

Adaptation
Strategy
development
in Belgium

► Johan Bogaert

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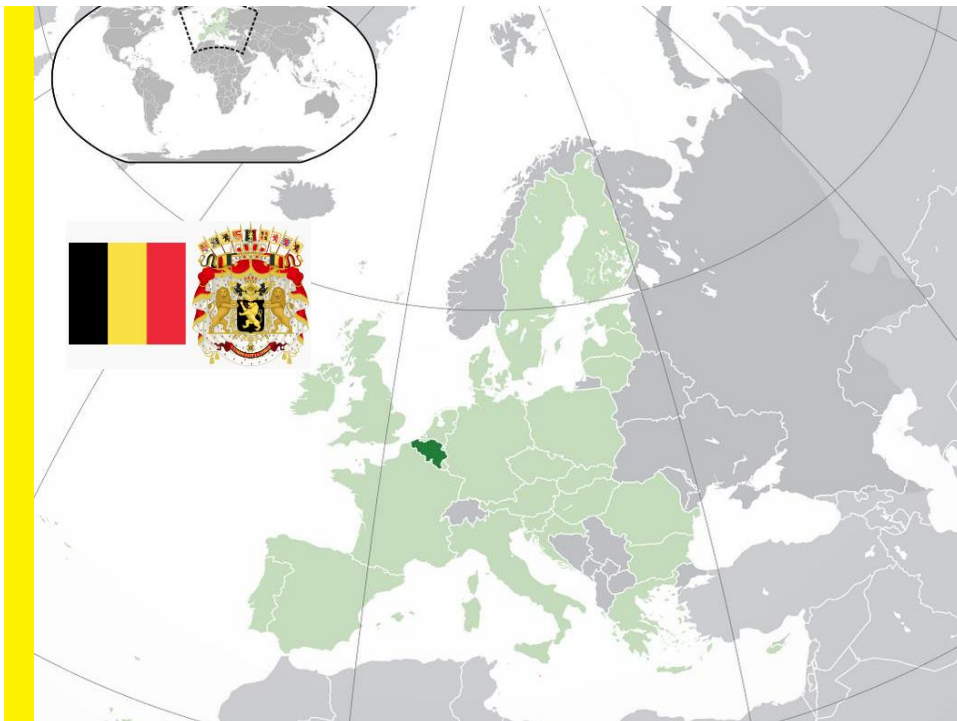
 **Flanders**
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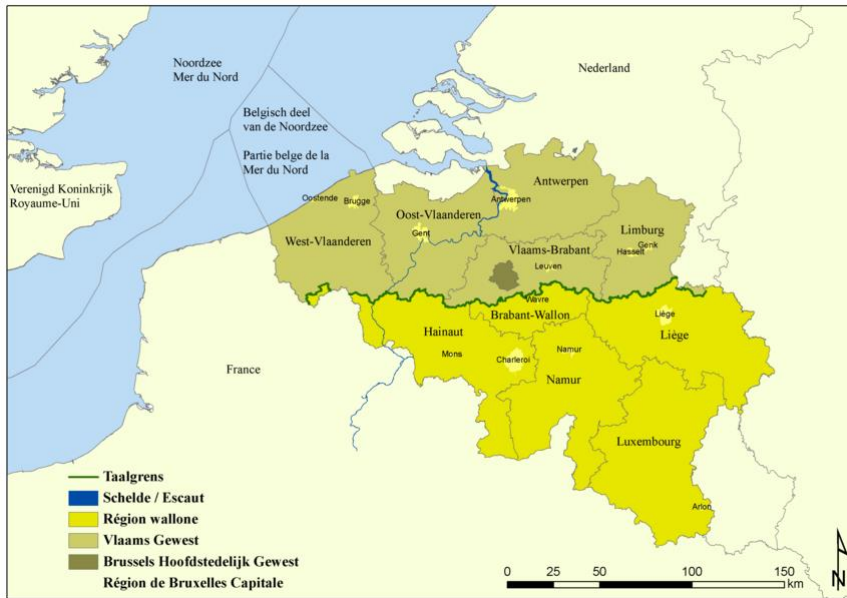
 **RÉGION WALLONNE**

 federale overheidsdienst
VOLKSGEZONDHEID,
VEILIGHEID VAN DE VOEDSELKETEN
EN LEEFMILIEU

 **BRUSSELS HOOFDSTEDELIJK GEWEST**
REGION DE BRUXELLES-CAPITALE

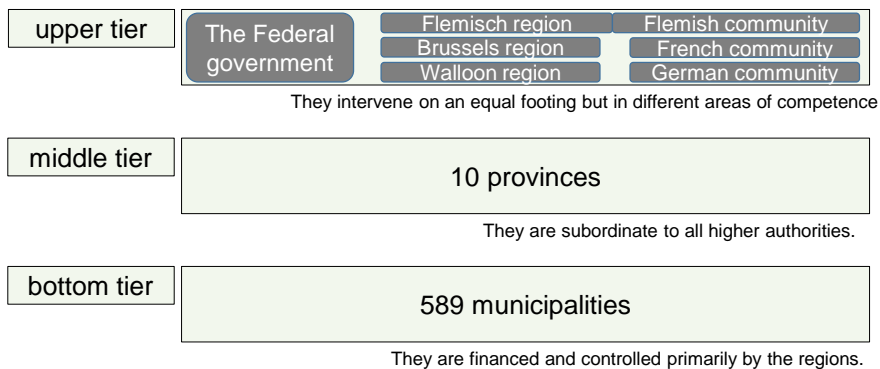
ECRAN expert training on risk and vulnerability 09.11.2015



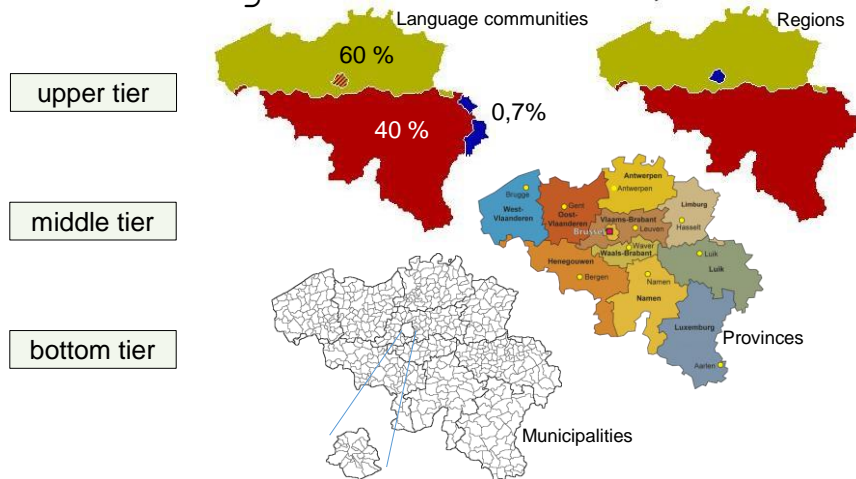


The Belgian decision making

three-tiered organisation



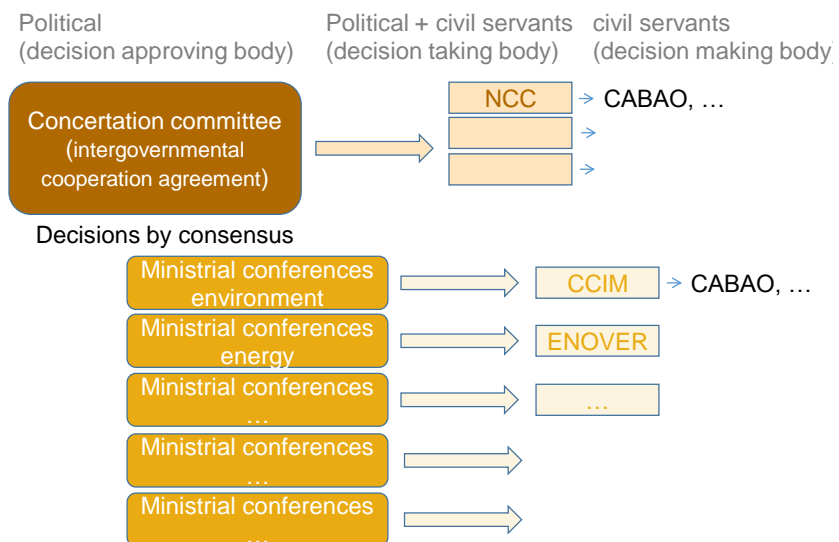
The Belgian decision making



ECRAN expert training on risk and vulnerability

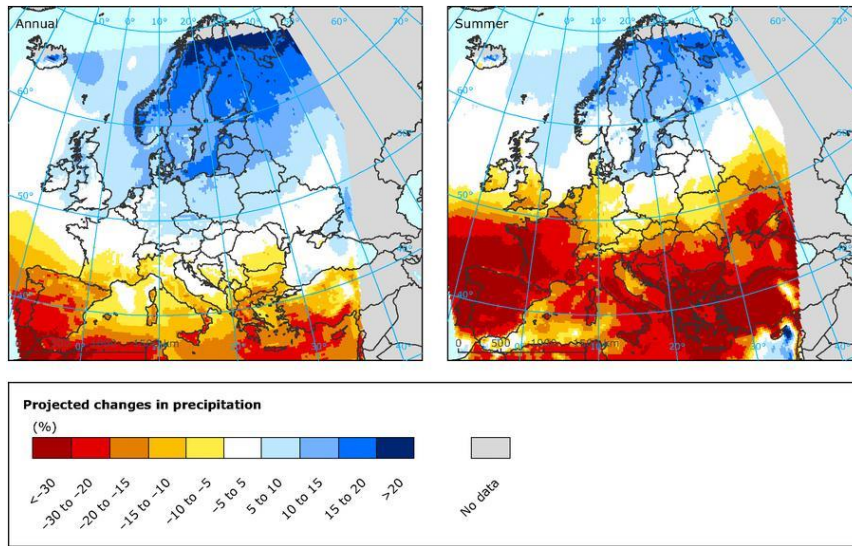
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Decision structure

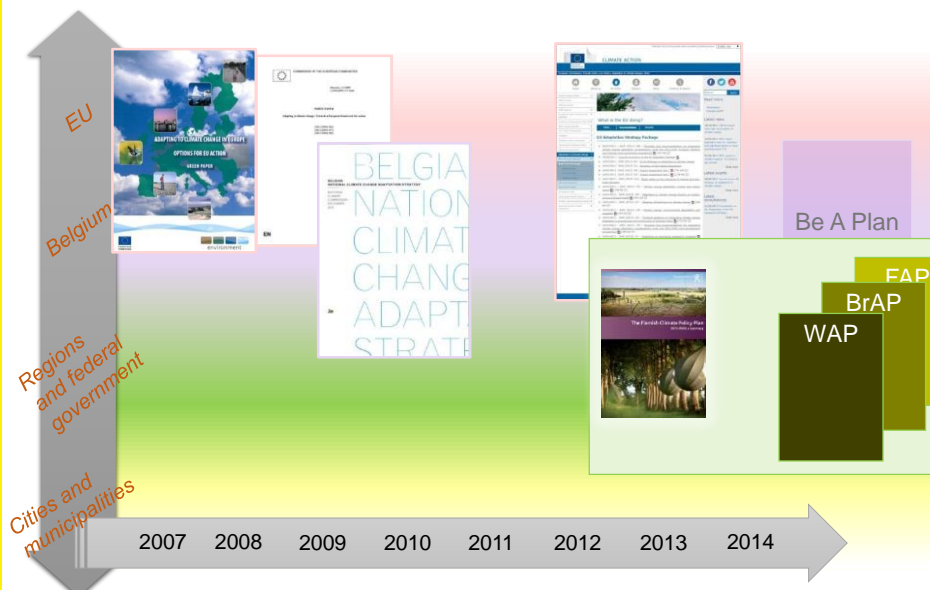


ECRAN expert training on risk and vulnerability

09.11.2015

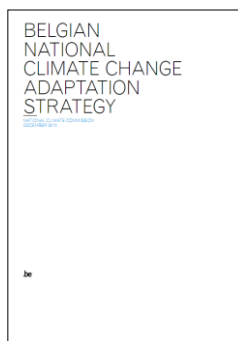


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The National Adaptation Strategie

Introduction

1

Climate framework

2

Impacts of climate change in Belgium

3

Adaptation in Belgium

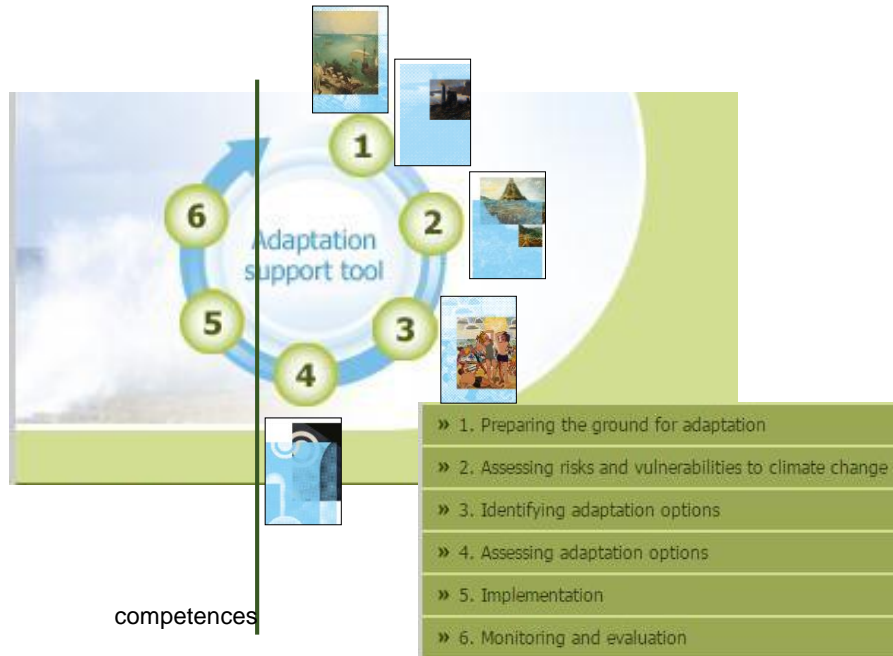
4

Strategy

5



<http://www.lne.be/themas/klimaatverandering/adaptatie/nationale-adaptatie-strategie>



Federal and regional level

- Flanders Adaptation Plan
 - Adopted 2013
 - Part of the climate plan
 - Period 2014 - 2020
 - 76 actions on adaptation
 - 11 sectors involved
 - Focus on
 - × Understand the Flemish vulnerability to CC
 - × Improve adaptation
 - First progress report



Federal and regional level

► Walloon Adaptation Plan

- Part of the Air-Climate-Energy plan (PACE)
- 7 sectors involved
- Actions are also proposed in order to
 - x develop a strong knowledge base
 - x pursue the international collaboration.



Federal and regional level

► Brussels Adaptation plan

- In public consultation
- Part of Brussel Air-Climate-Energy plan
- Specific to urban area
- 4 themes (infrastructures, forestry management, water management, natural patrimony)



Federal and regional level

- ▶ Federal Adaptation plan
 - In finalisation
 - Period 2014 - 2020
 - 34 actions on adaptation
 - 10 sectors involved
 - focus on
 - × building capacity to assess, anticipate and respond to risks associated with climate change impacts (increased knowledge)
 - × anticipate and mitigate risks and maximize the potential benefits of climate change.



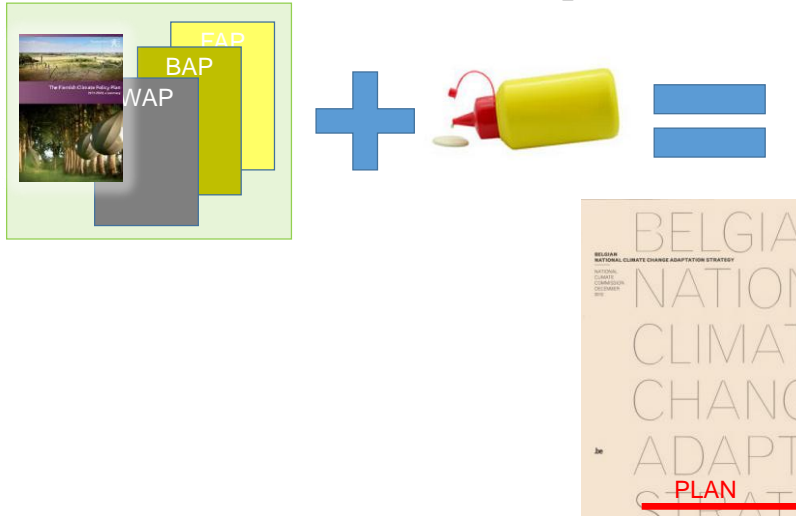
Provincial and local level



Mayors Adapt



The National Adaptation



The national Adaptation plan

- ▶ "In final stage"
- ▶ Focus on
 - What's lacking in the federal and regional plans.
- ▶ ± 10 actions



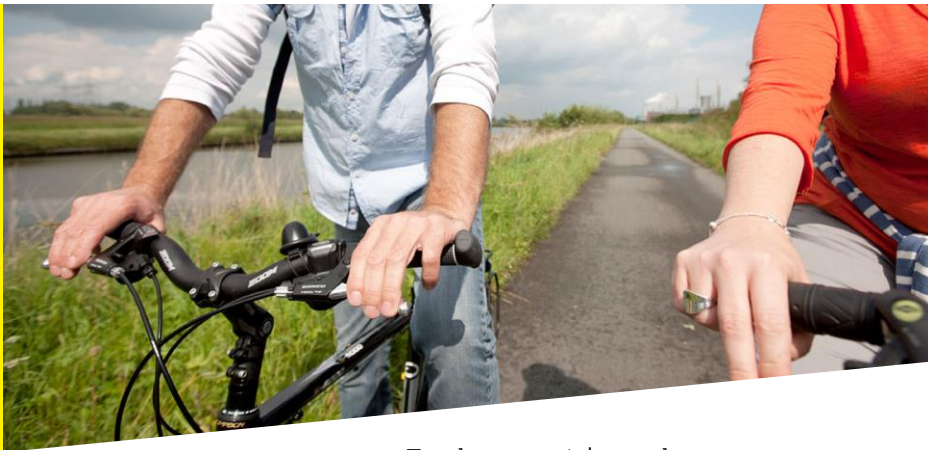
The national Adaptation plan



The national Adaptation plan



Wet Projections	2030		2050		2085			
Mean Projections	2030		2050		2085			
Dry Projections			2030		2050		2085	
Temperature rising (°C)	0,5	1	1,5	2	2,5	3	3,5	4
Agriculture	⬆ of erosion risk due to heavy rain							
	⬆ of loss of soils due to heavy rain							
	Variability of the crop production and breeding (⬆ of the frequency of extreme events)							
	⬆ of the pressure of diseases, parasites, weeds and invasion episodes							
Coastal Areas	⬆ of water needs and water stress risk							
	⬆ of yields or production of certain crops Limiting factors (photoperiod, water, fertility) and reversal of the trend?							
	⬆ risks of breaking of natural (mostly sand and dunes) coastal defences							
	⬆ risks of breaking of man made (dykes, wave breakers, ...) coastal defences							
Fisheries	⬆ of risks of higher stormfloods and waves							
	damages caused by changes of the wind regime and golt height							
	reduction of sweet water upper layer of the ground water in the polders (salt intrusion) affecting natural systems and infrastructures							
	changes in the abundance and distribution of marine species, inclusive commercial fish stocks							
Spatial Planning / Infrastructures	new commercial species will appear (shift from South to North)							
	new harmful species will appear							
	⬆ vulnerability of highly specialised fishery sector							
	⬆ of flood risk							
Forest	Risk of disruption of transport by waterways (low-flows more important)							
	Impact of heatwaves and amplification by heat islands							
	damage to infrastructure due to high temperatures (rail deformation, etc.)							
	Risk of disruption of road and rail transport and damage to infrastructure due to snow and frost							
Biodiversity	Impacts on clay soils (shrinkage)							
	Karst Risk							
	Damage related to a possible increasing of the frequency of storms							
	Modification of the distribution areas of forest species (bad for wood production)							
	Amplification of invasions							
	⬆ of damage related to fires, storms, droughts							
	damage related to frost							
	⬆ of the pululations frequency							
	⬆ of the growing and then limitation by soil fertility and droughts							
	Phenology modifications							
	Added pressure on vulnerable areas (peat areas ...)							
	changes in distribution areas							
	Amplification of invasions							
	Phenology modifications							
	⬆ of energy consumption for cooling (cold chain/ air conditioning in summer)							
	Identity and capacity of installations (innovation and transport)							



► To be continued ...

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