

CARD NAME	SCENARIO	DESCRIPTION	GIS OPERATIONS (with reference to Corinne Land Cover's nomenclature)
URBAN GREENING	SMART CITY	Greenery is applied to buildings' facades, roofs, and infrastructures	15% of "industrial or commercial units" (121) and 30% of "discontinuous urban fabric" (112) become "green urban areas" (141)
	POST-GROWTH	Underused urban areas are transformed into urban parks	10,5% of "industrial or commercial units" (121) and 7% of "discontinuous urban fabric" (112) become "green urban areas" (141)
	DE-GROWTH	Dismissed urban areas of the city are demolished and re-naturalised	15% of "industrial or commenrcial units" (121) and 10% of "discontinuous urban fabric" become "mixed forest" (313)
SUSTAINABLE ENERGY	SMART CITY	Digital systems based on real-time data allow for a more efficient use of energy	There are no land use transformations
	POST-GROWTH	Solar panels are installed in peri-urban fields	All "non-irrigated arable land" (211) becomes "airports" (124) (this category aims at simulating the performance of a solar panel field in terms of NCP provisions)
	DE-GROWTH	Peri-urban forests are cyclically cut to use wood for energy	10% of all "forest and seminatural areas" (31) becomes "sparsely vegetated areas" (333) (40%), "transitional woodland/shrubs" (324) (30%), and "sclerophyllous vegetation" (323) (30%)
SUSTAINABLE MOBILITY	SMART CITY	As the efficiency of logistics improves some industrial areas can be cleared	20% of "industrial or commercial units" (121) becomes "green urban areas" (141)
	POST-GROWTH	Green and blue infrastructures are designed to promote slow mobility	An offset of 300m along "road and rail networks and associated land" (122) becomes "mixed forest" (313)
	DE-GROWTH	Slow mobility (e.g., walking, cycling) become the main mean of transport	All areas covered by "road and rail networks and associated land" (122) become "sport and leisure facilities" (this category aims at simulating the performance of a slow mobility network field in terms of NCP provisions)
WATER MANAGEMENT	SMART CITY	Peri-urban water basins are created to store rainwater	5 water basins of 140 hectares each are created
	POST-GROWTH	New vegetation improves the drainage of green areas	All "green urban areas" (141) become "mixed forest" (313) (this category aims at simulating the performance of phytodepuration systems in terms of NCP provisions)
	DE-GROWTH	Dismissed urban areas of the city are demolished and re-naturalised	15% of "industrial or commercial units" (121) and 10% of "discontinuous urban fabric" become "natural grassland" (321)
URBAN FARMING	SMART CITY	Plantation of new trees on private land is promoted	15% of "industrial or commenrcial units" (121) becomes "annual crops associated with permanent crops" (241)
	POST-GROWTH	Collective farms substitute most current urban parks	All "green urban areas" (141) become "non-irrigated arable land" (211) (50%) and "complex cultivation patterns" (242) (50%)
	DE-GROWTH	Farming production become decentralised and self-managed	50% of "non irrigated arable land" (211) becomes "agro-forestry areas" (244)
URBAN FORESTRY	SMART CITY	New trees are planted along infrastructures	5% of "discontinuous urban fabric" (112) becomes "mixed forest" (313)
	POST-GROWTH	New trees are planted along infrastructures and in underused plots	An offset of 300m along "road and rail networks and associated land" (122) become "mixed forest" (313), 10% of "industrial and commercial units", and 5% di "discontinuous urban fabric" (112) become "mixed forest" (313)
	DE-GROWTH	New trees are planted in dismissed areas of the city	20% of "industrial or commercial units" (121) and 5% of "discontinuous urban fabric" (112) become "mixed forest"
URBANISATION	SMART CITY	Population grows but the city does not expand	30% of "discontinuous urban fabric" (112) becomes "continuous urban fabric" (111)
	POST-GROWTH	New urban developments are forbidden	There are no land use transformations
	DE-GROWTH	Population declines and peripheries become more cultivated	25% of "discontinuous urban fabric" (112) becomes "complex cultivation patterns" (242)
FARM TO FORK	SMART CITY	As food waste is reduced some peri-urban fields can be converted into forest	10% of "arable land" (21), "permanent crops" (22), "annual crops associated with permanent crops" (241), and "complex cultivation patterns" becomes "mixed forest" (313)
	POST-GROWTH	Agriculture is reorganised to enhance the diversity of crops	50% of "non-irrigated arable land" (211) becomes "annual crops associated with permanent crops" (241) (15%), "fruit trees and berry plantations" (222) (15%), "olive groves" (223) (10%), and "vineyards" (221) (10%)
	DE-GROWTH	All private gardens are used to farm	10% of "discontinuous urban fabric" (112) becomes "complex cultivation patterns" (242)
BIODIVERSITY	SMART CITY	All rooftops have greenery	15% of "industrial or commercial units" (121) and 10% of "discontinuous urban fabric" (112) become "natural grassland" (321)
	POST-GROWTH	Some urban parks are redesigned to enhance biodiversity	70% of "green urban areas" becomes "mixed forest" (313) (50%) and "natural grassland" (321) (50%)
	DE-GROWTH	All urban greenery and sports fields are re-naturalised	All "green urban areas" (141) and 50% of "sport and leisure facilities" become "mixed forest" (313) (50%) and "natural grassland" 321 (50%)