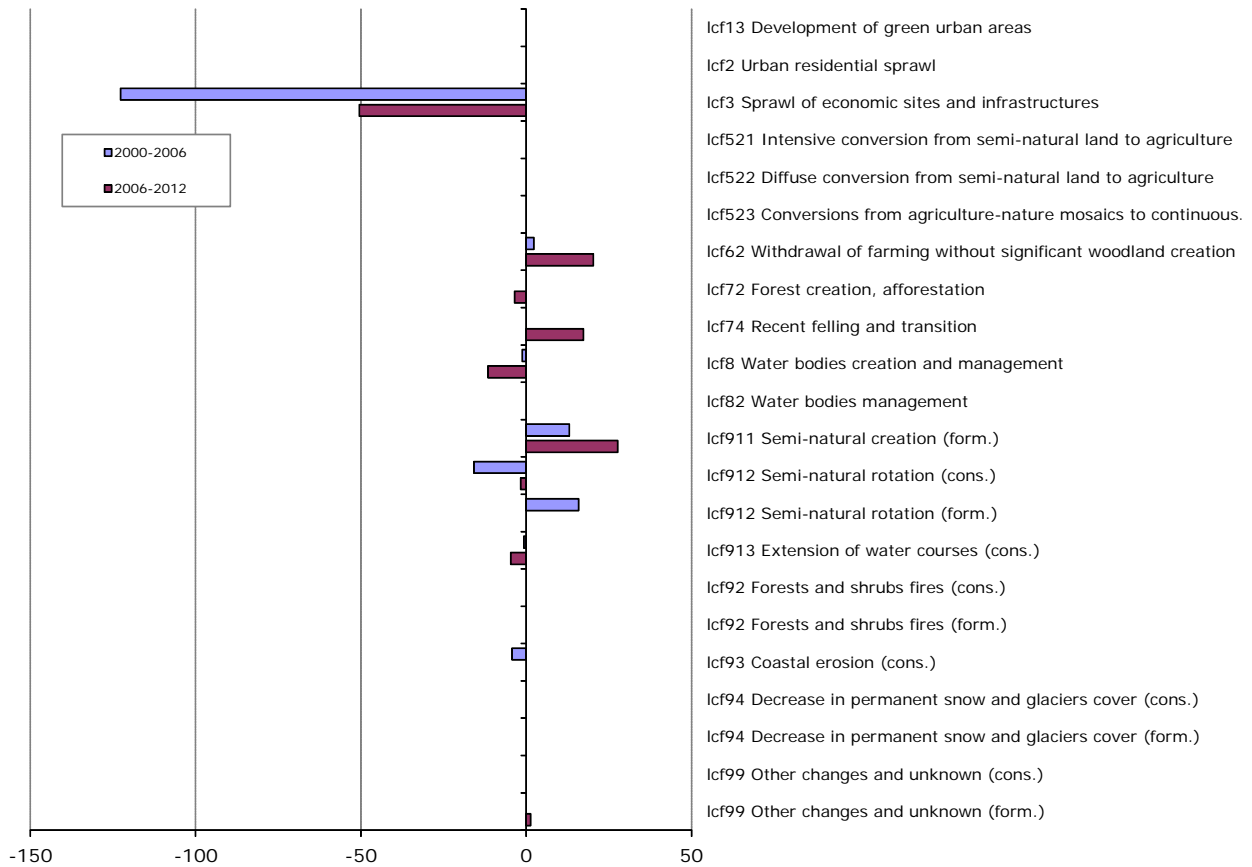
11.42. Main trends in wetlands & water consumption/formation 2006-2012
[ha/year]



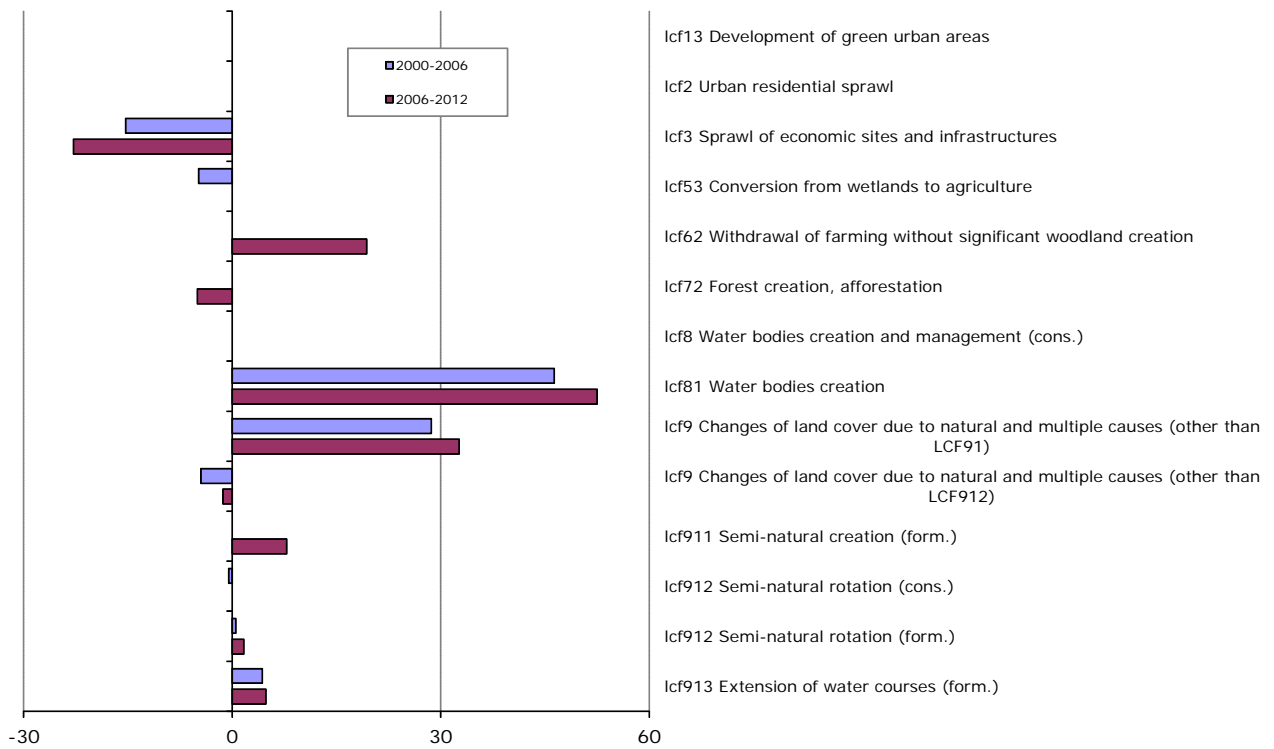
11.43. Mean annual conversions of forest & other woodland
[ha/year]



12.44. Mean annual conversions of dry semi-natural LC [ha/year]

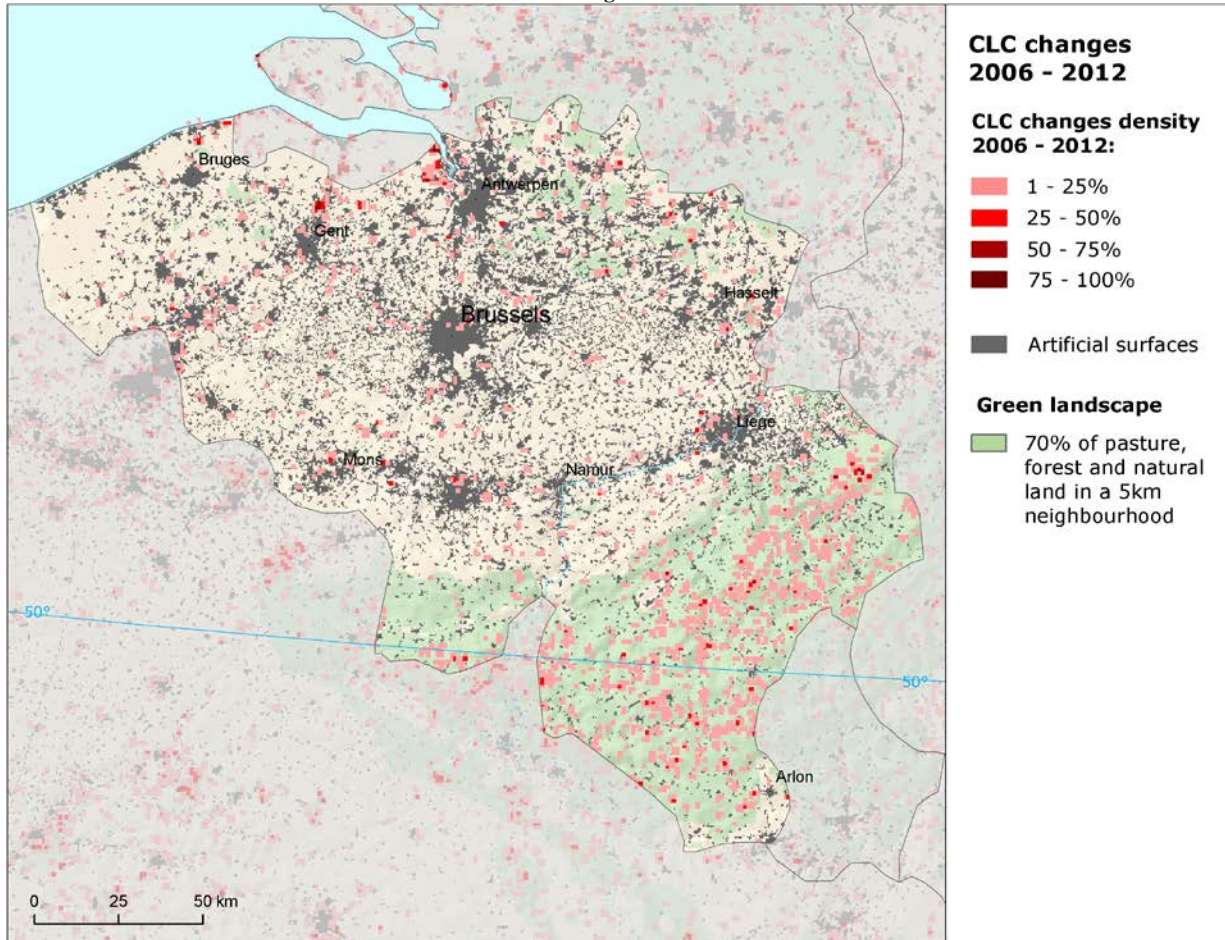


12.45. Mean annual conversions of wetlands and water LC [ha/year]

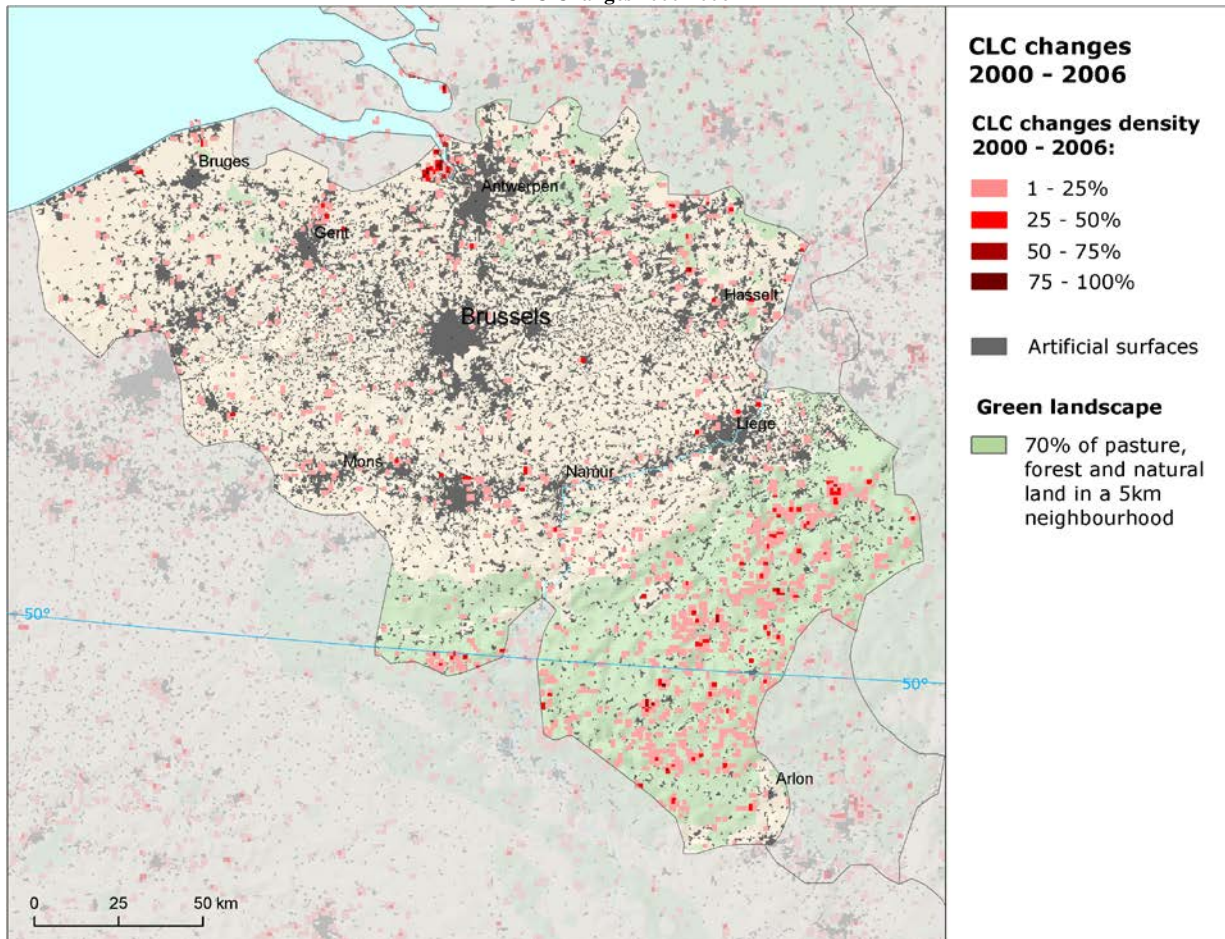


Belgium

CLC Changes 2006-2012

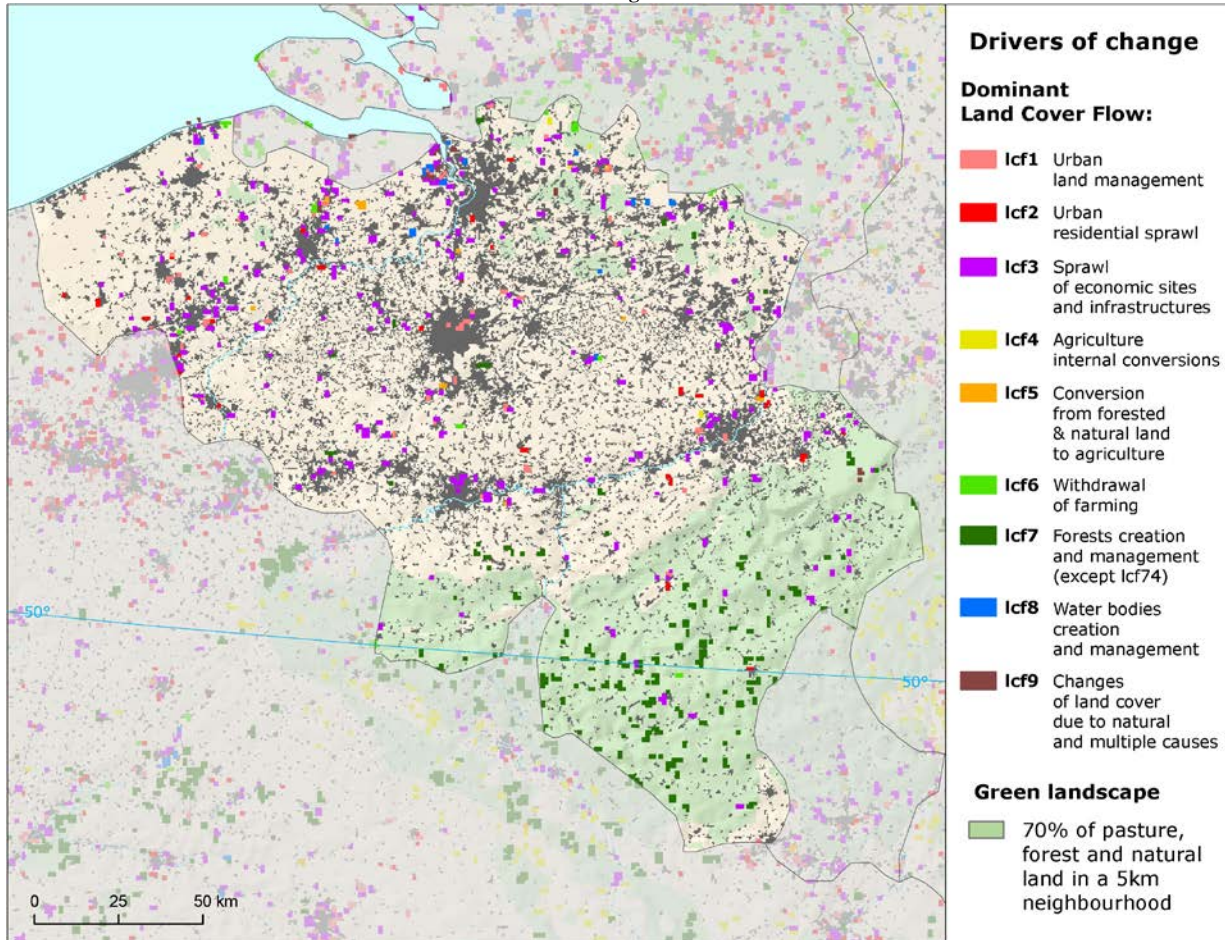


CLC Changes 2000-2006

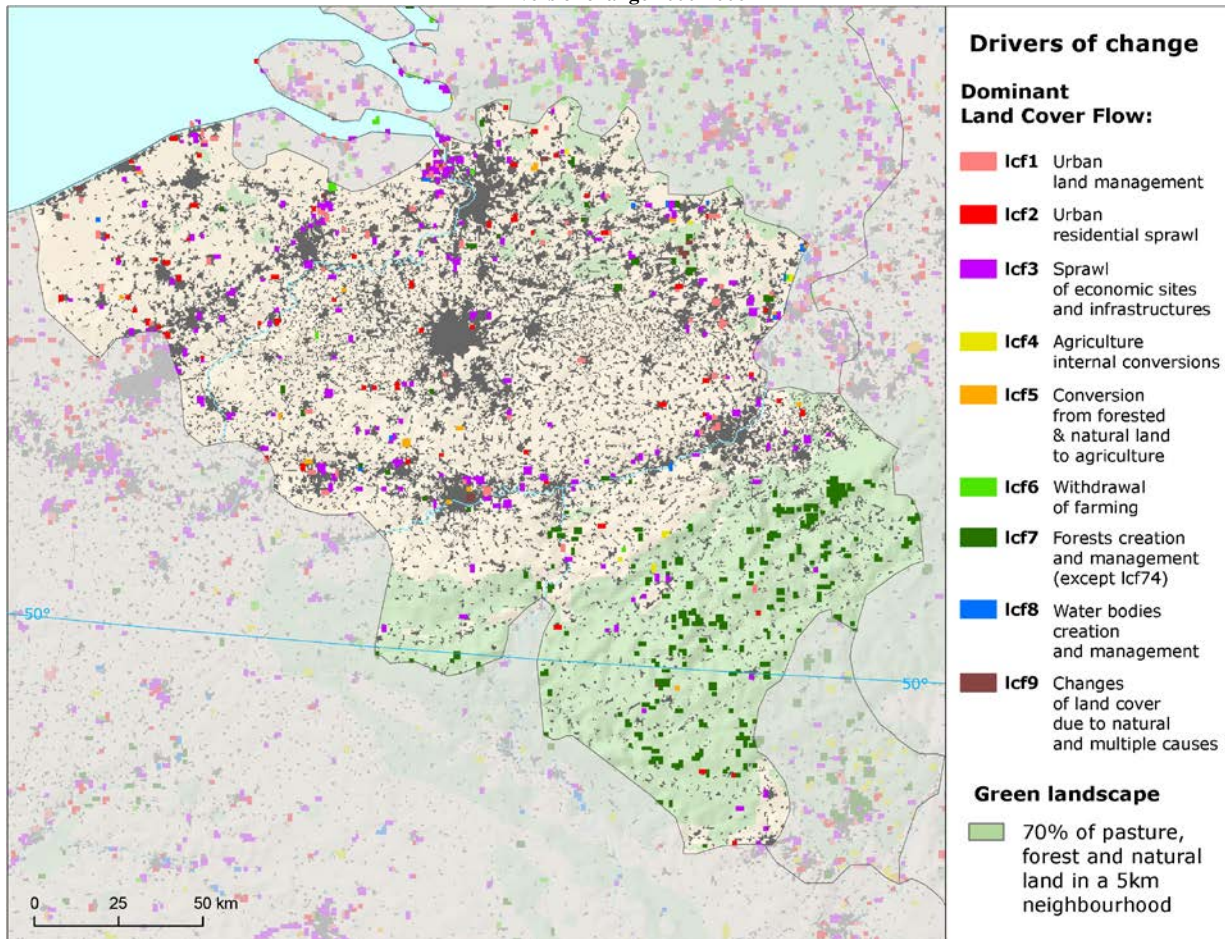


Belgium

Drivers of change 2006-2012

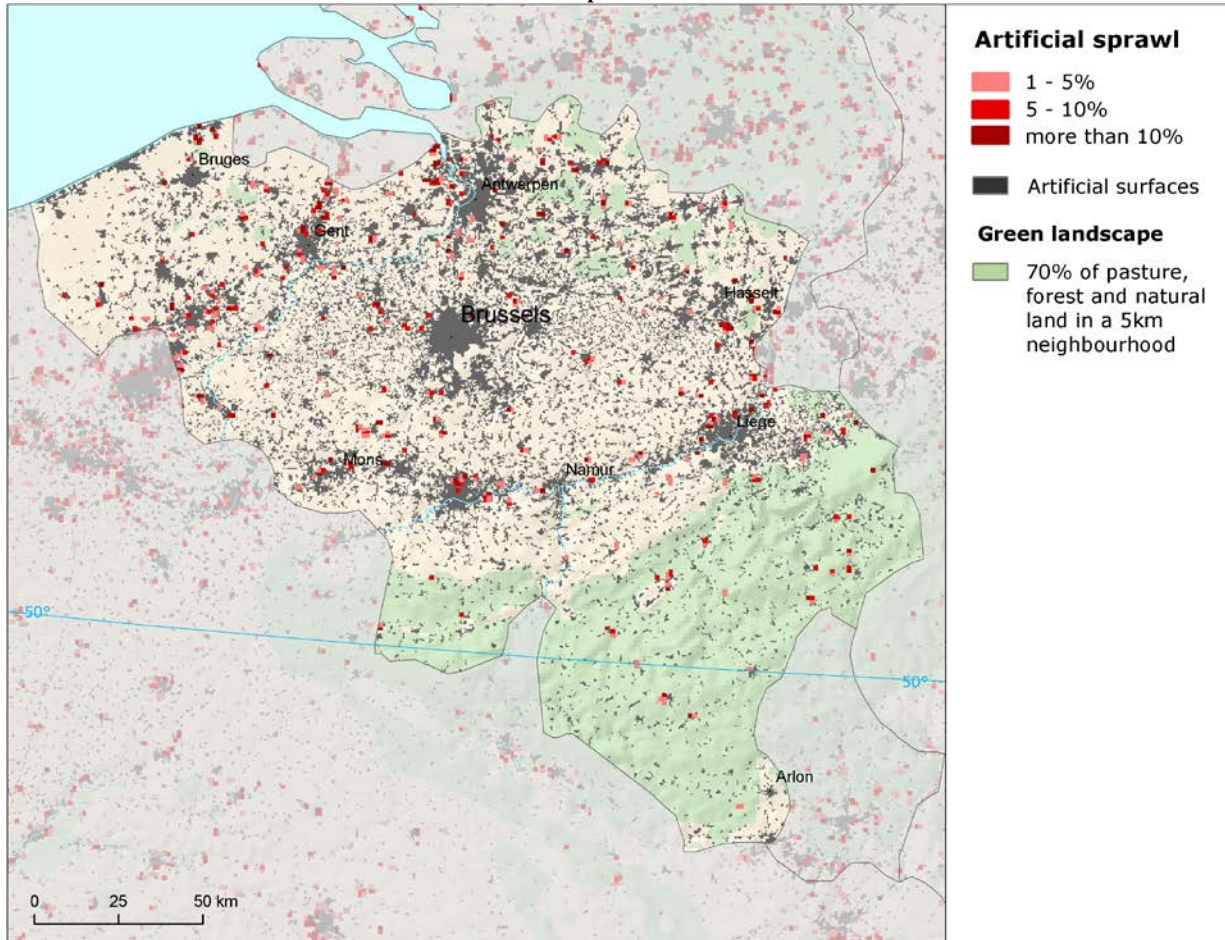


Drivers of change 2000-2006

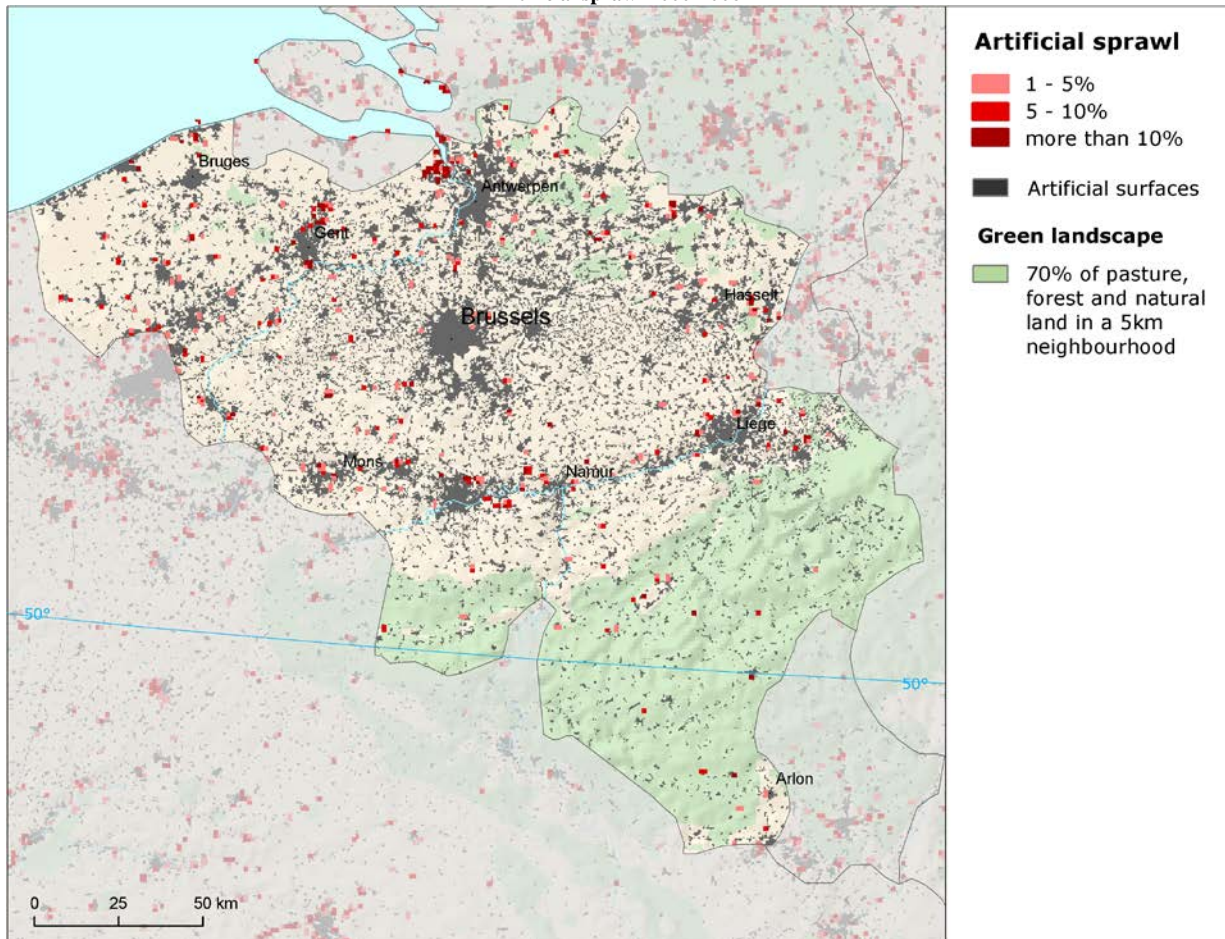


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Artificial sprawl 2006-2012

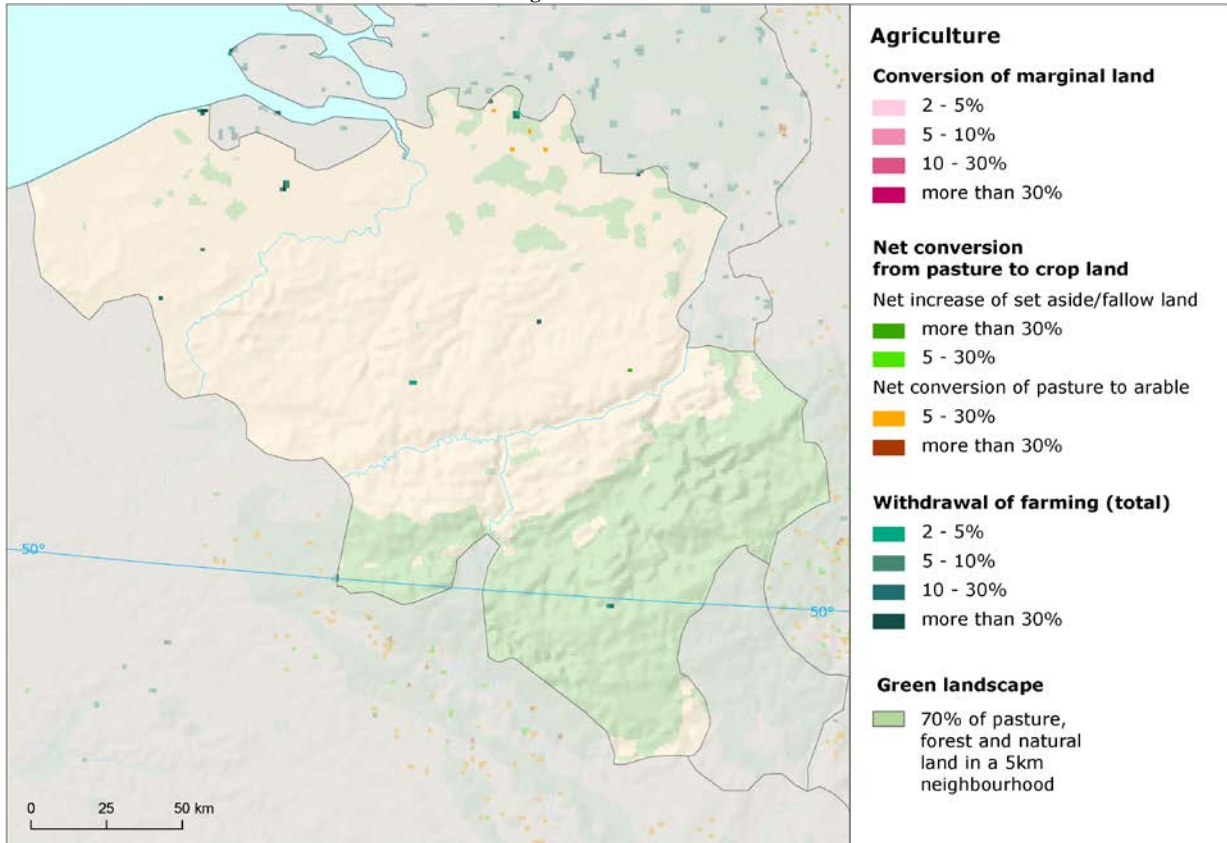


Artificial sprawl 2000-2006

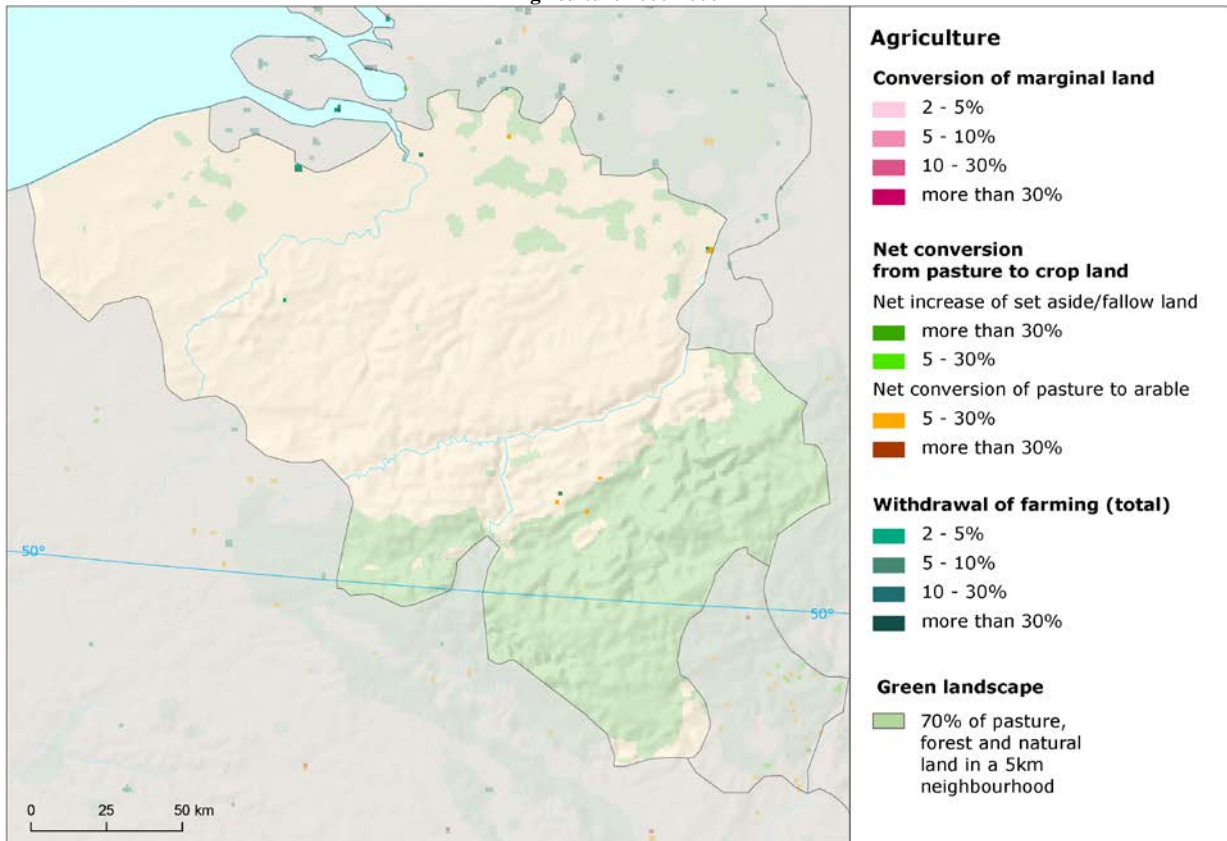


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Agriculture 2006-2012

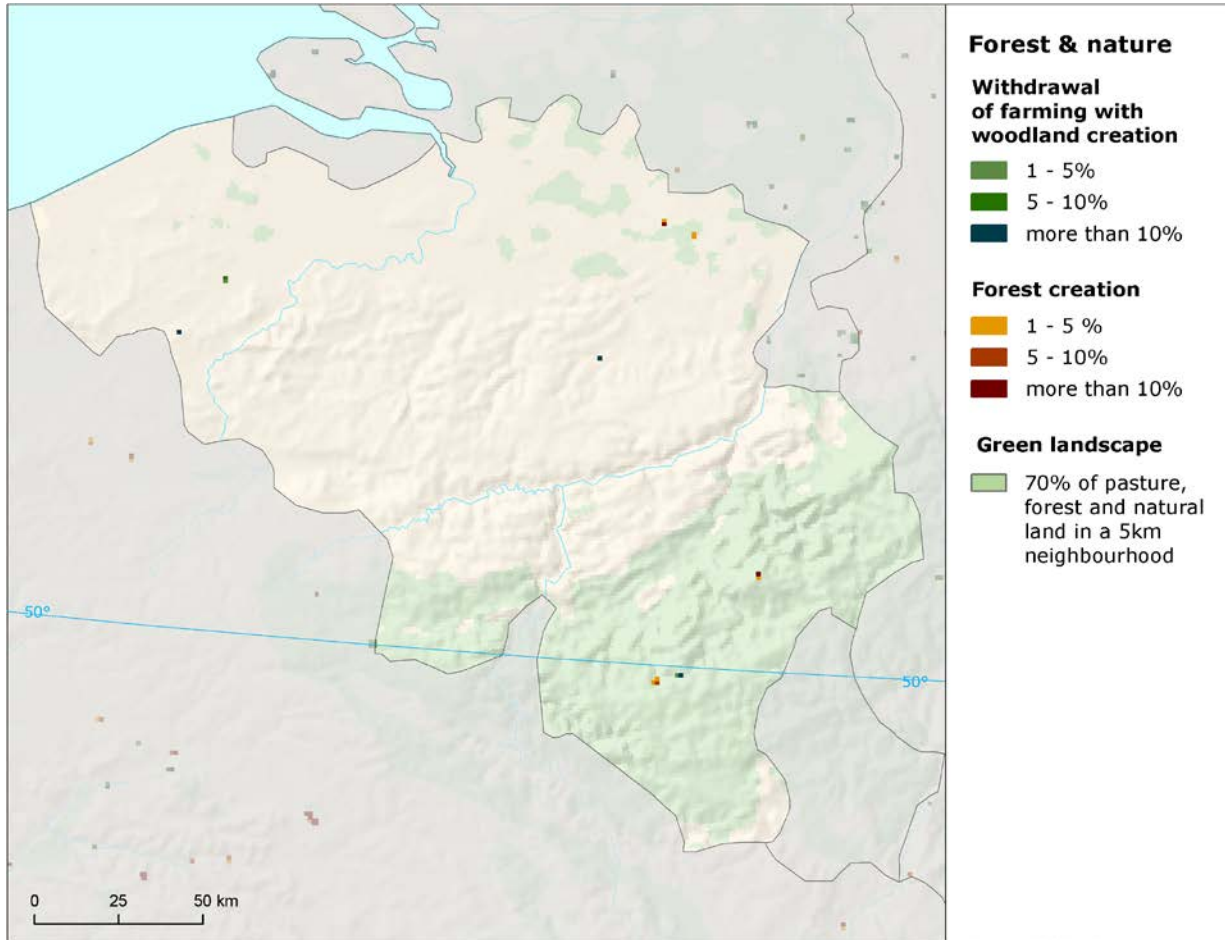


Agriculture 2000-2006



Belgium

Forest and nature 2006-2012



Forest and nature 2000-2006

