Country fact sheet

Land cover 2012

Austria

September 2017

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European Environment Agency

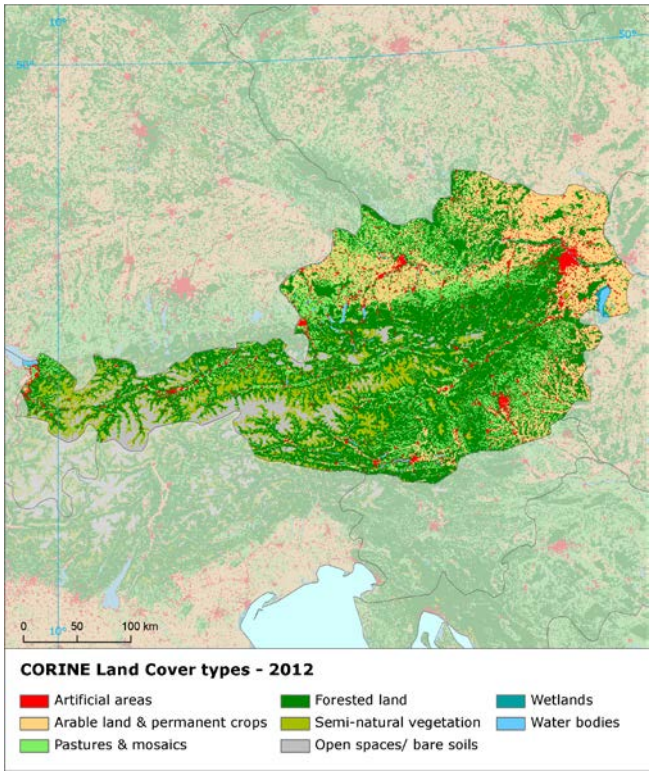
Austria

Land cover 2012

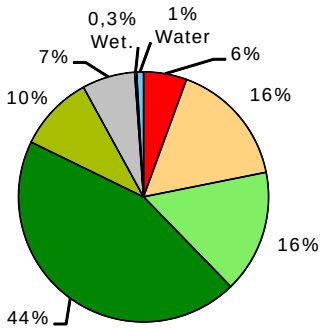
Overview of land cover & change 2006-2012

Despite its significant acceleration, compared to the period 1990-2000, the pace of development in the Austrian landscape belongs to European lowest. The intensity of development is comparable with the previous period 2000-2006.
The most intensive land cover flow in Austria is the forest creation and management. Its intensity is considerably higher, compared to previous period and it is almost exclusively driven by the recent felling and transition. Despite its decreasing, tendency, the sprawl of economic sites and infrastructures remains the second most powerful driver of change in the county. There was an obvious culmination of this flow during the previous period, caused by increased extension of sport and leisure facilities, which usually covers large areas. Compared to other European countries, Austria shows relatively low speed of artificial land take. With the annual land take rate of 0.21% of initial artificial area, it is about half as low as European average.
The other significant drivers of change in the Austrian landscape are changes due to natural and multiple causes, represented by melting of glaciers in the Alps. However, also this process culminated already during the period 2000-2006 and has more than half lower intensity in the period 2006-2012.

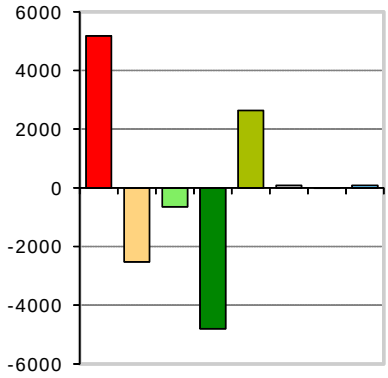
Note: The results presented here are based on a change analysis of 44 land cover types mapped consistently on a 1:100.000 scale across Europe over more than decade between 2000-2006-2012 - see Corine land cover (CLC) programme for details.
Number of years between CLC2006-CLC2012 data for Austria: 6



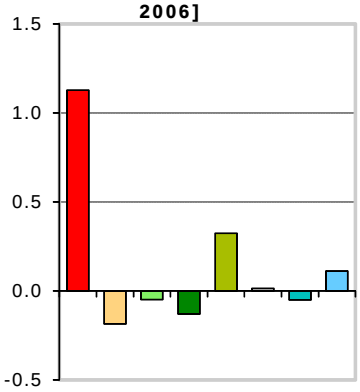
1.1. Land cover 2012 [% of total]



1.2. Net change in land cover 2006-2012 [ha]



1.3. Net change in land cover [% of initial year 2006]



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

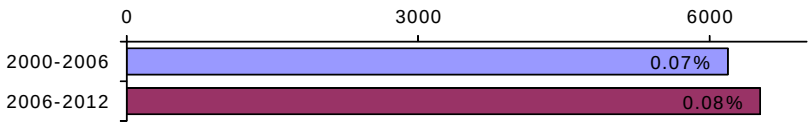
Summary balance table 2006-2012

	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	**4601**	**13543**	**13200**	**37051**	**8123**	**5686**	**220**	**722**	**83146**
Consumption of initial LC	8.7	27.9	12.1	322.8	6.1	13.4	0.1	0.1	391
Formation of new LC	60.6	2.7	5.6	274.7	32.5	14.3	0.0	0.9	391
Net Formation of LC	**51.8**	**-25.2**	**-6.4**	**-48.1**	**26.3**	**0.9**	**-0.1**	**0.8**	**0**
Net formation as % of initial year	*1.1*	*-0.2*	*0.0*	*-0.1*	*0.3*	*0.0*	*0.0*	*0.1*	
Total turnover of LC	**69.3**	**30.5**	**17.7**	**597.5**	**38.6**	**27.7**	**0.1**	**1.1**	**782**
Total turnover as % of initial year	*1.5*	*0.2*	*0.1*	*1.6*	*0.5*	*0.5*	*0.0*	*0.1*	*0.9*
Land cover 2012	**4652**	**13518**	**13194**	**37003**	**8150**	**5687**	**220**	**723**	**83146**

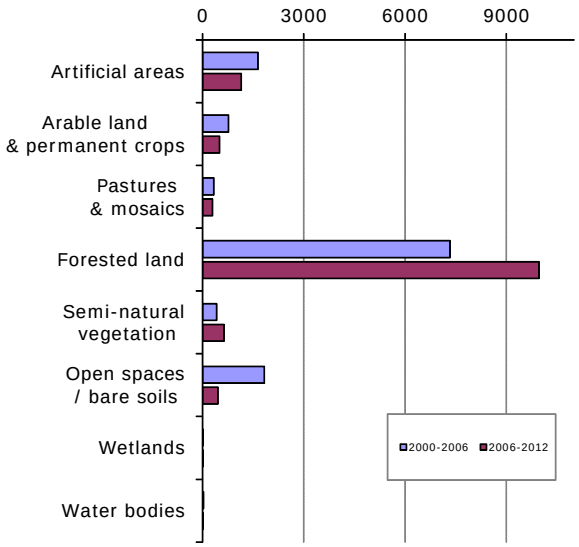
Austria

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

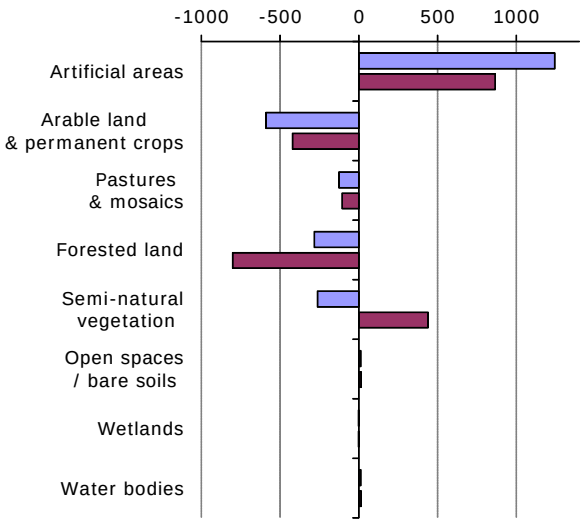
2.4. Annual land cover change [ha/year, % of total area]



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

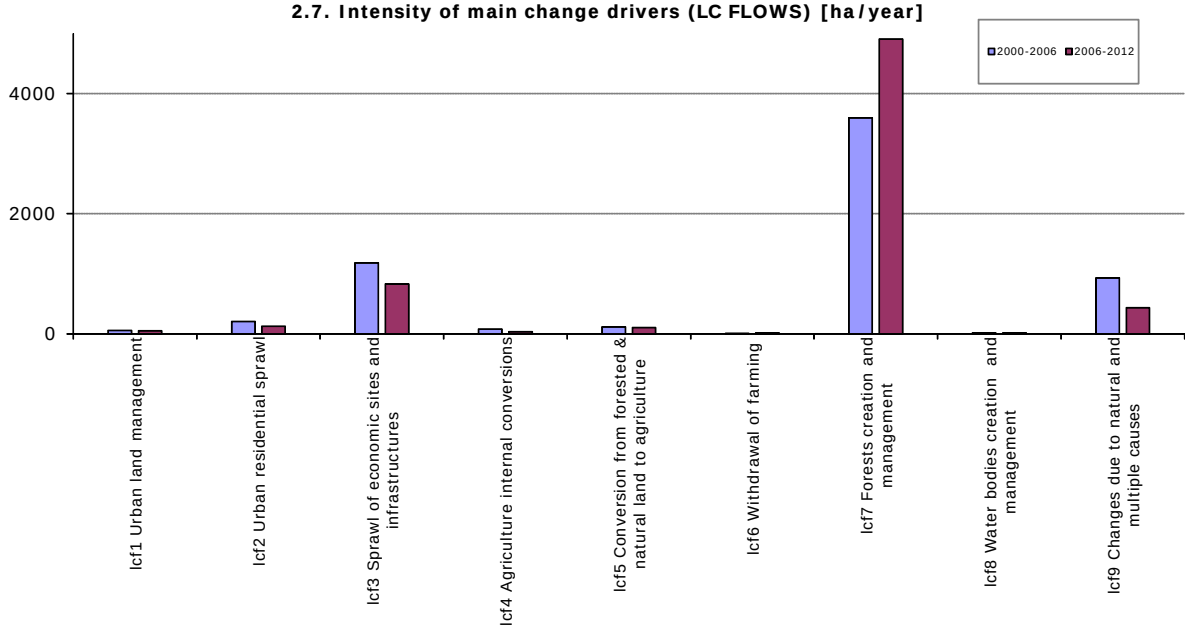


2.6. Net annual change of LC types [ha/year]



Summary trend figures	2000-2006	2006-2012
Annual land cover change [ha/year]	**6187**	**6520**
Annual land cover change as % of initial year	**0.07%**	**0.08%**
Land uptake by artificial development as mean annual change [ha/year]	1385	948
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	826	617
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]	18	33
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]	-31	-16
Forest & other woodland net formation as mean annual change [ha/year]	-284	-801
Dry semi-natural land cover net formation as mean annual change [ha/year]	-252	453
Wetlands & water bodies net formation as mean annual change [ha/year]	9	12

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



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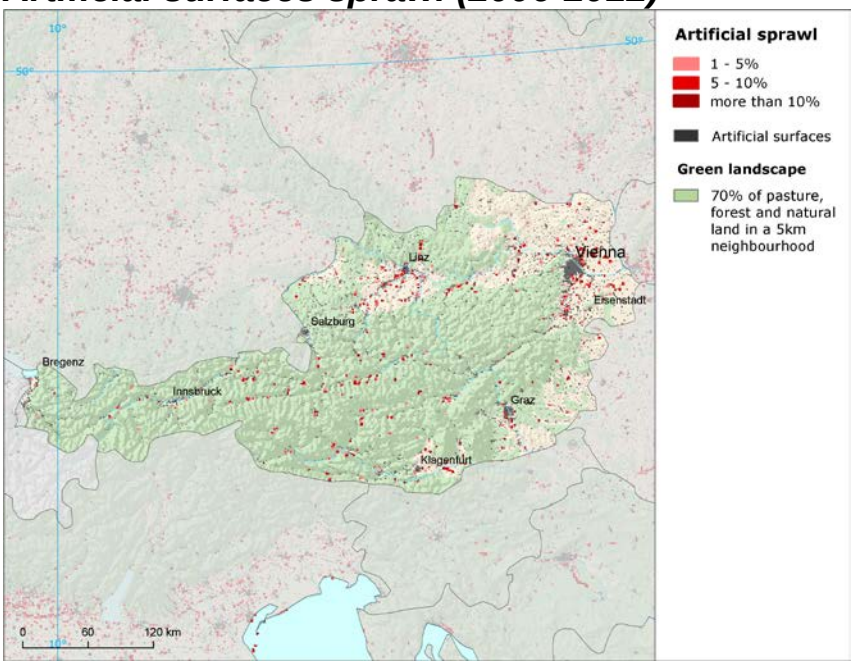
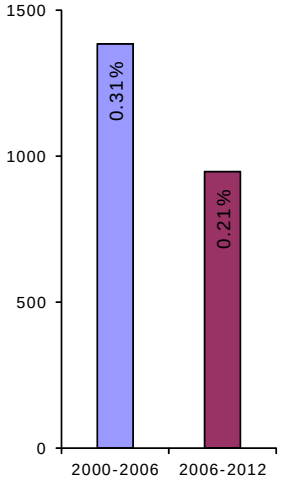
Artificial surfaces sprawl (2006-2012)



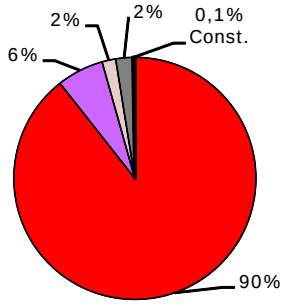
3.8. Artificial land take [ha/year, % of initial year]



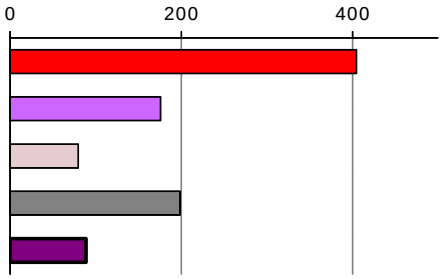
Slowdown of sport, leisure and recreation sites expansion

In the long term, the extension of sport and leisure facilities is the major driver of the artificial development in Austria. However, the intensity of this flow is significantly lower now, compared to previous period. It is also the reason for the decrease of the overall artificial land take, while the other types of artificial development have comparable intensity as in the previous period. The sprawl of mines and quarrying areas, industrial and commercial sites and residential sprawl are the other main drivers of the artificial development in the country. Geographically, the sprawl shows similar pattern as in the period 2000-2006, with major concentration of the residential development in the surroundings of the capital city Wien. The sprawl of economic sites and infrastructures occurs mainly around the cities of Wien and Linz. Around Wien, this economic sprawl was obvious ever since 1990; around Linz, it was visible only in the last two periods.

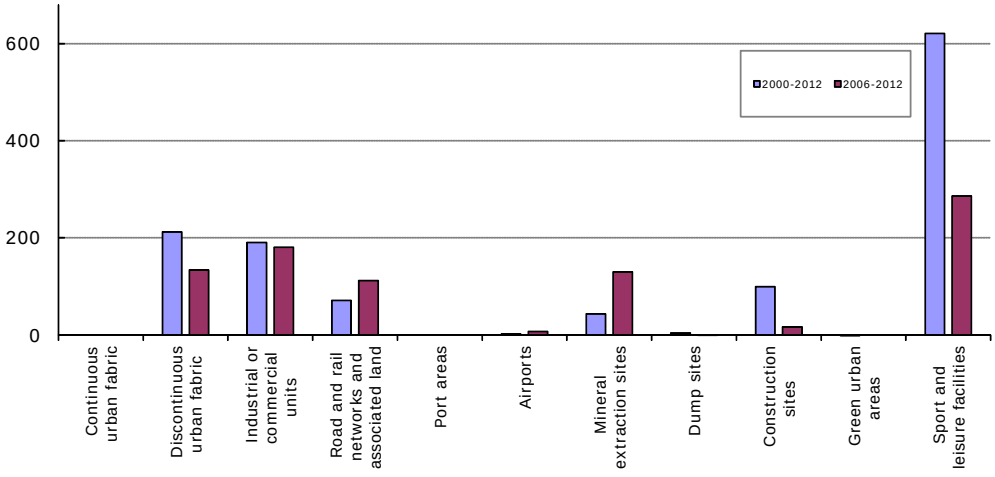
3.9. Artificial surfaces 2012 [% of total area]



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

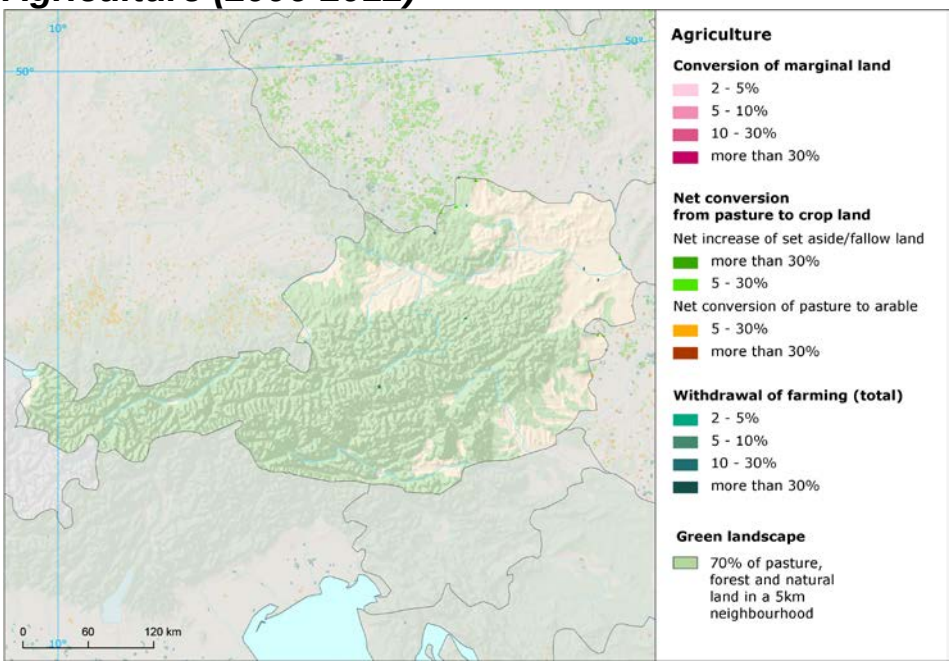


3.11. Mean annual artificial change by class [ha/year]



Austria

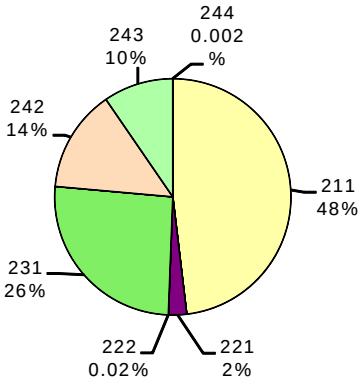
Agriculture (2006-2012)

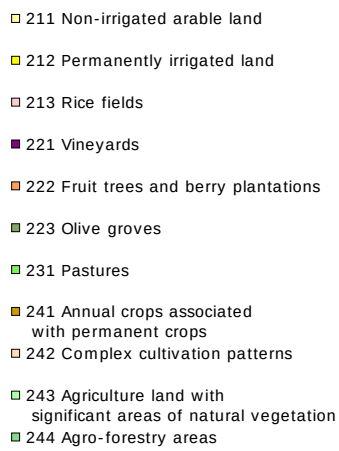


Consumption of arable land by artificial sprawl continues

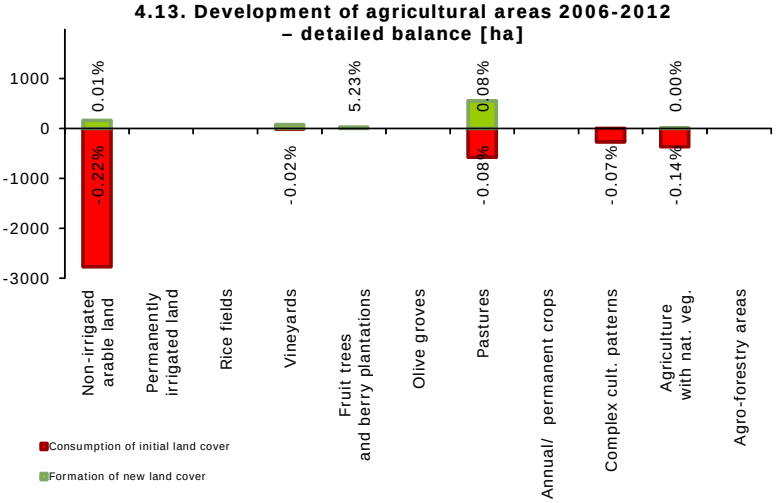
The main process in development of agricultural land in Austria is its consumption by artificial sprawl, mostly by the sprawl of economic sites and infrastructures, but also by residential sprawl. The arable land (by 68%) is the major source for this artificial land take. This situation was similar in both previous periods - the consumption by the sprawl had comparable intensity during the 1990-2000 and slightly higher in the 2000-2006. As a result, the arable land has negative net change balance – however, only about 0.20% of the total area of arable land was consumed during the period 2006-2012 in Austria, which is not a worrying amount. In comparison with the extent of this land take, the other conversions of agricultural land in the country are rather insignificant. There occurred some cases of conversions from developed areas (mineral extraction or construction sites) to agriculture and also of diffuse conversion from forest to agriculture (coniferous forest to pastures). The intensity of internal agricultural flows in Austria is negligible in the long term.

4.12. Agricultural areas 2012 [% of total area]

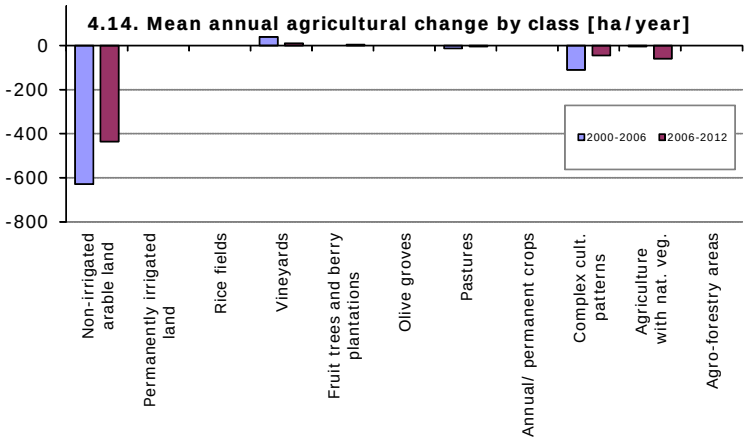




4.13. Development of agricultural areas 2006-2012 – detailed balance [ha]

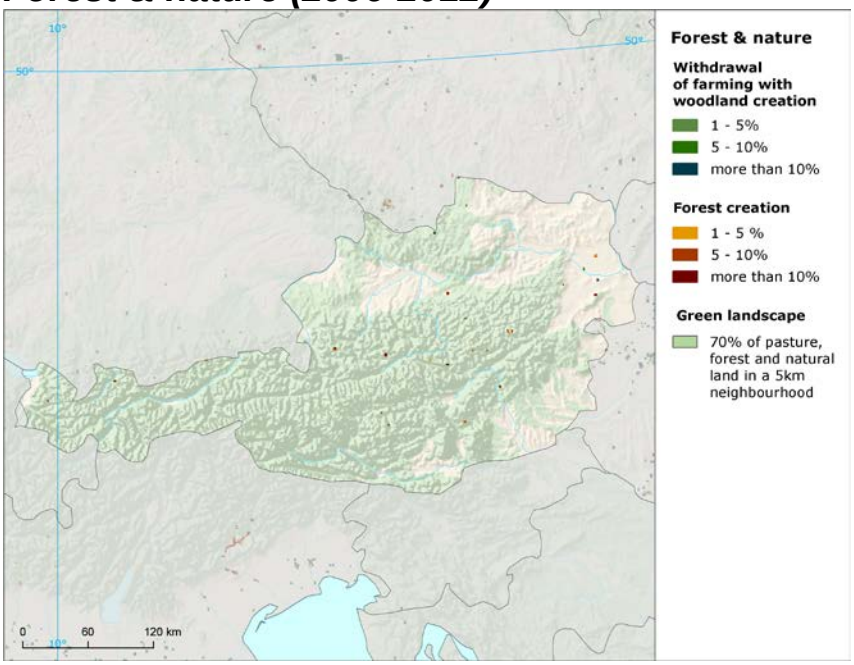


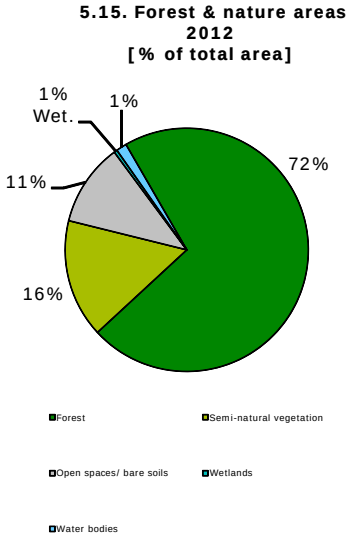
4.14. Mean annual agricultural change by class [ha/year]



Austria

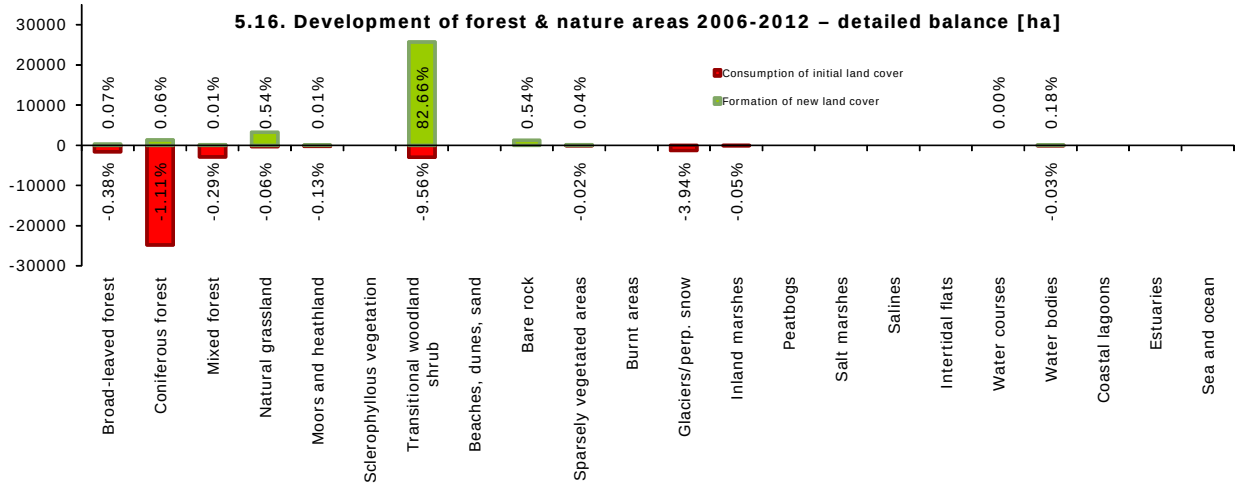
Forest & nature (2006-2012)

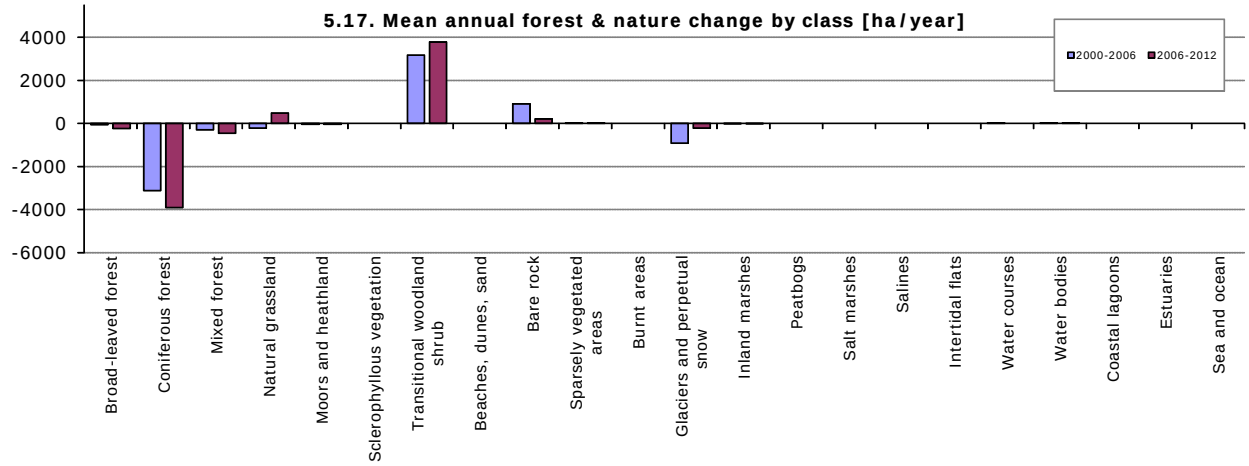




Rapid slowdown of glaciers melting

The internal forest conversions are the most extensive drivers of change of the Austrian natural landscape. They are represented almost exclusively by the recent felling and transition in this country and have slightly lower intensity, compared to previous period 2000-2006. During the period 1990-2000, the extent of recent felling in Austria was rather insignificant. However, the most important conversion in the country is the decrease of alpine glaciers cover. This process seems to culminate during the previous period 2000-2006 and its intensity rapidly decreased in the period 2006-2012. Actually, its intensity is even significantly lower than in the period 1990-2000. Concerning the other conversions of natural land, there was observed semi-natural creation, represented by the conversion from transitional woodland and shrub land into natural grassland and the natural land cover was also consumed by artificial sprawl – mostly coniferous forest (62% of total natural land consumption) by sport and leisure facilities (59% of total natural land consumption).

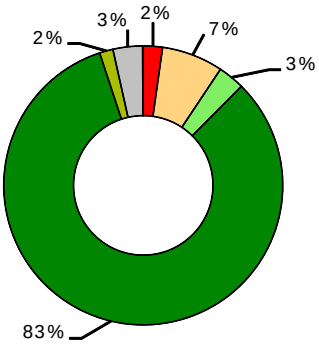




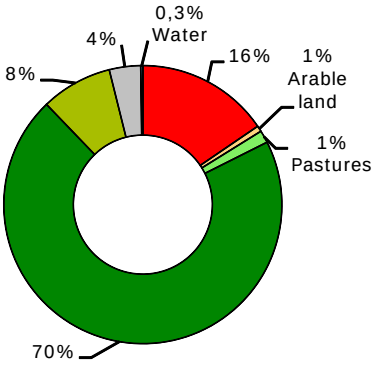
Annex: Land cover flows and trends

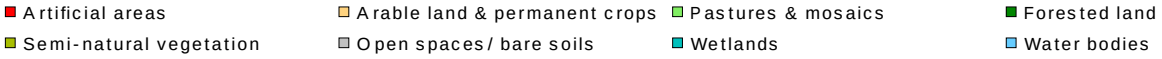
Land cover flows 2006-2012

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

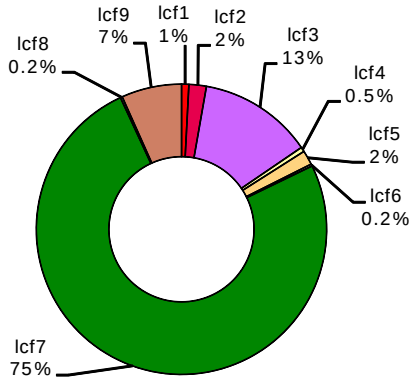


6.19. Formation of land cover 2006-2012 [% of total change area]





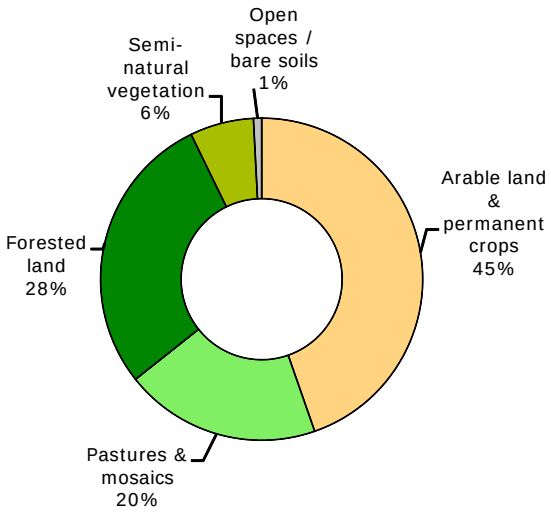
6.20. Drivers of change (LC FLOWS) 2006-2012 [% of total change area]



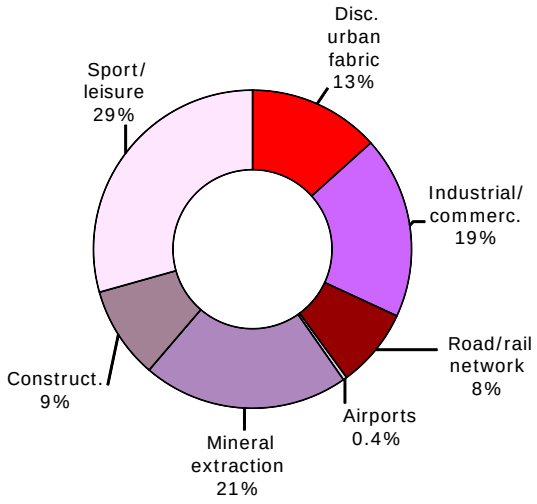
Austria

Artificial areas

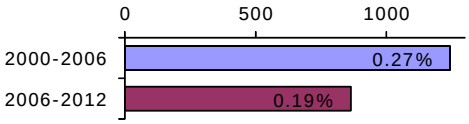
7.21. Consumption by artificial land take 2006-2012 [% of total]



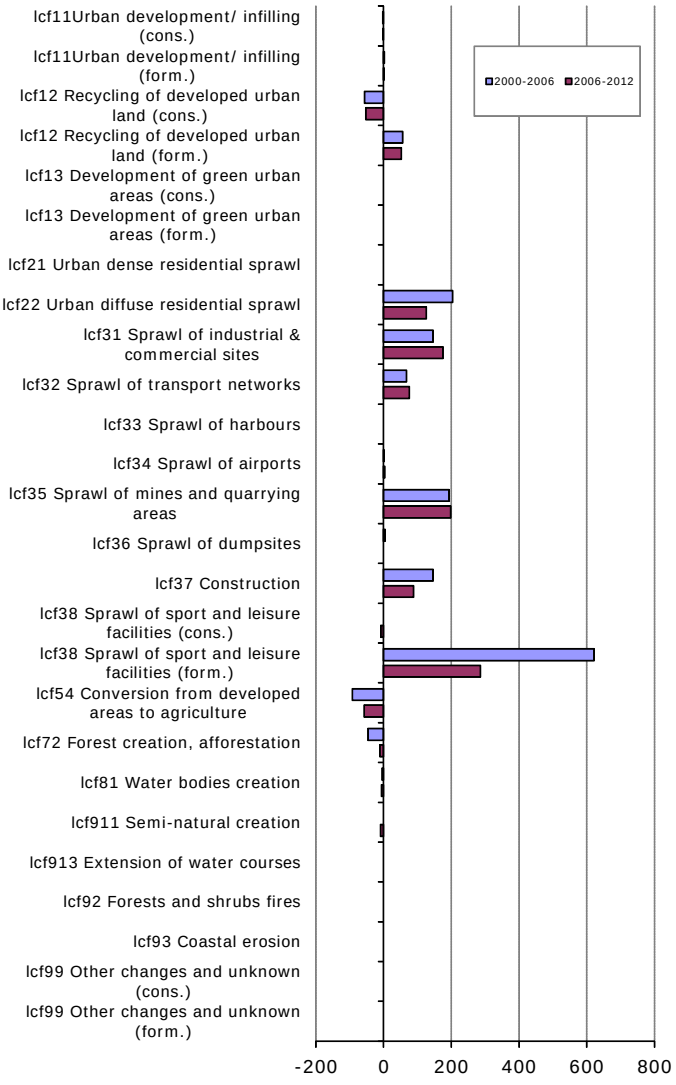
7.22. Formation by artificial land take 2006-2012 [% of total]



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



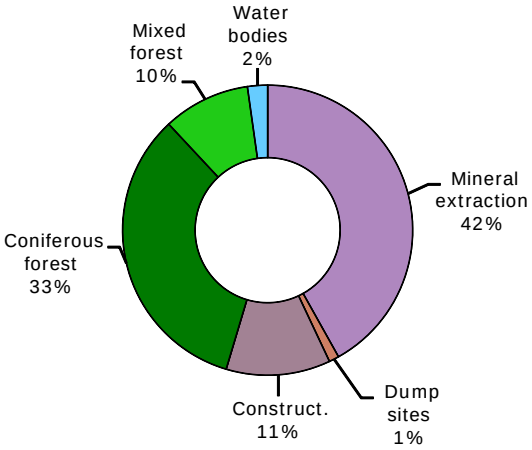
7.24. Artificial development by change drivers (LC FLOWS) [ha/year]



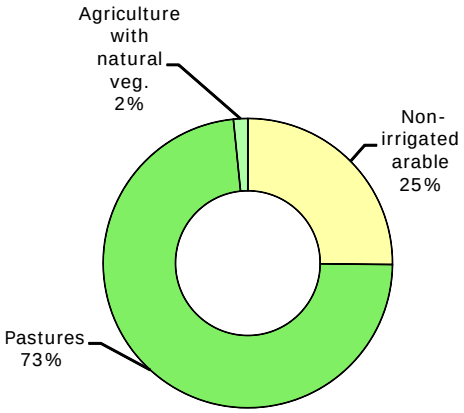
Austria

Agriculture

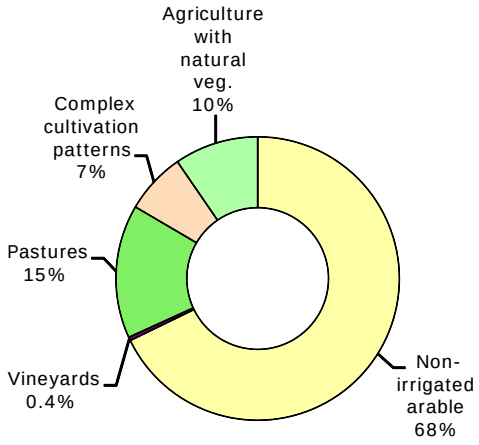
8.25. LC consumed by agriculture 2006-2012 [% of total]



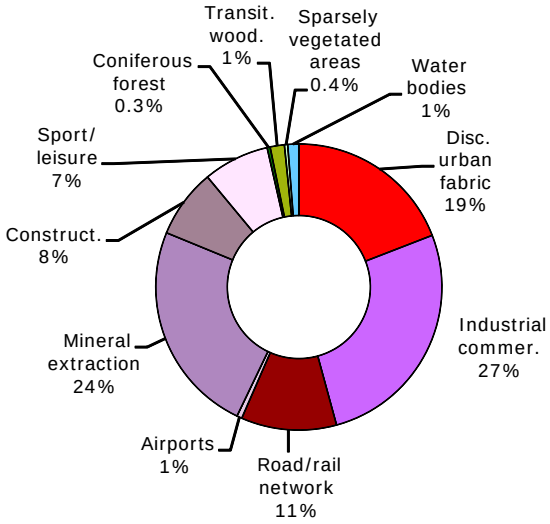
8.26. Formation of agricultural land from non-agriculture 2006-2012 [% of total]



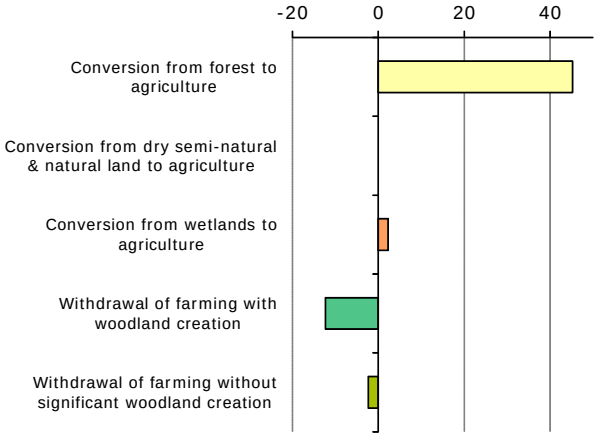
8.27. Consumption of agricultural land by non-agriculture 2006-2012 [% of total]



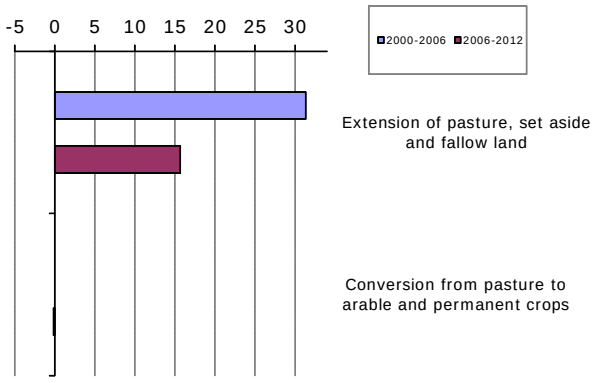
8.28. Formation of non-agricultural land from agriculture 2006-2012 [% of total]



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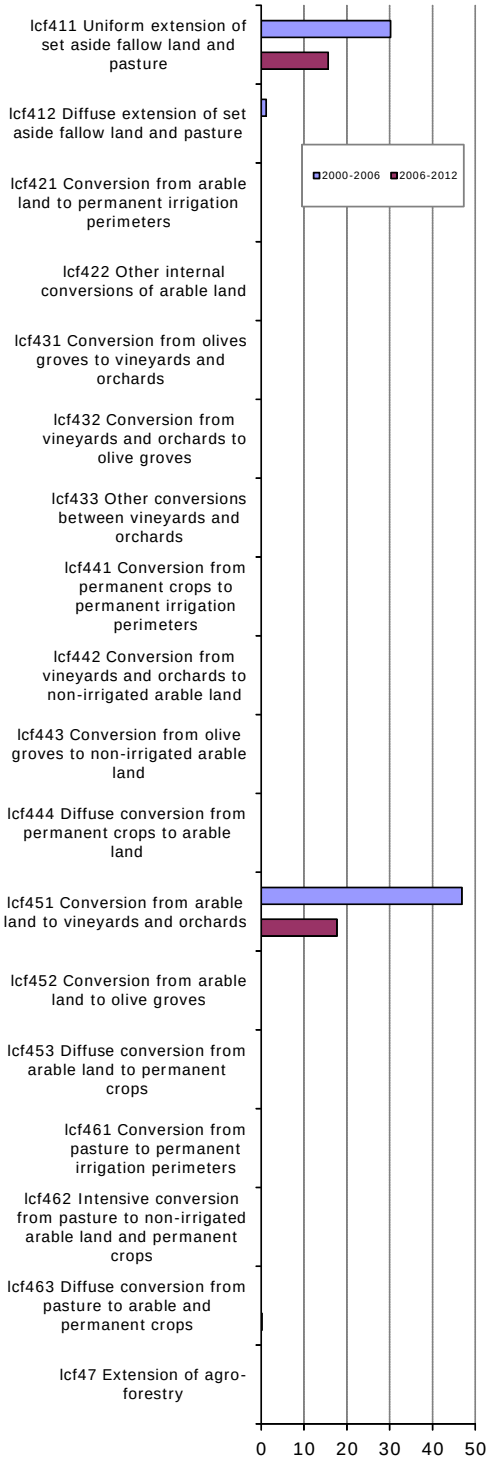
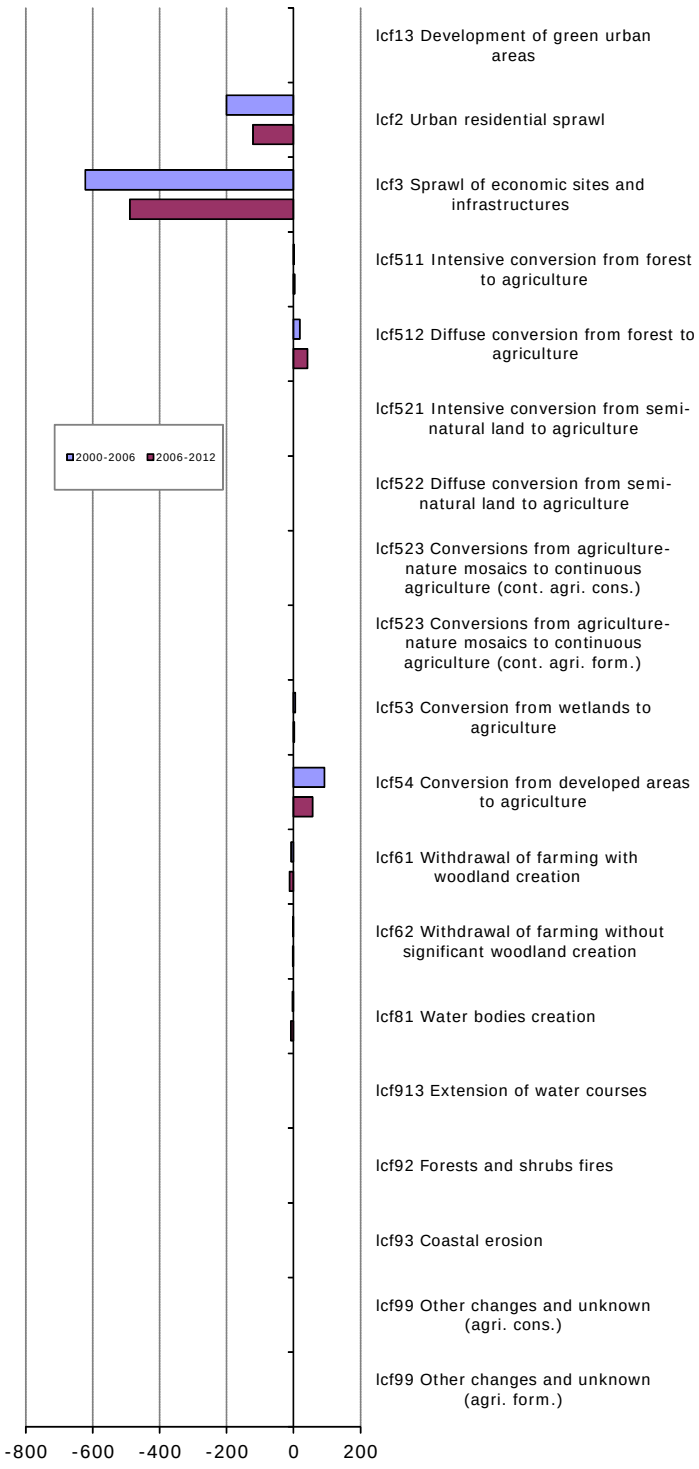
9.31. Mean annual agriculture internal conversions [ha / year]



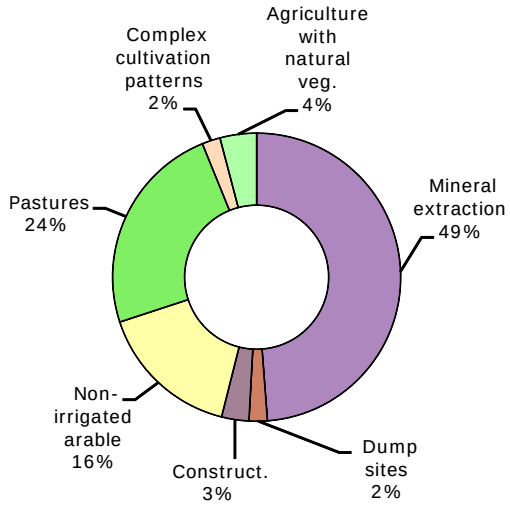
9.32. Mean annual conversions between agriculture and other LC types [ha / year]



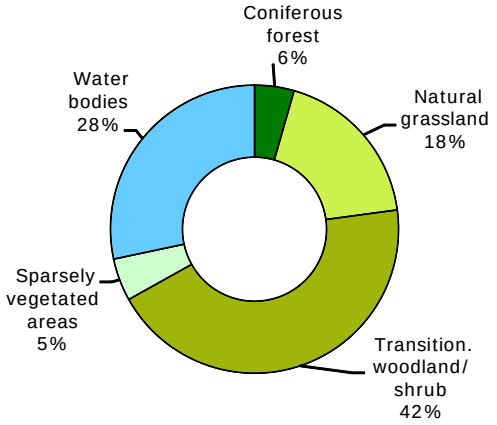
Austria

Forest & nature

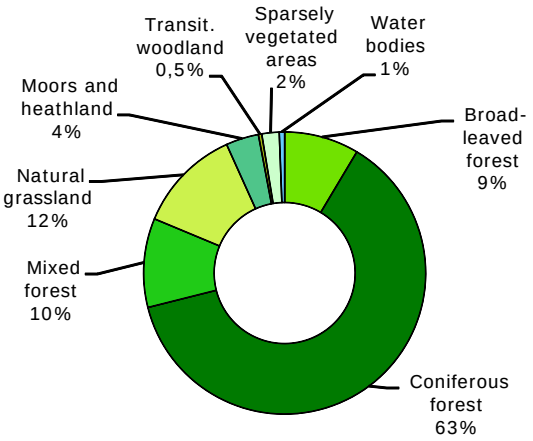
10.33. LC consumed by forest & nature 2006-2012 [% of total]



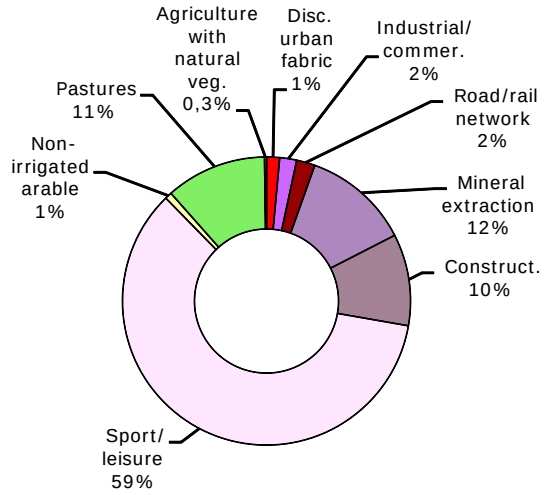
10.34. Formation of forest & nature land from non-forest /nature 2006-2012 [% of total]



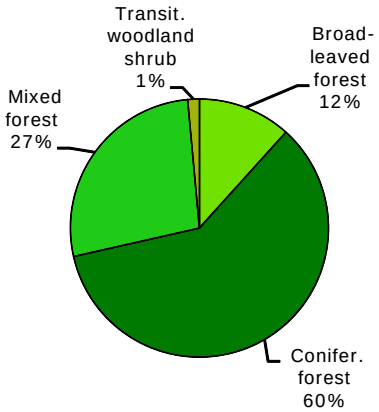
10.35. Consumption of forest & nature land by non-forest/nature 2006-2012 [% of total]



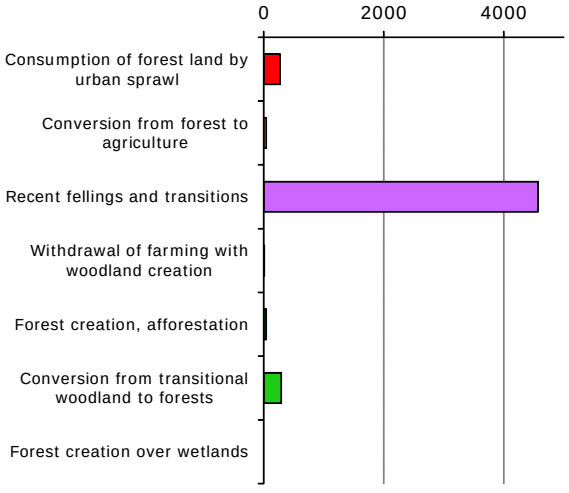
10.36. Formation of non-forest/nature land from forest & nature 2006-2012 [% of total]



10.37. Forested land 2012 [% of total area]

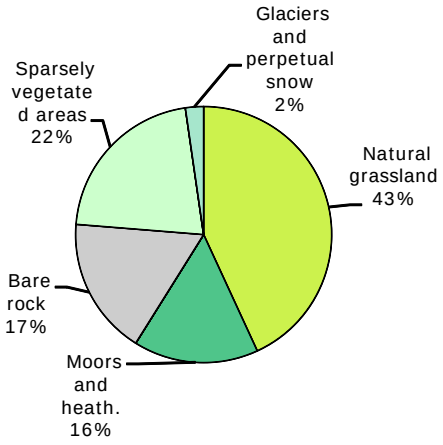


10.38. Main trends in woodland & forests consumption/formation 2006-2012 [ha/year]

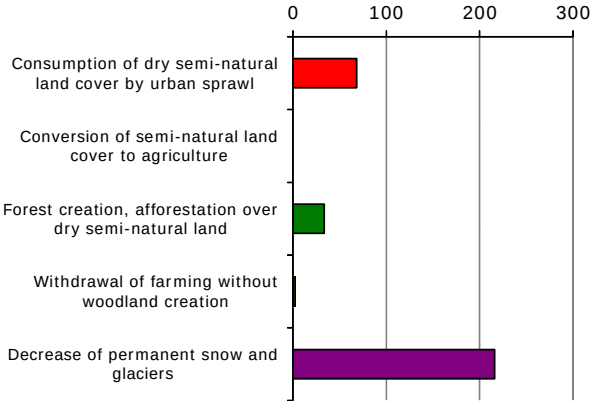


Austria

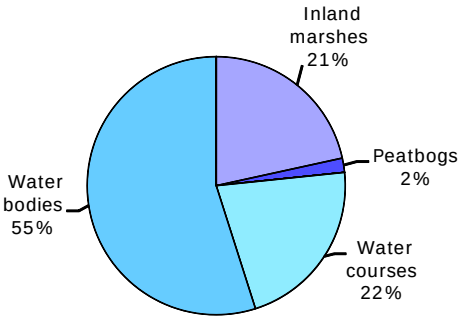
11.39. Dry semi-natural areas 2012 [% of total area]



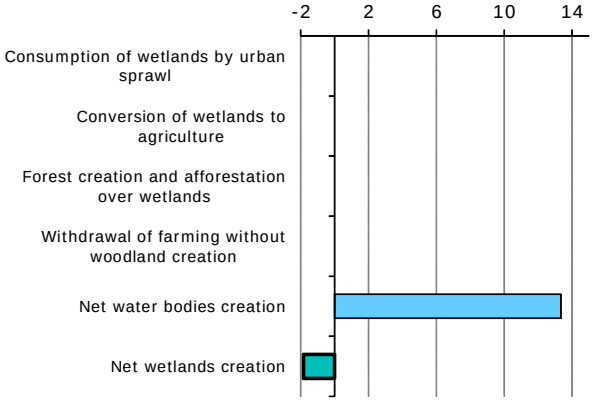
11.40. Main trends in dry semi-natural land consumption/formation 2006-2012 [ha/year]



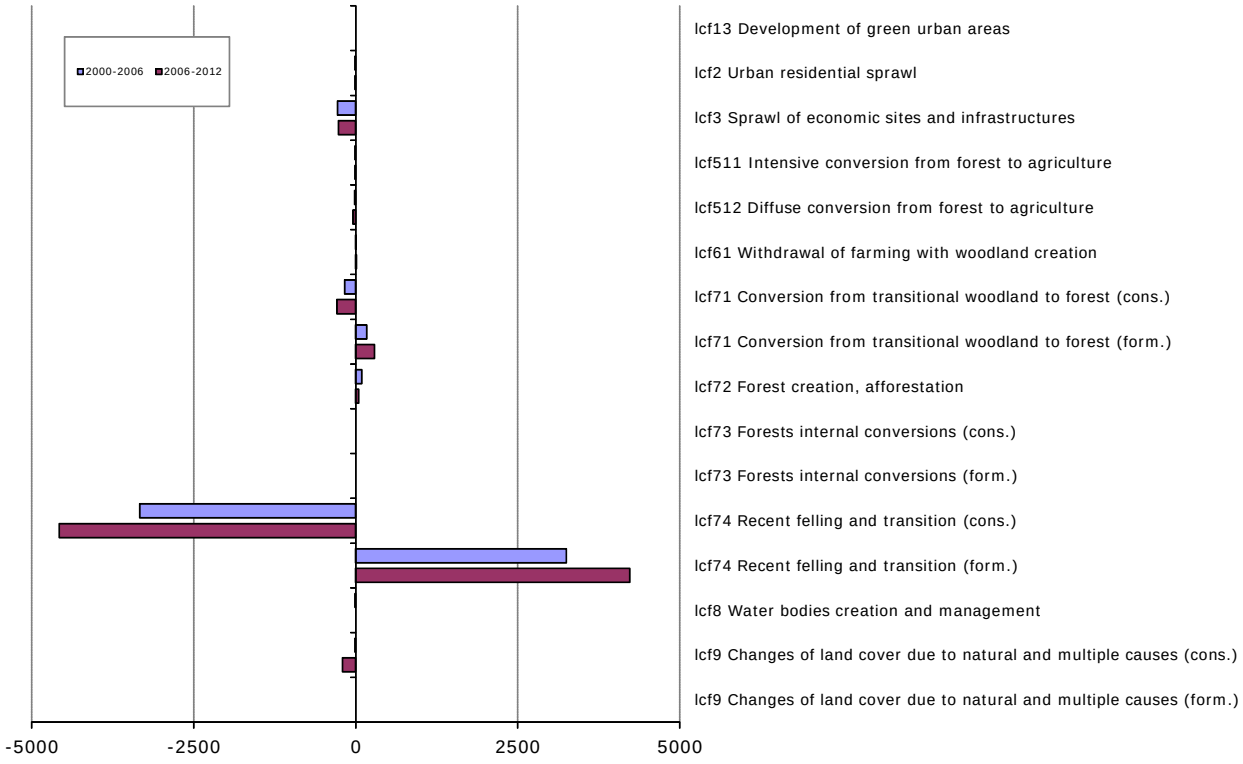
11.41. Wetlands & water 2012 [% of total area]



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

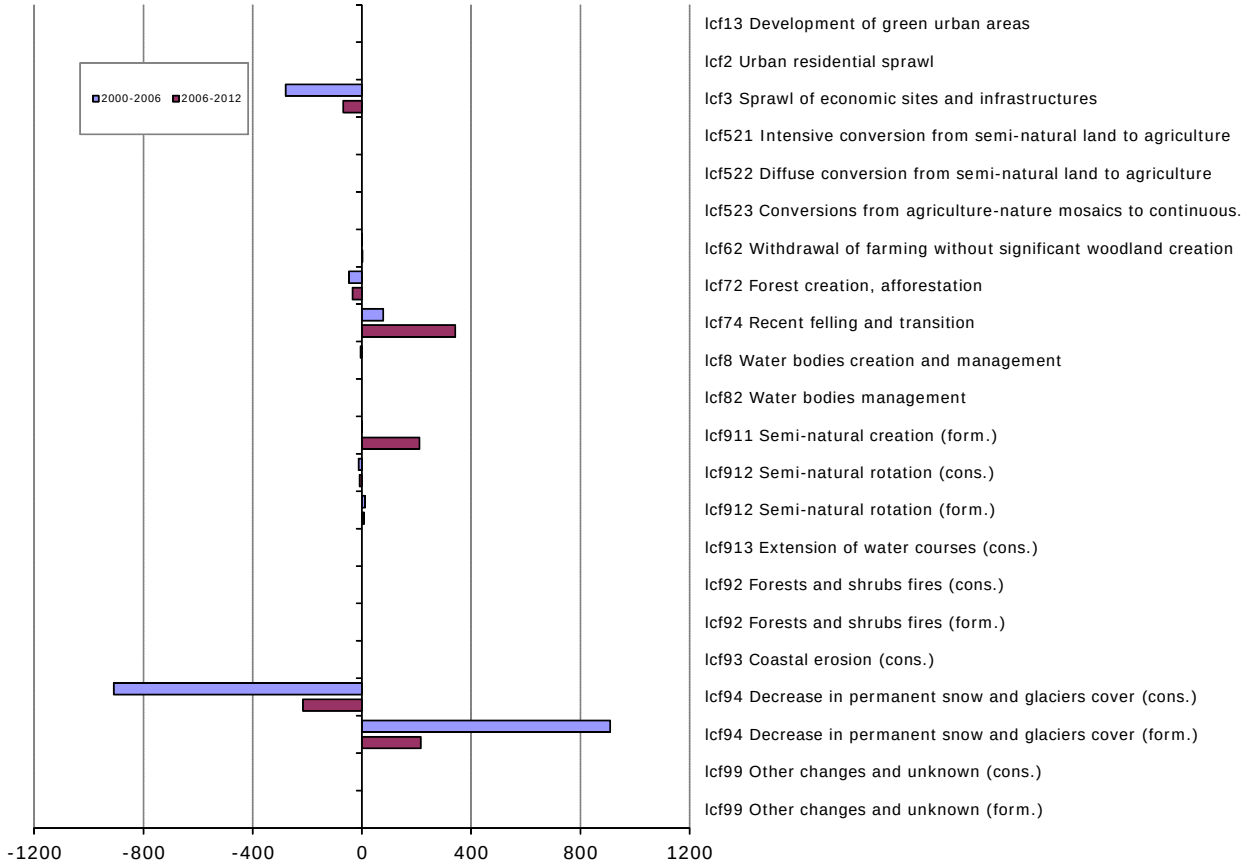


11.43. Mean annual conversions of forest & other woodland [ha/year]

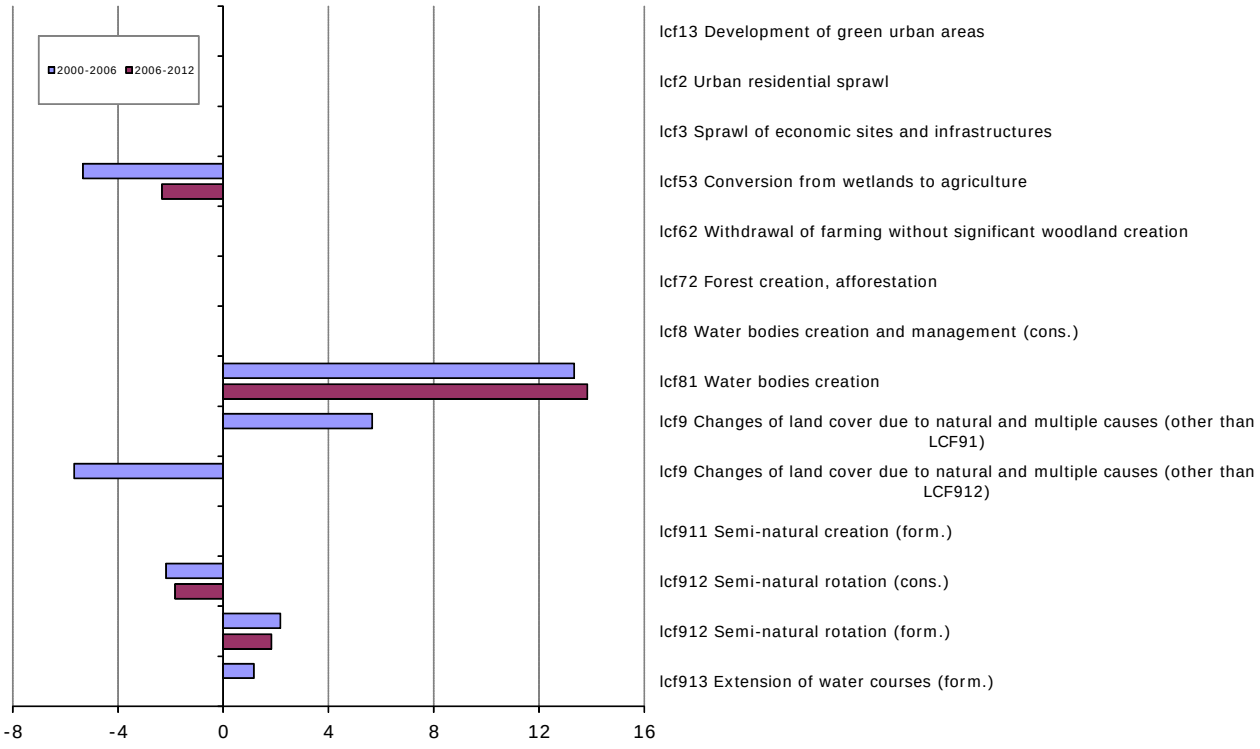


Austria

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

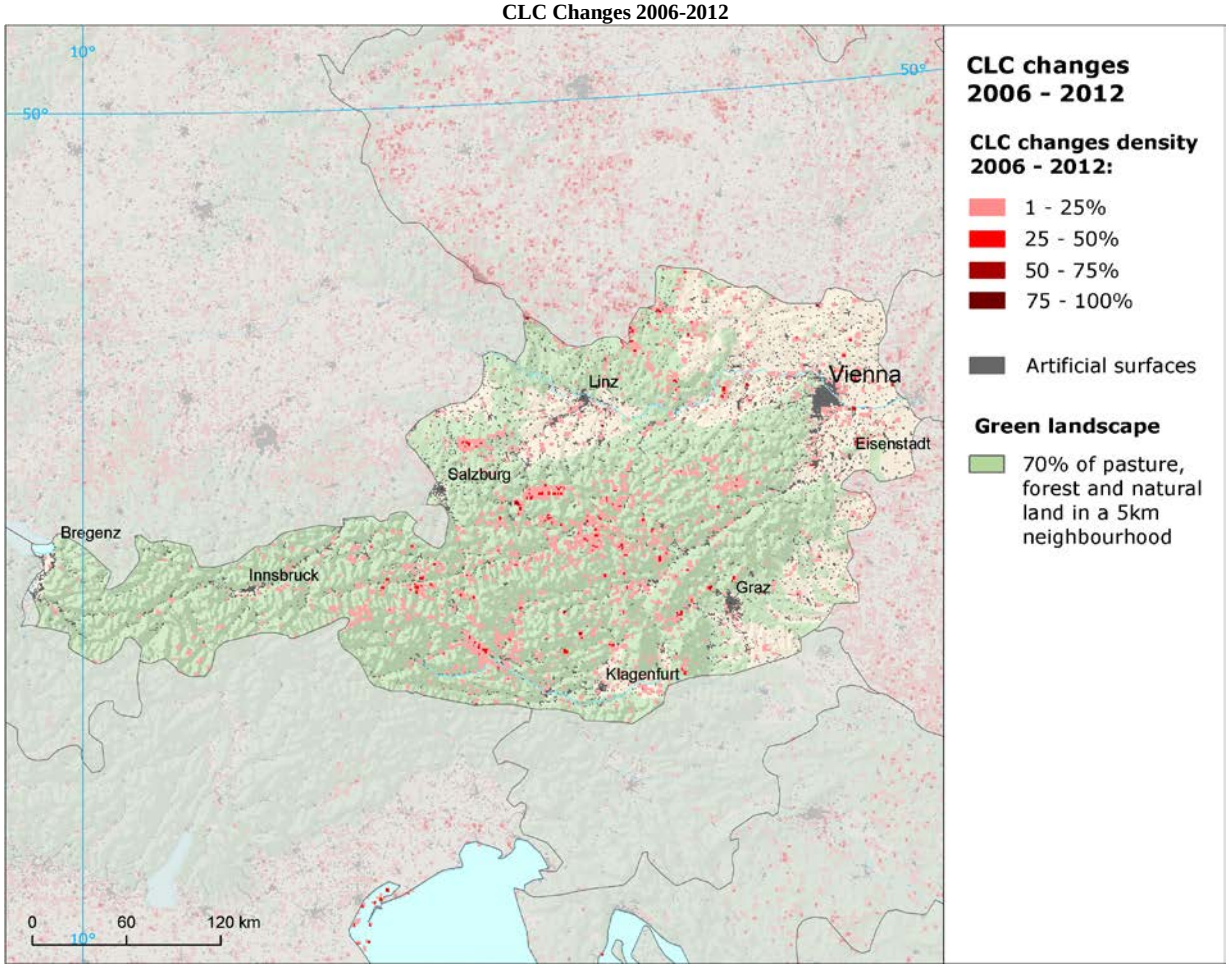


12.45. Mean annual conversions of wetlands and water LC [ha/year]

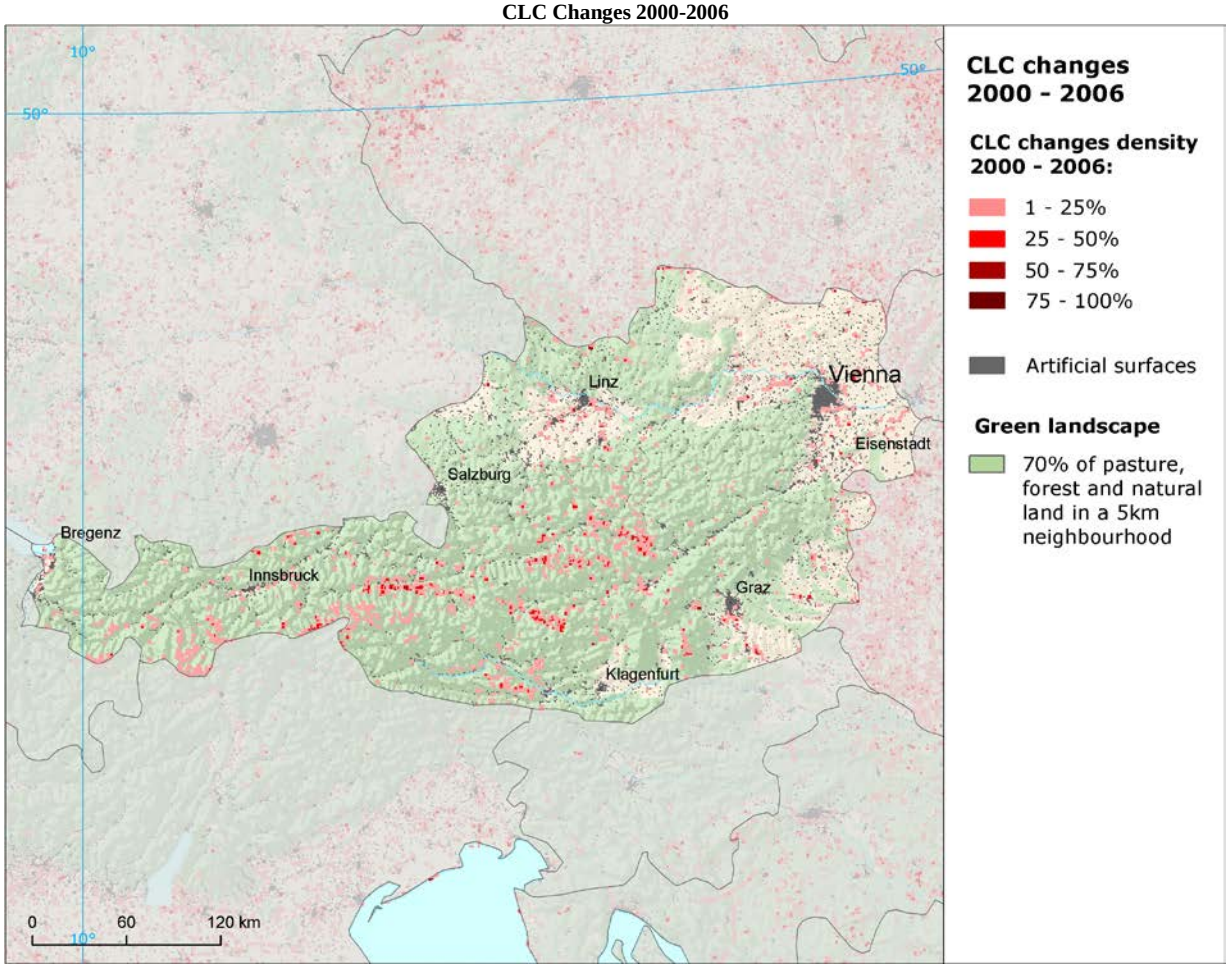


Austria

CLC Changes 2006-2012

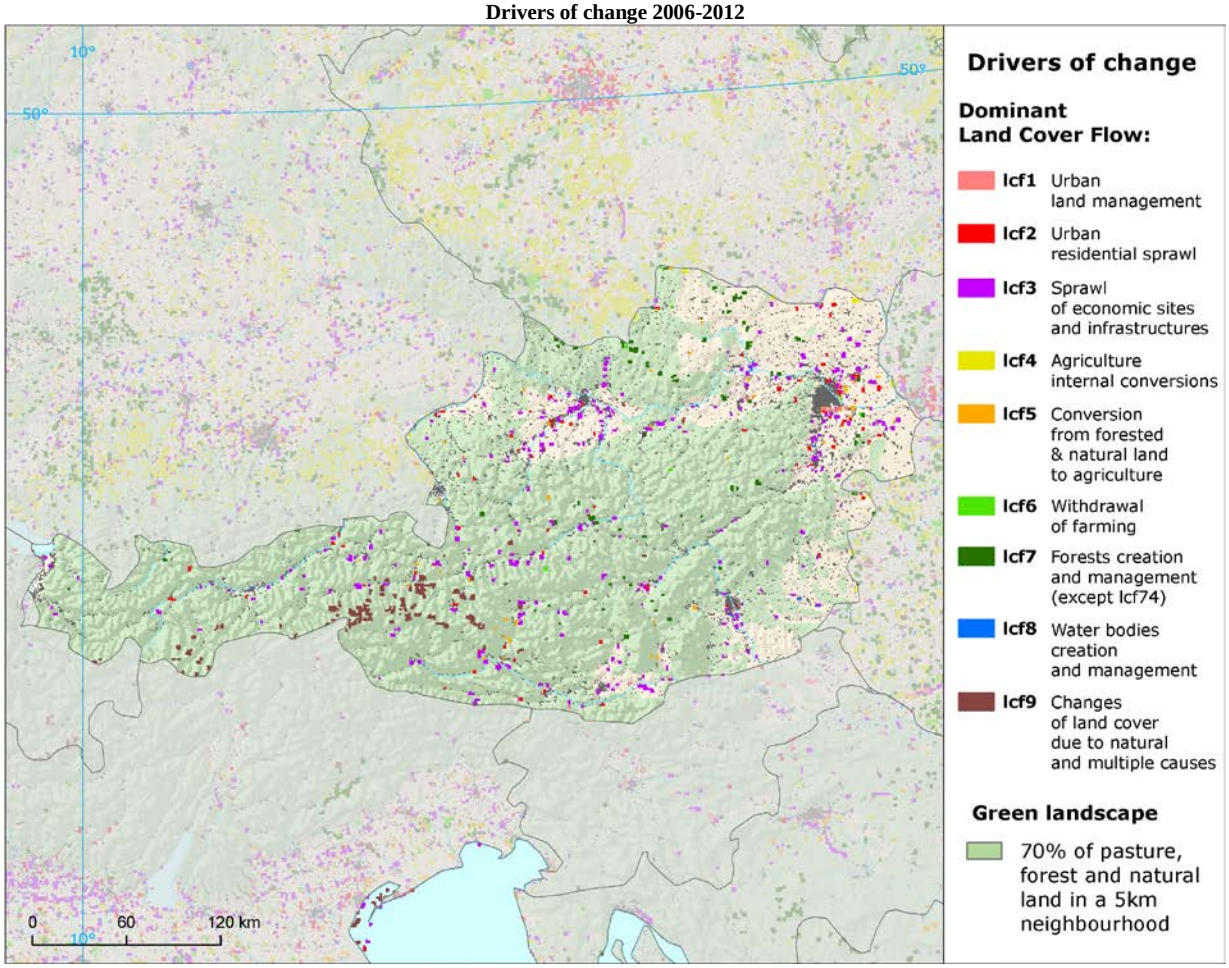


CLC Changes 2000-2006

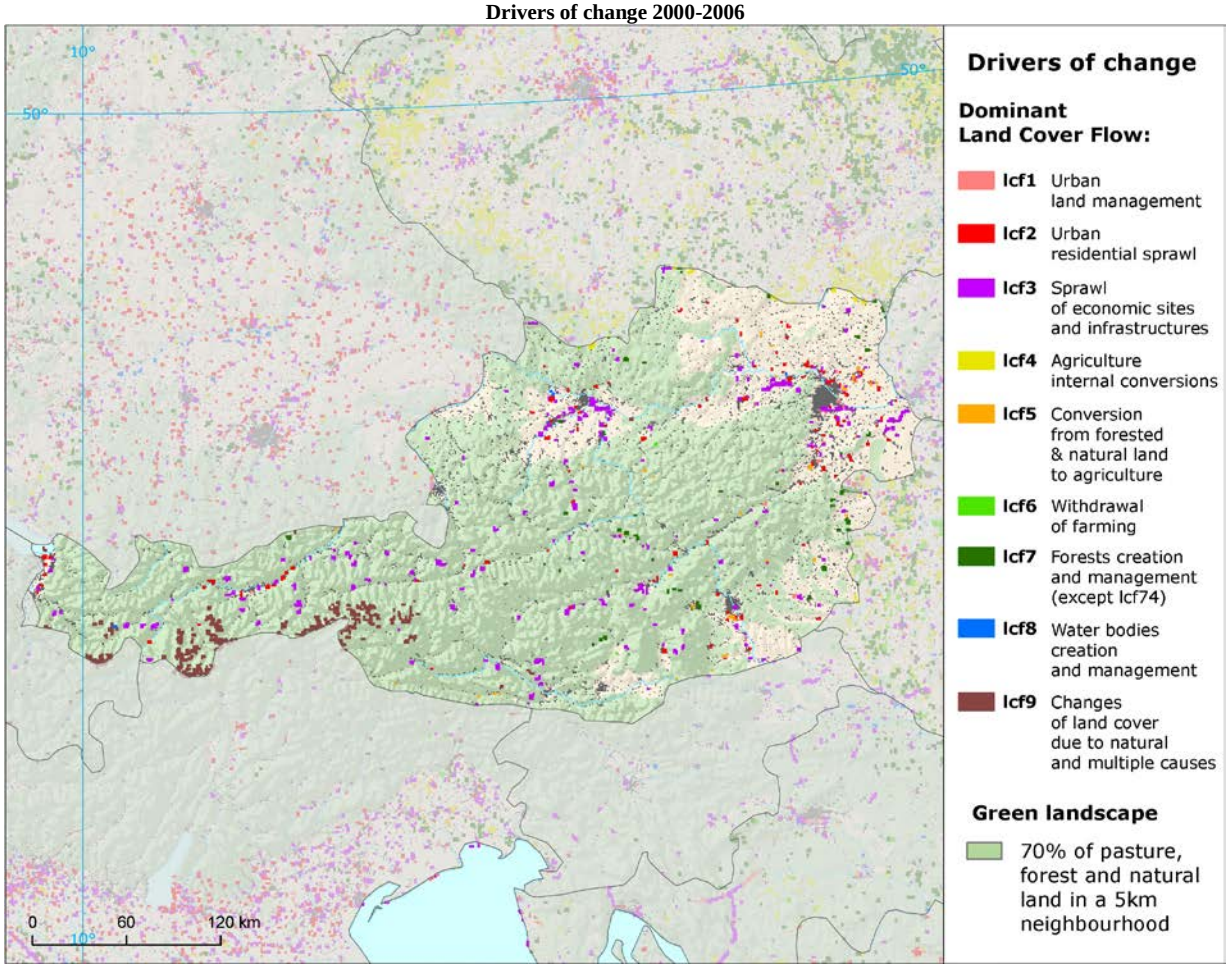


Austria

Drivers of change 2006-2012

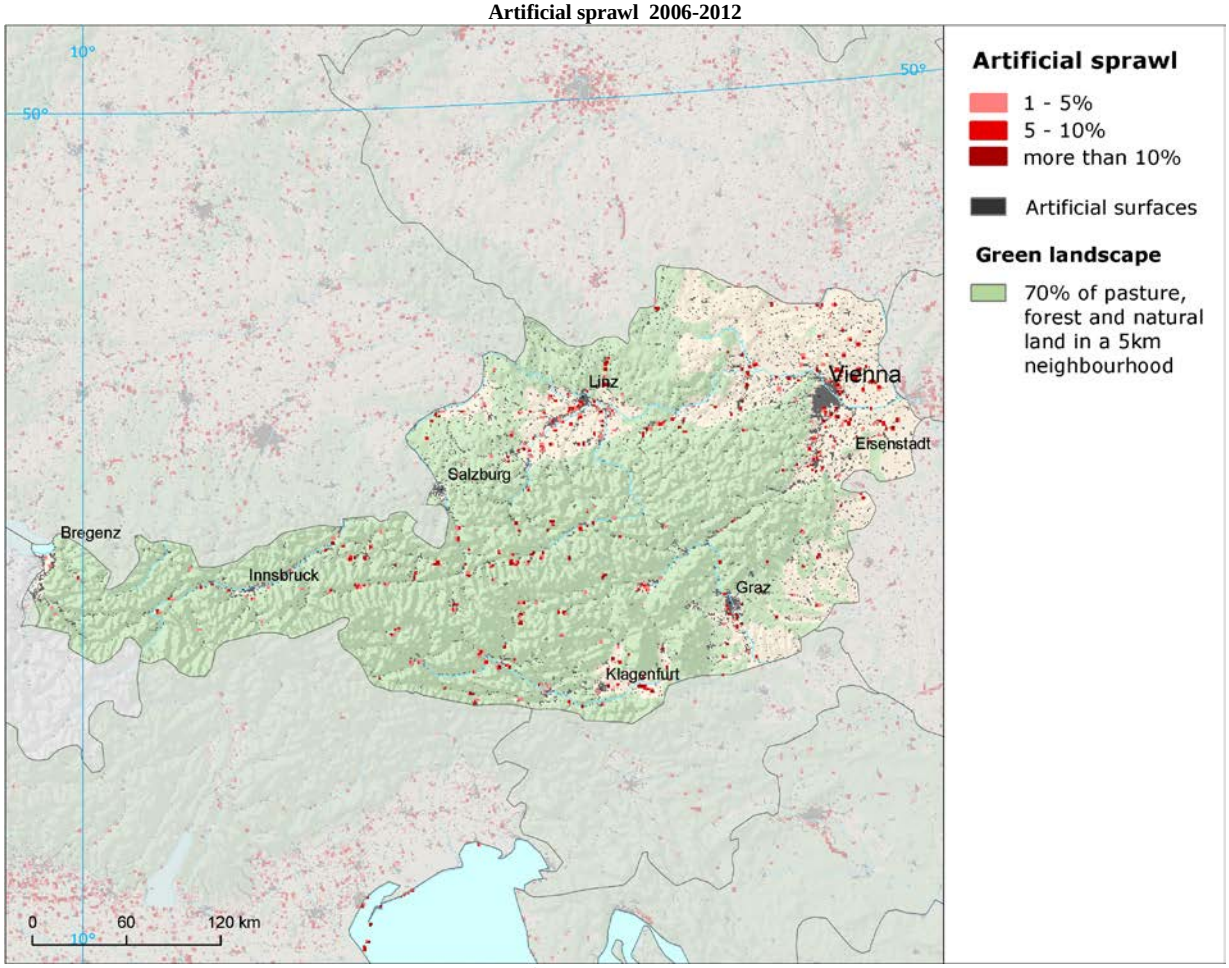


Drivers of change 2000-2006

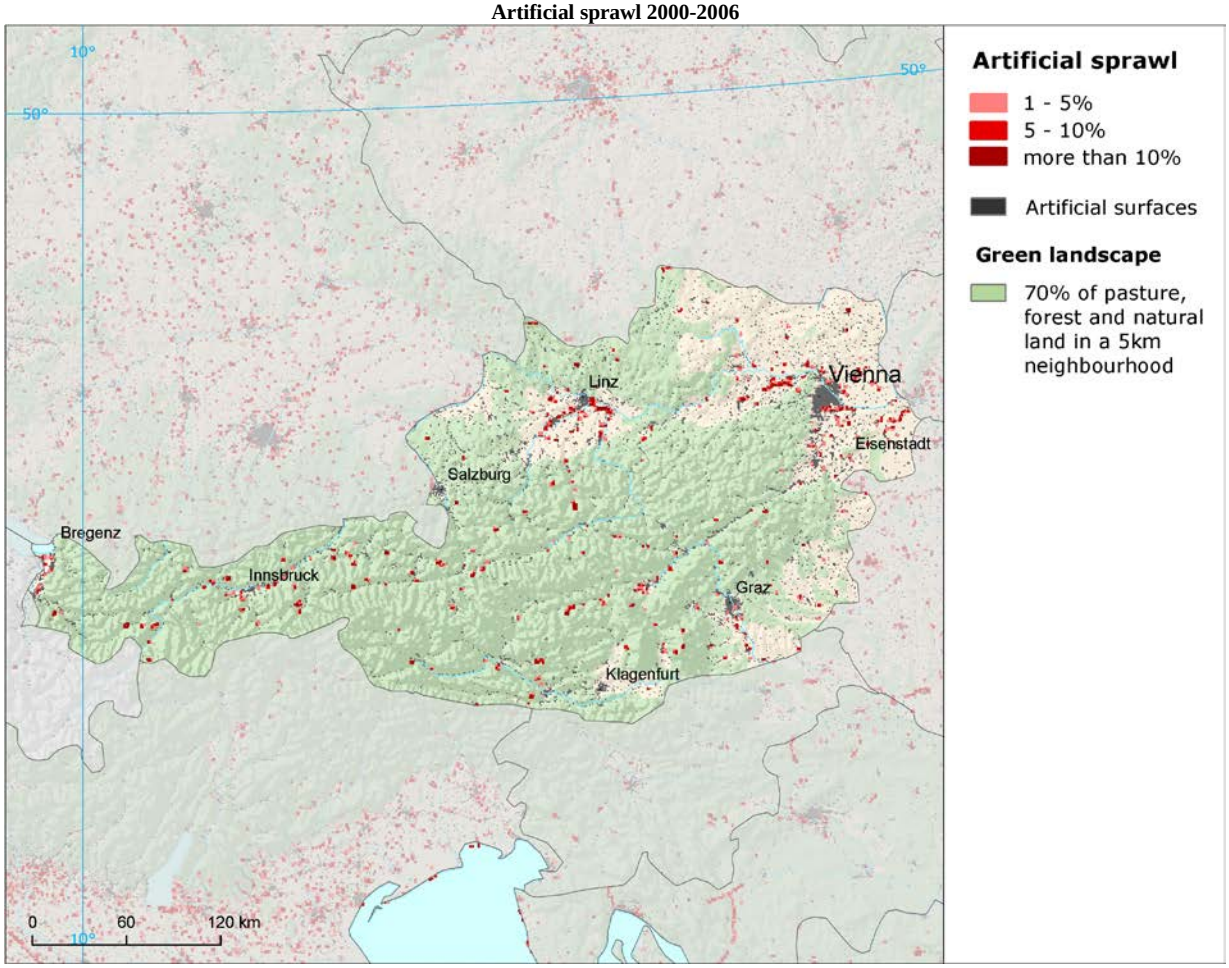


Austria

Artificial sprawl 2006-2012

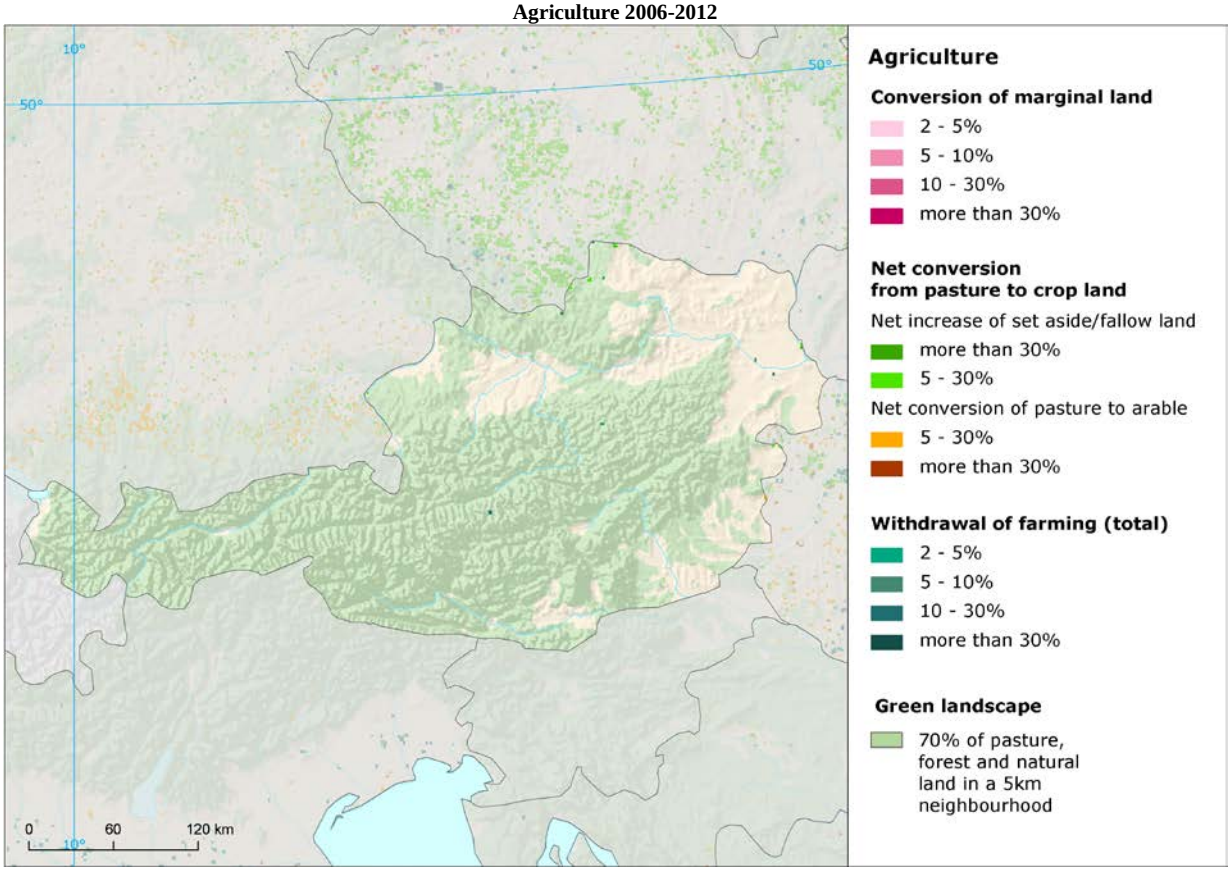


Artificial sprawl 2000-2006

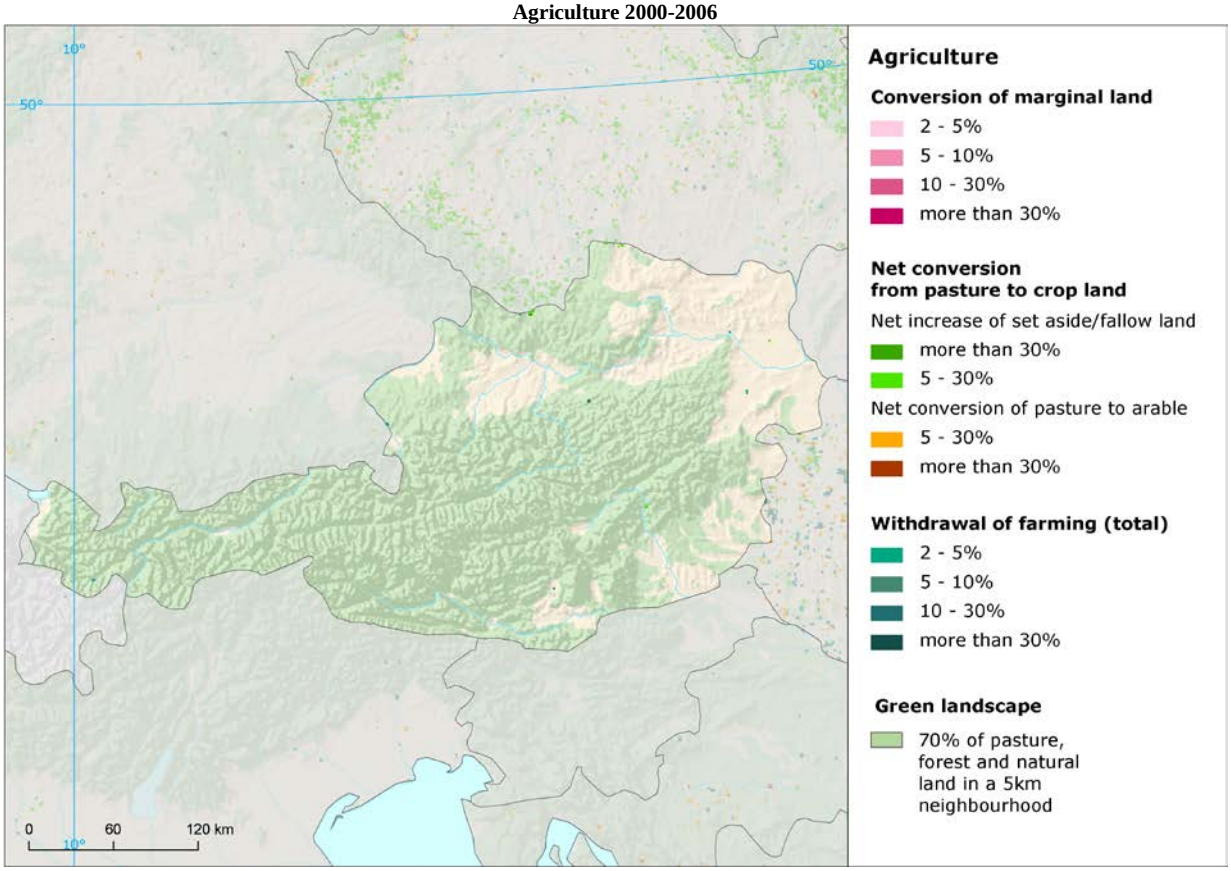


Austria

Agriculture 2006-2012

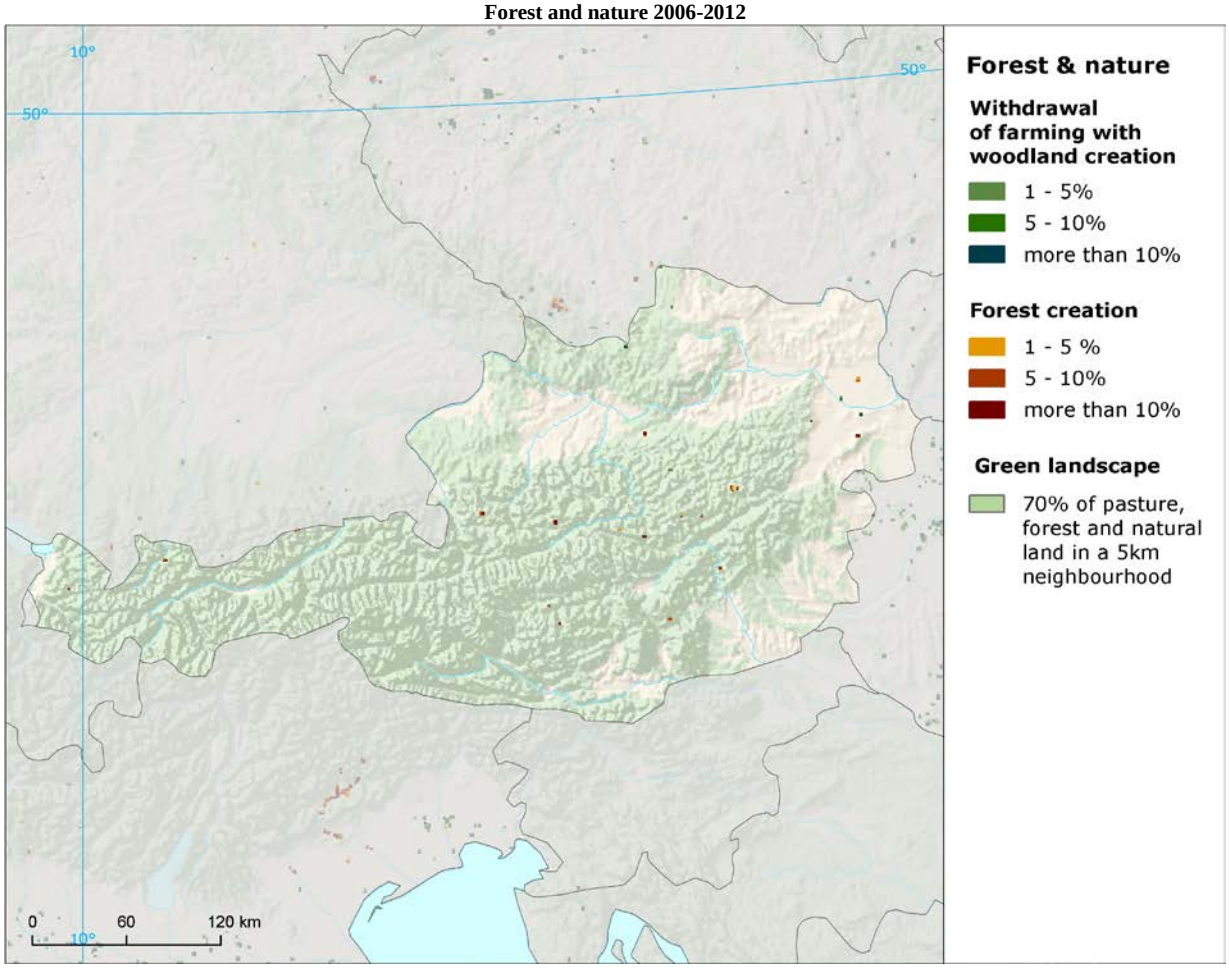


Agriculture 2000-2006



Austria

Forest and nature 2006-2012



Forest and nature 2000-2006