



Energielandschap
OOST-VLAANDEREN

Creating Landscapes for windenergy in the East Flanders Core Area

Fachkongress 16 juni 2016

STRATEGISCH PROJECT
Ruimtelijk Structuurplan Vlaanderen



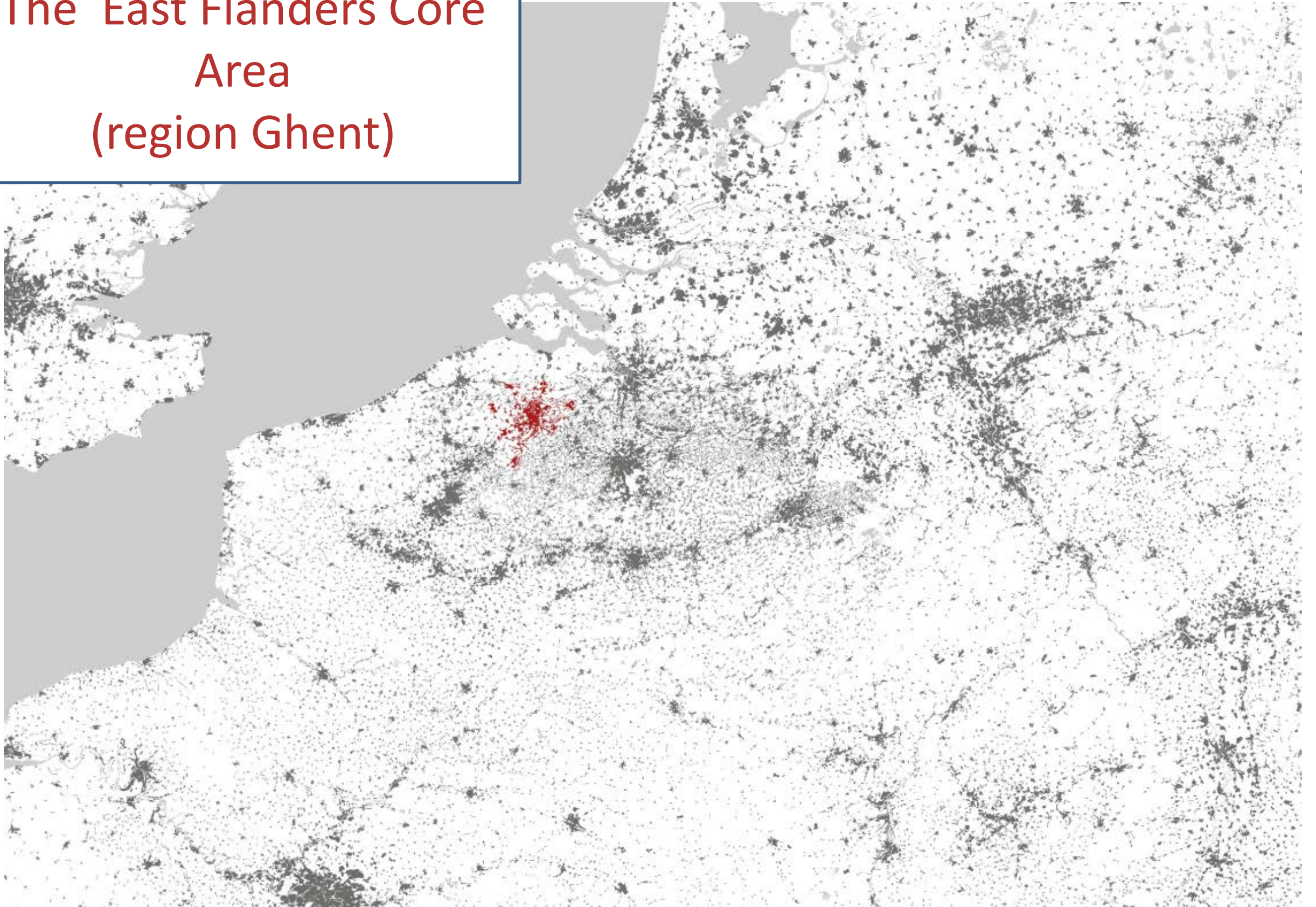
 Provincie
Oost-Vlaanderen
Voor ieder van ons

Overview

1. The East Flanders Core Area (*'region Ghent'*)
2. Creating landscapes for windenergy:
 - A framework and a spatial plan was needed...
 - On speaking terms with windfirms !
 - Creating involvement = creating value 😊
 - Upgrade the environment!
3. Recommendations en perspectives

The East Flanders Core Area
(region Ghent)

Near Brussels, Antwerp, and Louvain





The East Flanders Core Area



Part of the 'Central part of Flanders'



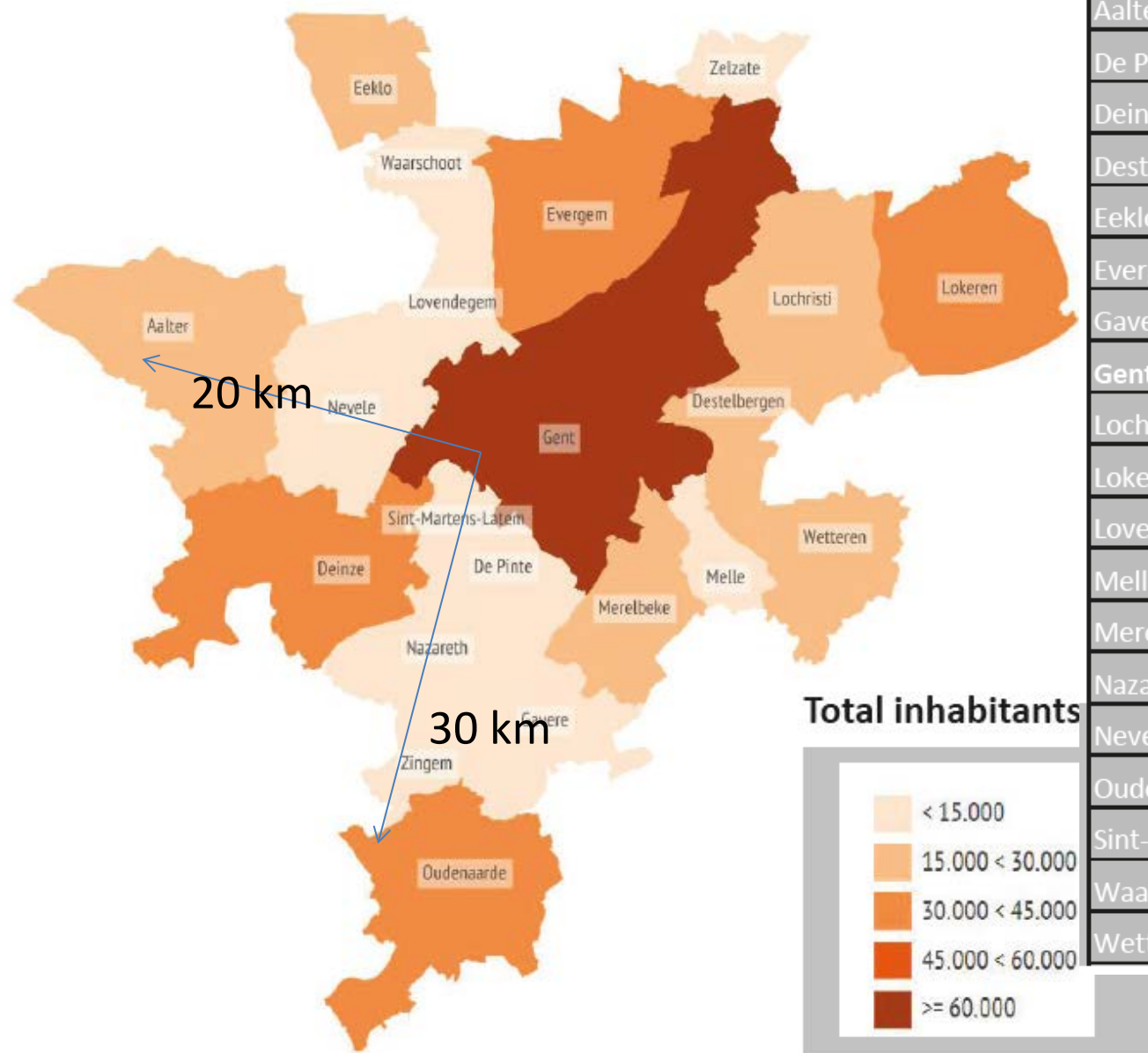
21/06/2010

The East Flanders Core Area

- In de centre of the province of East Flanders..
- Between the local level (municipalities) and the national/regional level (Belgium and Flanders)
- Not a stadsregio... yet !
- Region of 620 000 inhabitants ; 960 km² ; 21 municipalities
- Port of Ghent ; knowledge institutes , a lot of infrastructures and rivers..



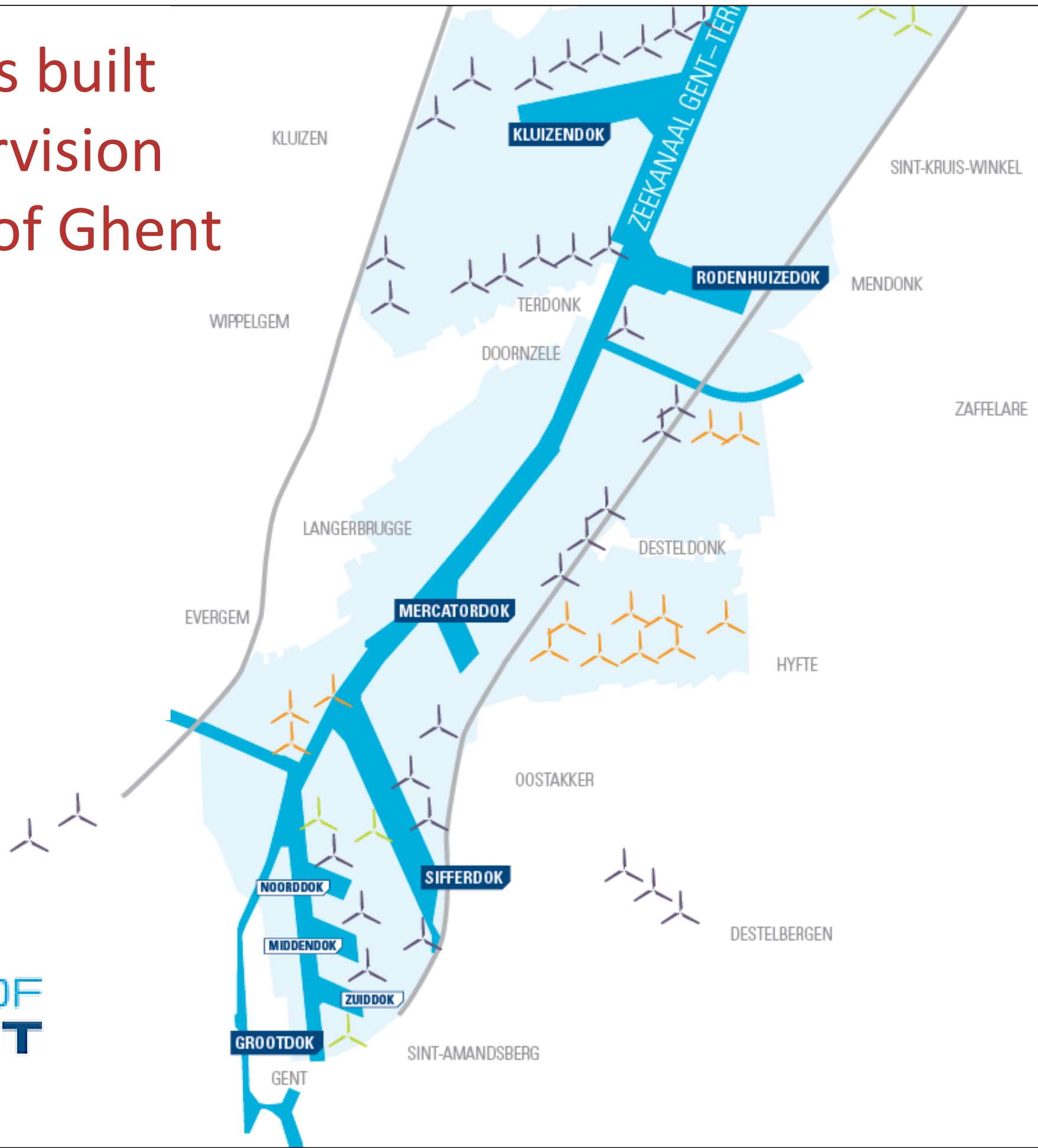
East Flanders Core Area



Municipality	Distance to Ghent (in km)	Inhabitants [2015]	Surface (in km ²)	Characteristics
Aalter	20	20.053	82	large municipality
De Pinte	9	10325	18	small municipality
Deinze	17	30.426	76	small city
Destelbergen	5	17897	27	small municipality
Eeklo	19	20.675	30	small city
Evergem	7	34.461	75	large municipality
Gavere	15	12562	31	small municipality
Gent	0	252.962	156	central city
Lochristi	9	22.107	60	large municipality
Lokeren	19	40.544	68	small city
Lovendegem	10	9530	19	small municipality
Melle	8	11129	15	small municipality
Merelbeke	7	24114	37	small municipality
Nazareth	14	11535	35	small municipality
Nevele	13	12061	52	small municipality
Oudenaarde	25	30.804	68	small city
Sint-Martens-Latem	8	8504	14	small municipality
Waarschoot	14	7891	22	small municipality
Wetteren	12	24.835	37	small city

Surface of 960 km²
21/06/2016

63 windmills built under supervision of the port of Ghent



Creating landscapes for windenergy

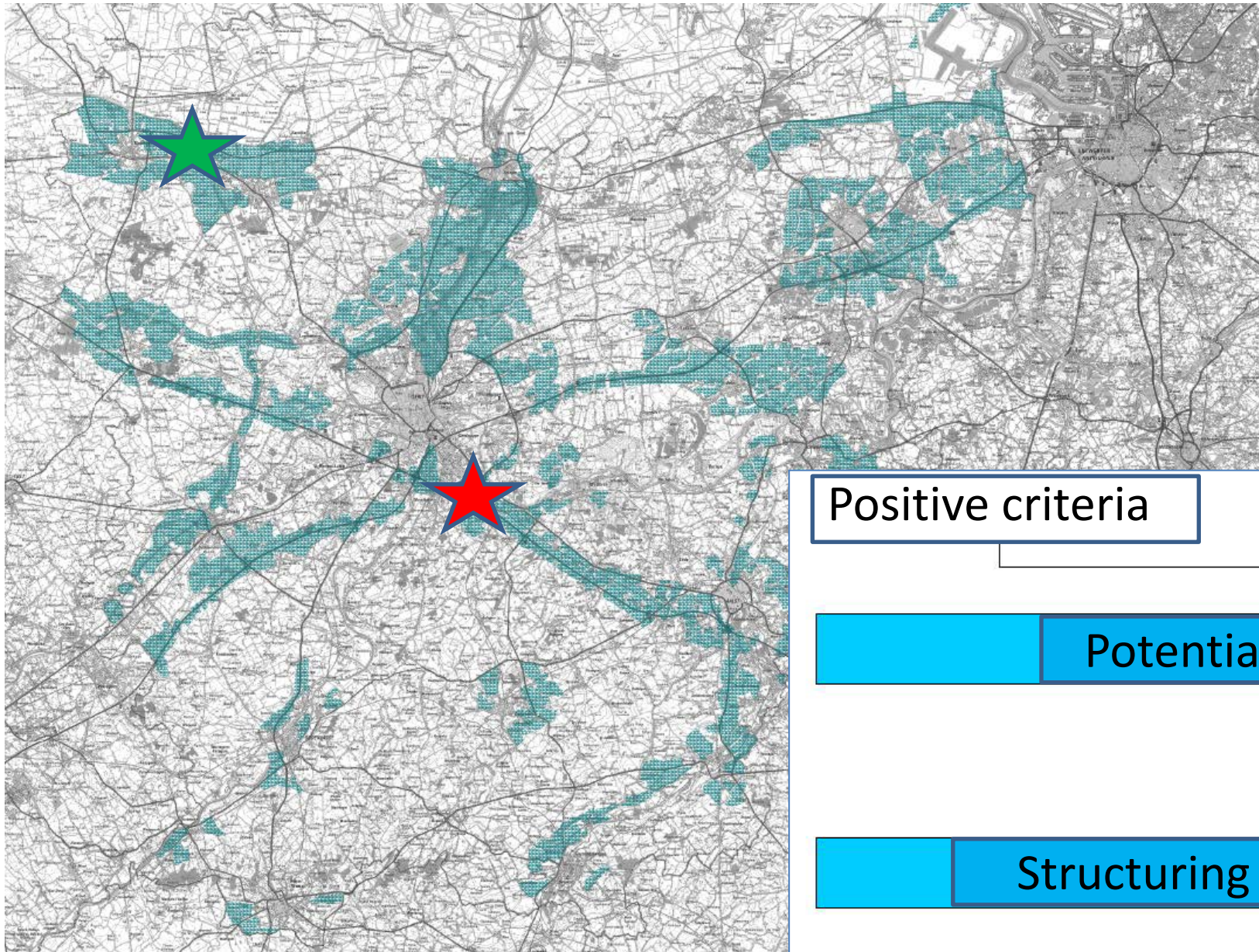


<https://vimeo.com/147593029>

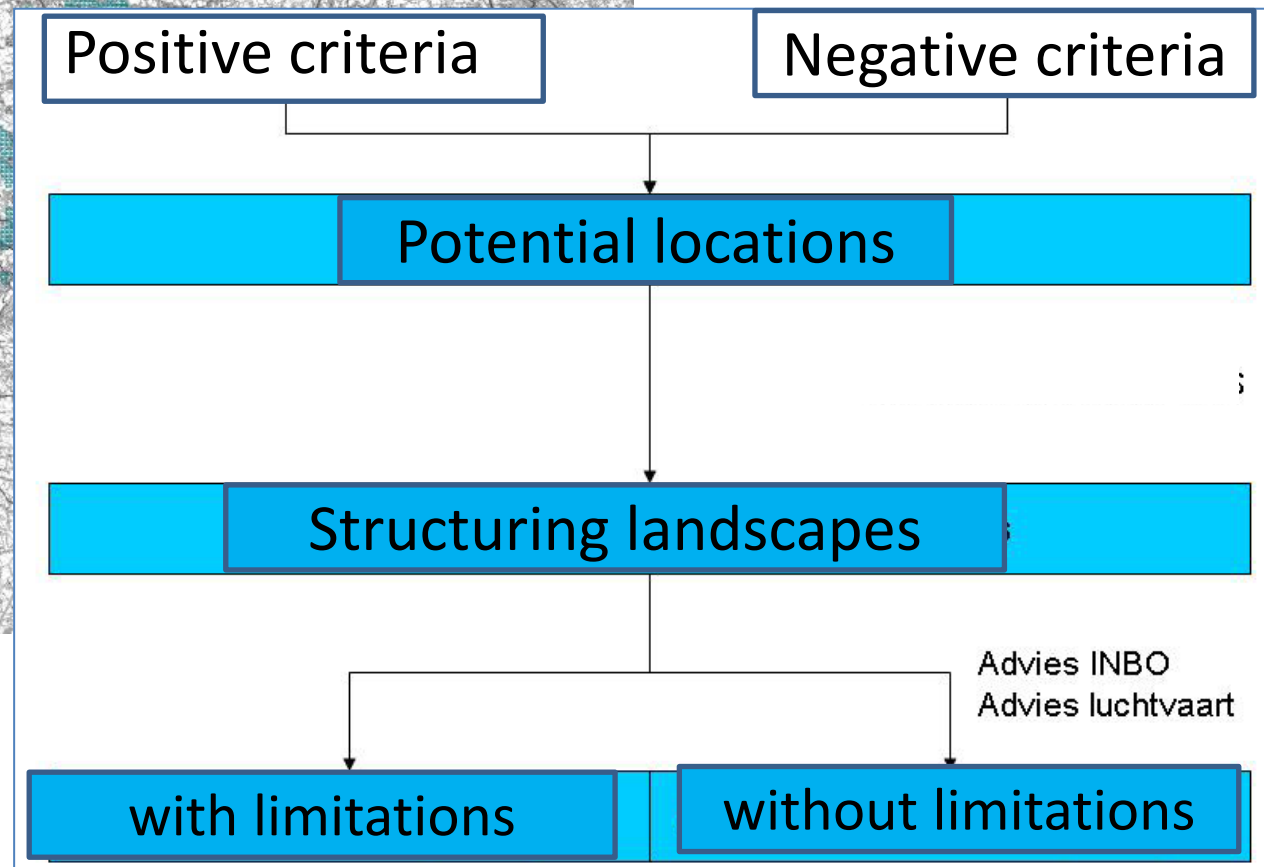
Creating landscapes for windenergy

1. A framework was needed...
2. Two plans: **Eeklo-Maldegem** and **E40**
 - Study of the landscape
 - Environmental study
 - Two spatial plans
3. On speaking terms with windfirms!
4. Creating involvement = creating value 😊

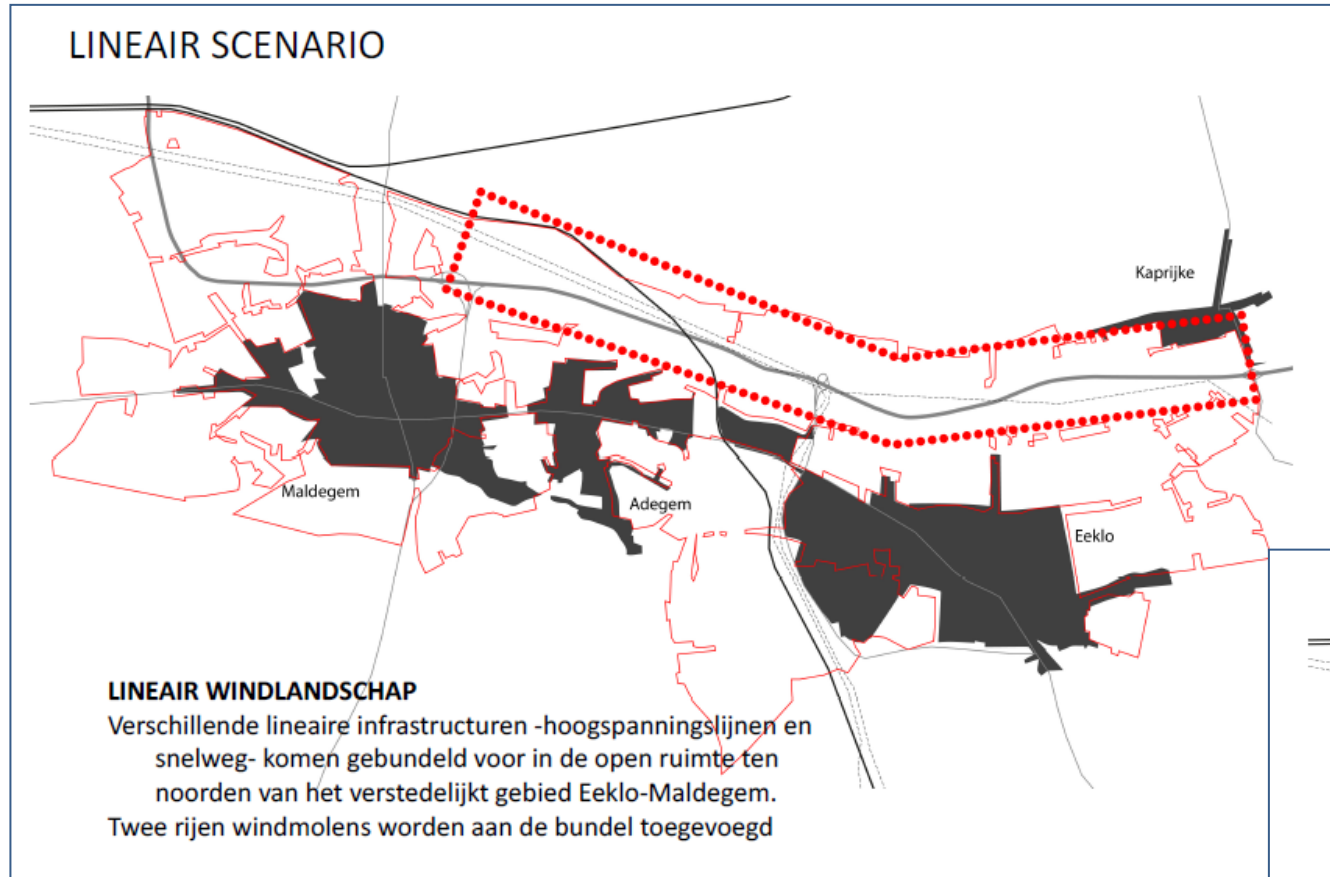
1. A framework for windenergy



Potential locations

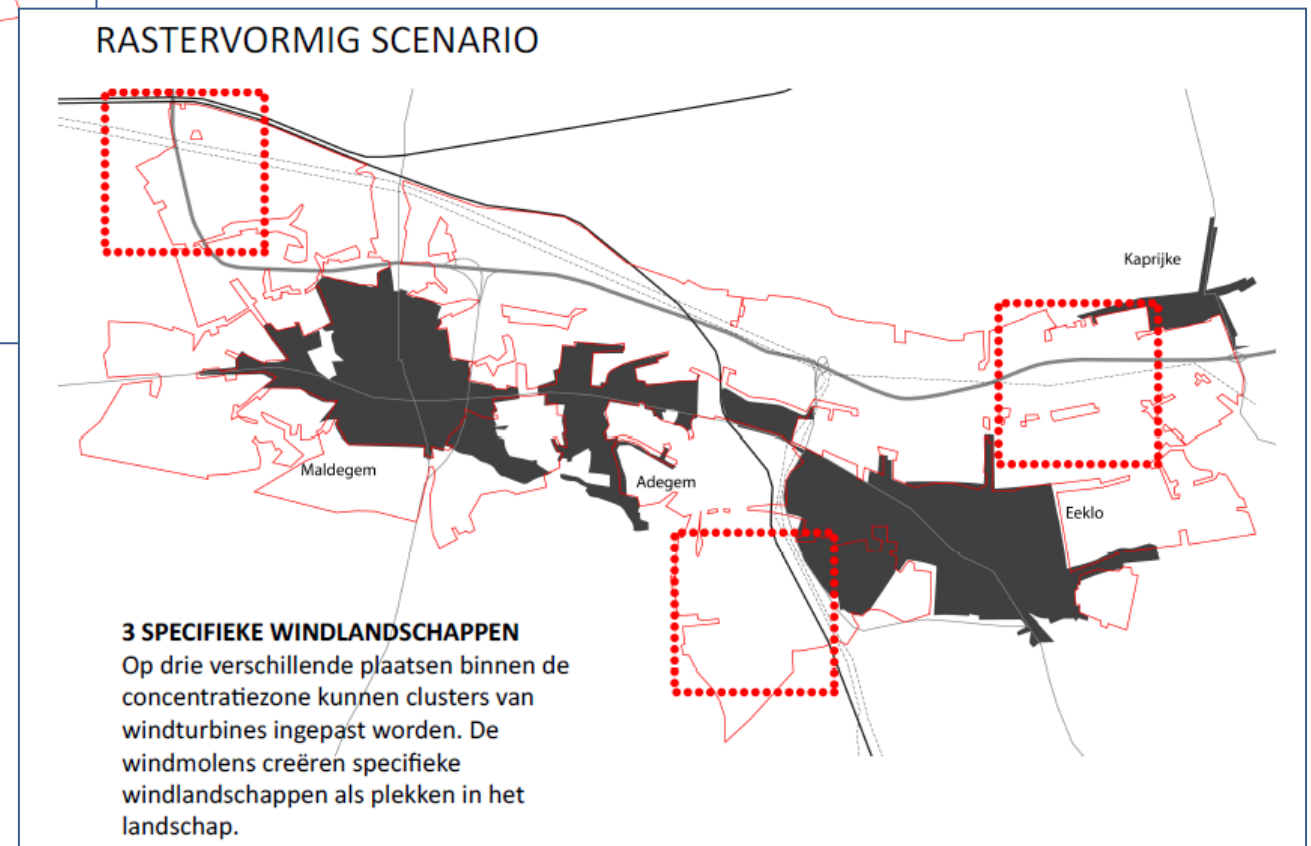


Studie of the landscape Eeklo-Maldegem



Linear scenario

Rasterscenario



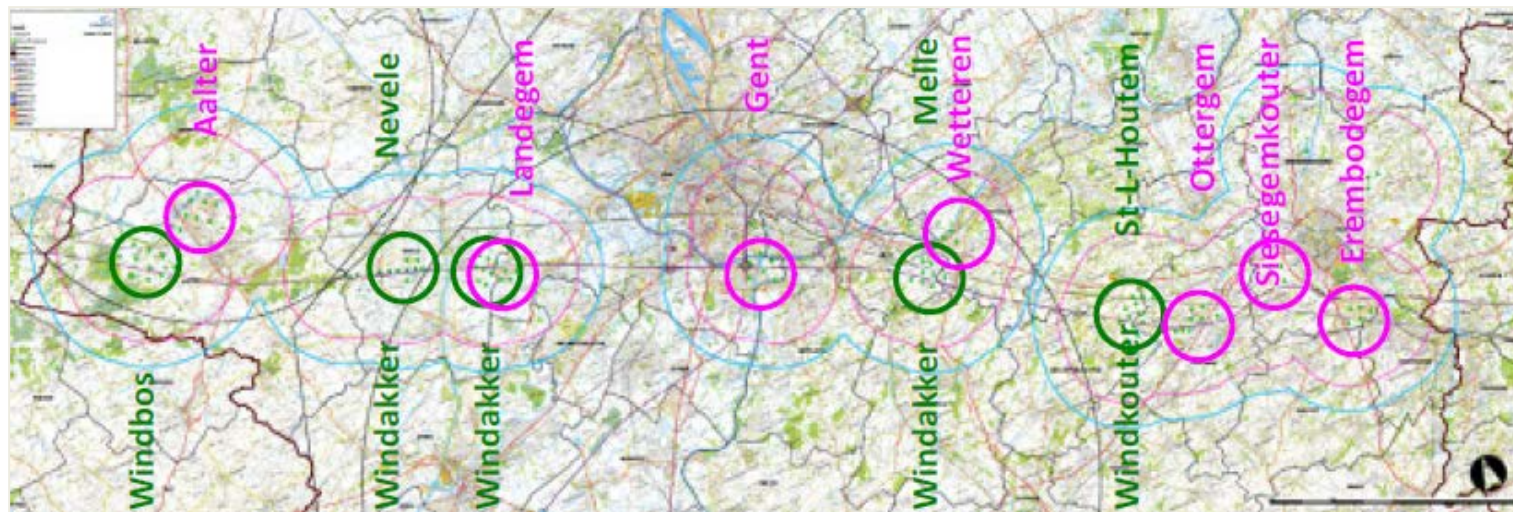
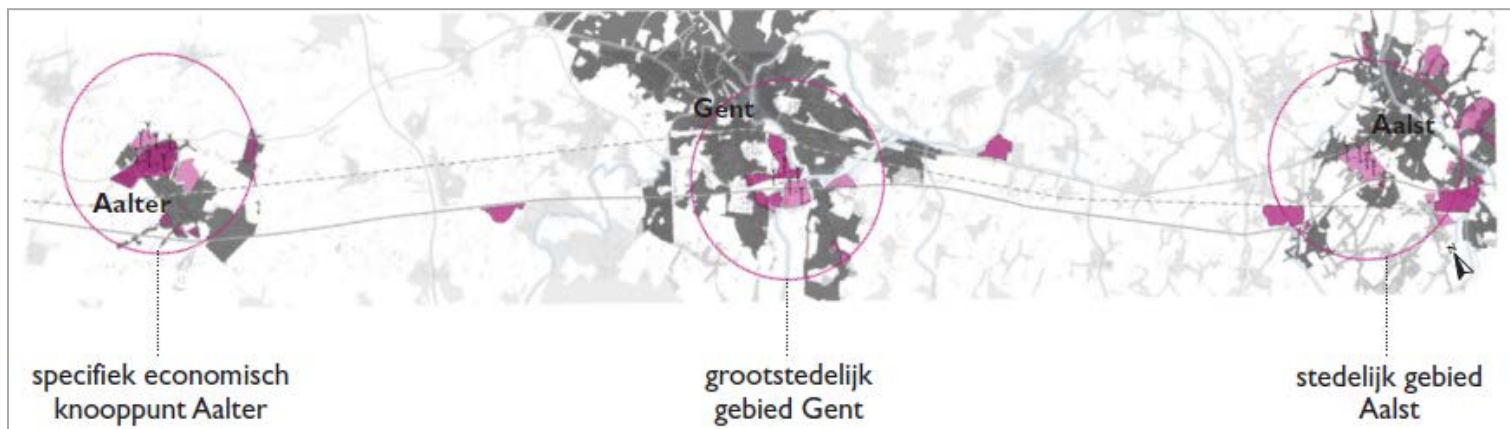
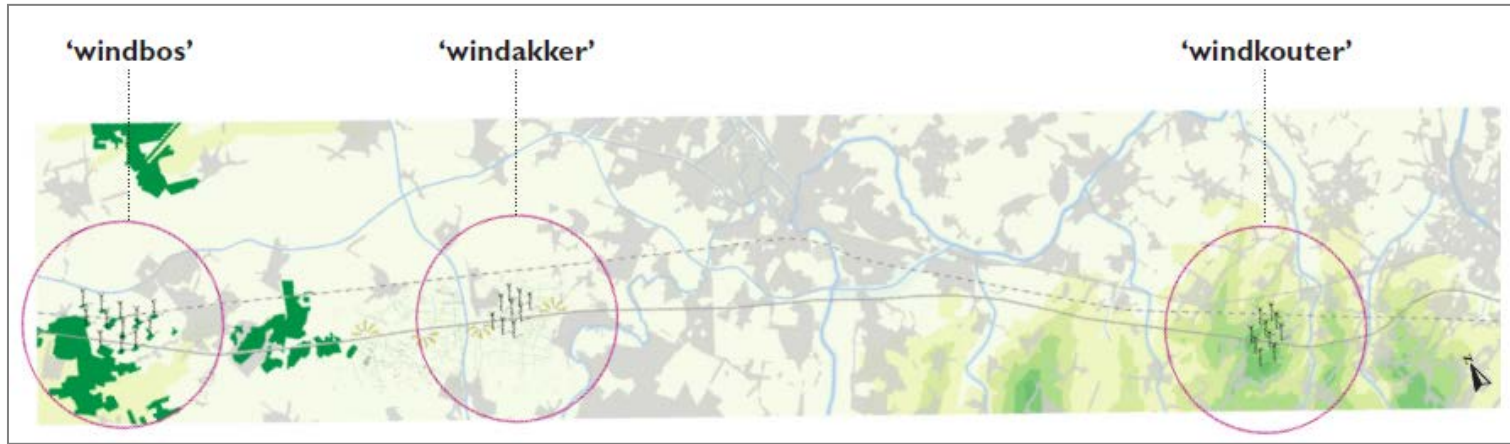
Studie of the landscape E40



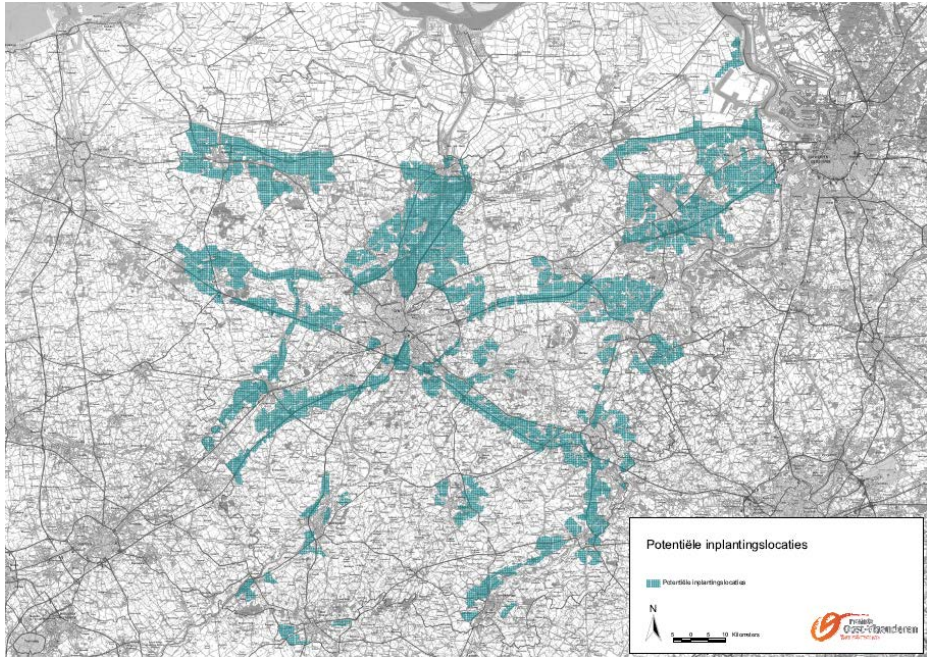
Different scenario's,
different models

On industrial areas or in open space

*In a forest, on a hill,
on a field,*

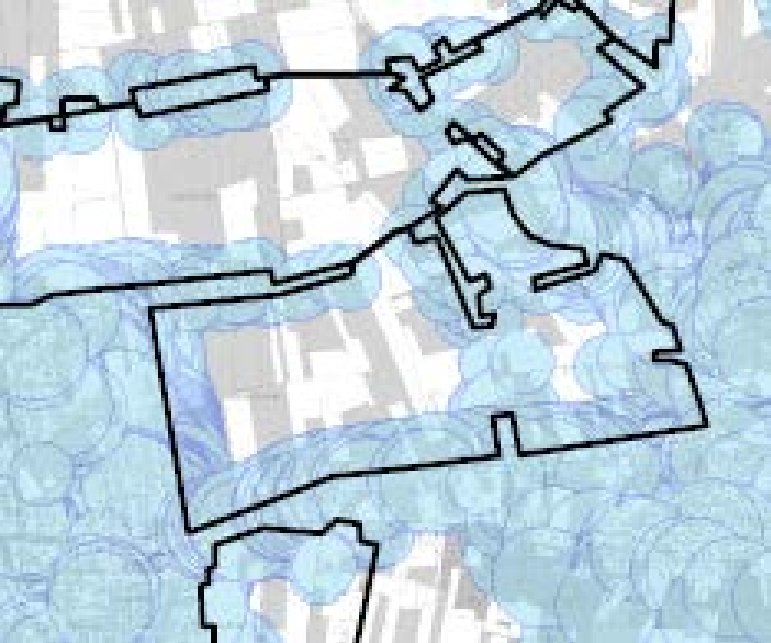


Environmental study



Framework

Buffer to houses



Maximum windenergy



Environmental impact on a theoretical basis

Environmental study



Regulation

Authorized planMER



Plan-MER Inplanting windturbines in zoekzone Maldegem-Eeklo definitief MER

Provincie Oost-Vlaanderen

26 november 2013
Definitief rapport
819961



Tabel 13.3 Richtwaarden voor windturbinegeluid

Gebiedsbestemming bij vergunning	Richtwaarde in LAeq,15 min dB(A) in open lucht		
	Overdag 7u-19u	's avonds 19u-22u	's nachts 22u-7u
1° gebieden voor verblijfsrecreatie	44	39	39
2a° gebieden of delen van gebieden, uitgezonderd woongebieden of delen van woongebieden, gelegen op minder dan 500m van industriegebieden	50	45	45
2b° woongebieden of delen van woongebieden op minder dan 500m gelegen van industriegebieden	48	43	43
3a° Gebieden of delen van gebieden, uitgezonderd woongebieden of delen van woongebieden, op minder dan 500m gelegen van gebieden voor KMO, van dienstverleningsgebieden of van ontginningsgebieden	48	43	43
3b° Woongebieden of delen van woongebieden, op minder dan 500m gelegen van gebieden voor KMO, van dienstverleningsgebieden of van ontginningsgebieden	44	39	39
4° Woongebieden	44	39	39
5° Industriegebieden, dienstverleningsgebieden, gebieden voor gemeenschapsvoorzieningen en openbare nutsvoorzieningen en ontginningsgebieden tijdens de ontginning.	60	55	55
5bis° Agrarische gebieden	48	43	43
6° Recreatiegebieden, uitgezonderd gebieden voor verblijfsrecreatie	48	43	43
7° Alle andere gebieden, uitgezonderd: bufferzones, militaire domeinen en deze waarvoor in bijzondere besluiten richtwaarden worden vastgelegd	44	39	39
8° Bufferzones	55	50	50
9° gebieden of delen van gebieden op minder dan 500 m gelegen van voor grindwinning bestemde ontginningsgebieden tijdens de ontginning	48	43	43

Maximum for noise

Maximum for umbra

necessary stillstand module

Max. 8u in a year and max. 30min in a day

Veiligheidsstudie verplicht bij elke projectaanvraag voor windturbines.

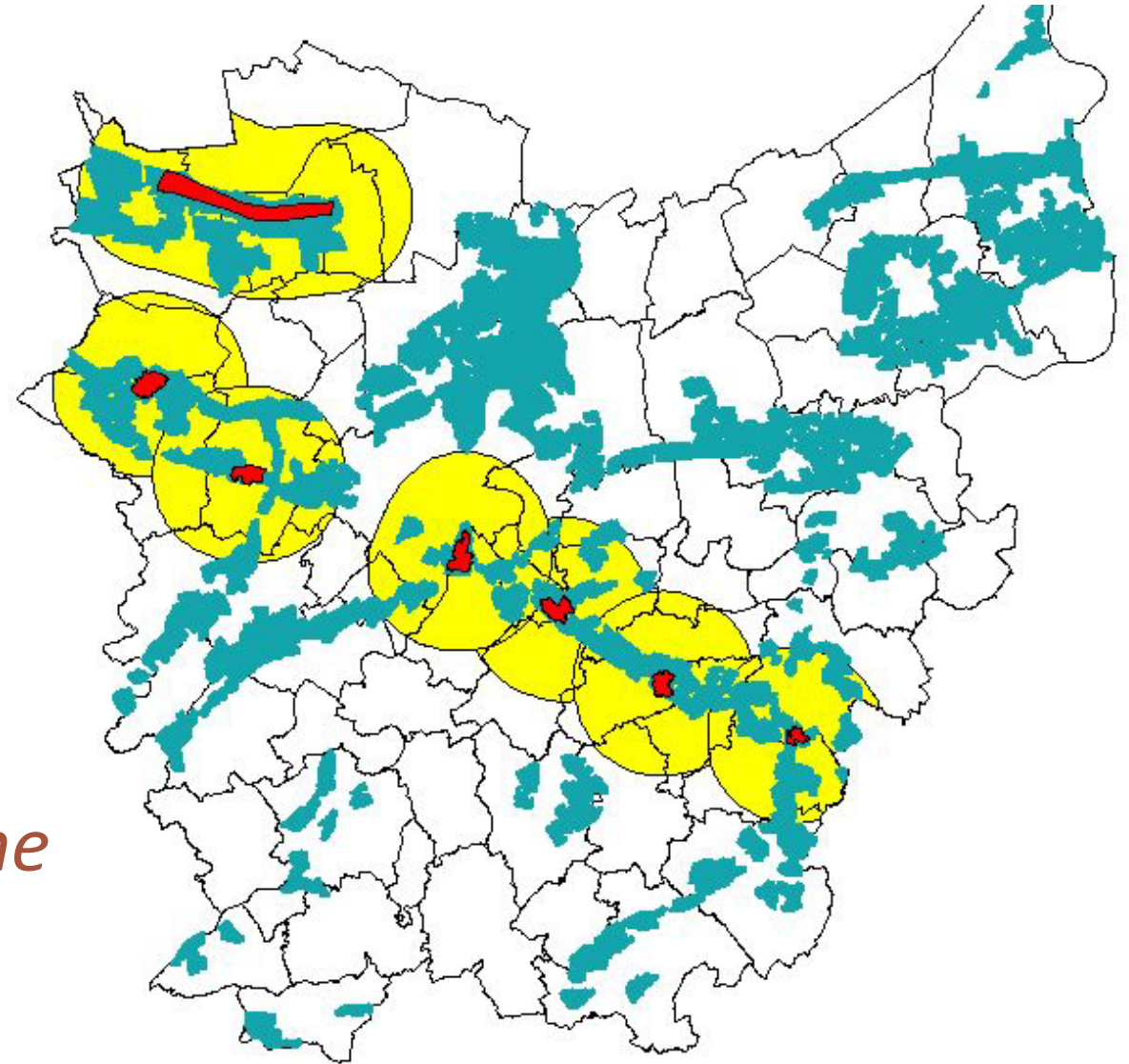
Belang van meldpunt voor klachten !!!

*Procoro nadrukt belang van **adequaat handhavingsbeleid** => gemakkelijk en toegankelijk meldpunt, opgericht en operationeel gehouden door Provinciebestuur*

Two spatial plans



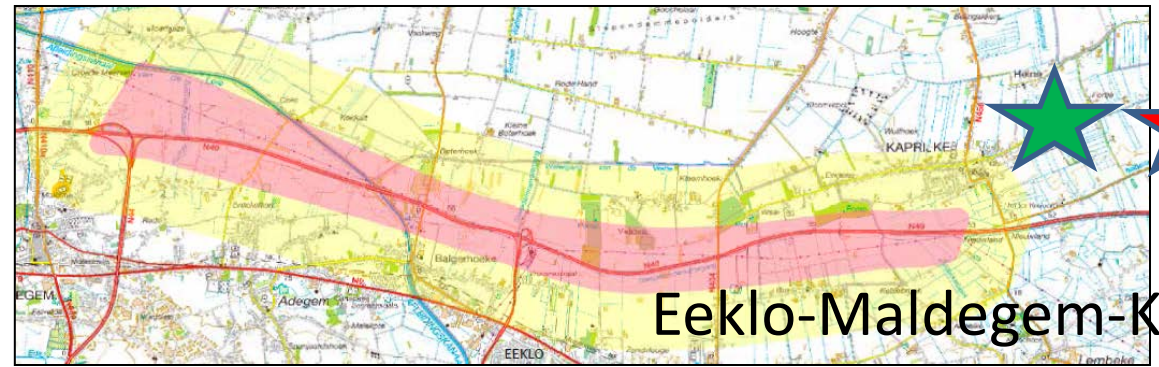
- Area for windturbines (red)
- 'Effectuated' area (800m)
- Area where windturbines are forbidden (yellow)



Note!

Principe of concentration en contrast created involvement, because it became clear where the turbines were coming, and where not!

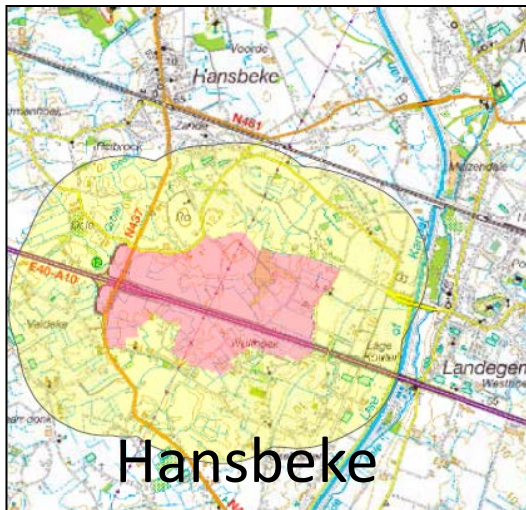
Two spatial plans



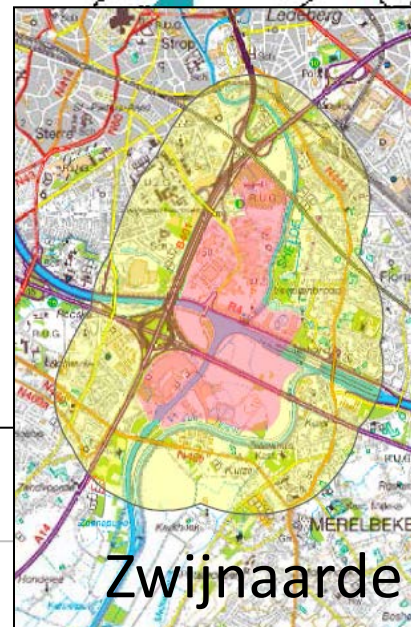
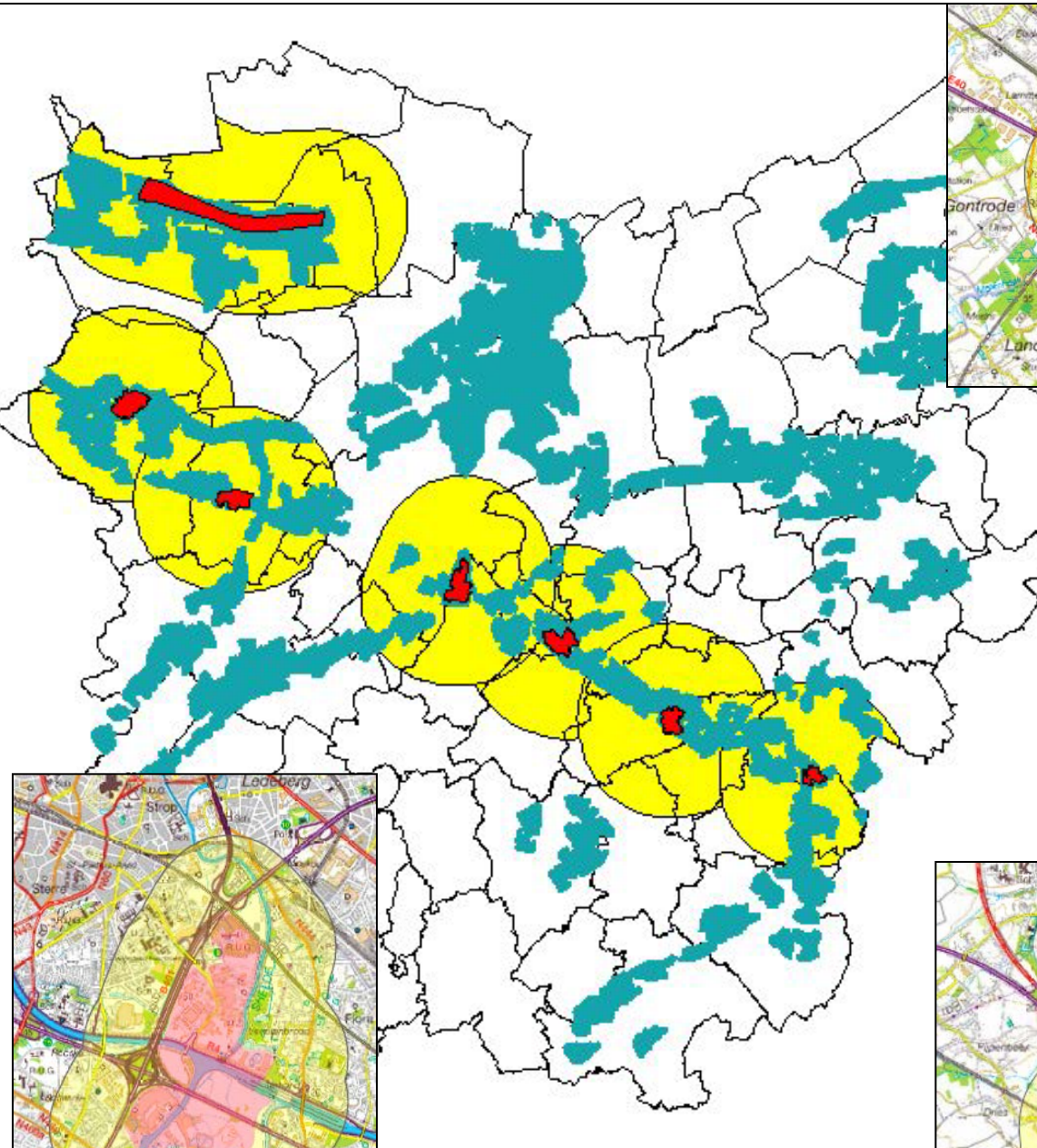
Eeklo-Maldegem-Kaprijke



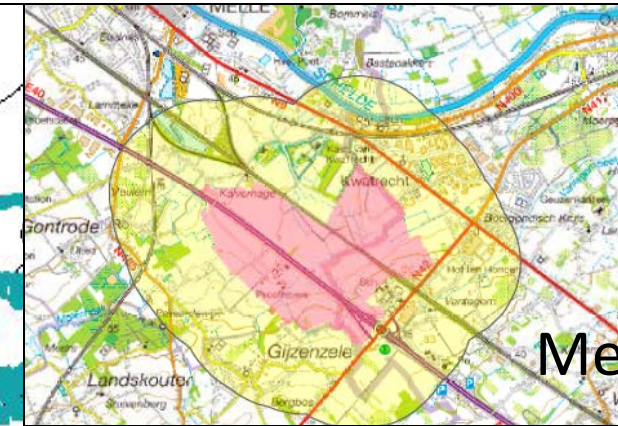
Aalter



Hansbeke



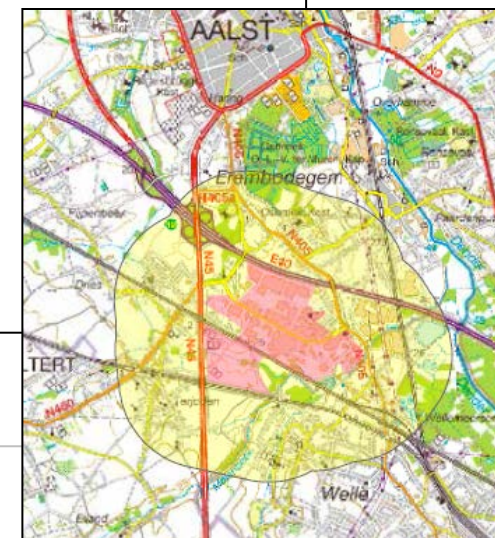
Zwijnaarde



Melle



St. Lievens-Houtem



Erembodegem

2. On speaking terms...

Electrabel
GDF SUEZ

Eneco

electrawinds
POWERED BY NATURE

Nimby
Projects

storm
WINDPOWER

ENERVEST

colruyt

luminus

Aspiravi
renewable energy

We agreed on...

1. We started giving information about our intention and the process of planning locations for windenergy.
2. We asked for a 'stand still' in the area.
3. We asked them to be transparant about projects that they planned in the area => one vision/project.
4. We asked them to participate in fund for the environment and to create the opportunity for locals en local authorities to become owner of the project (envolvement!).

We agreed on...

5. We asked them to do a common environmental screening.
6. Now we ask them to ask the authorization at the same time (clarity of the total project area)...
7. And to have a common 'help desk', common communication, etc.

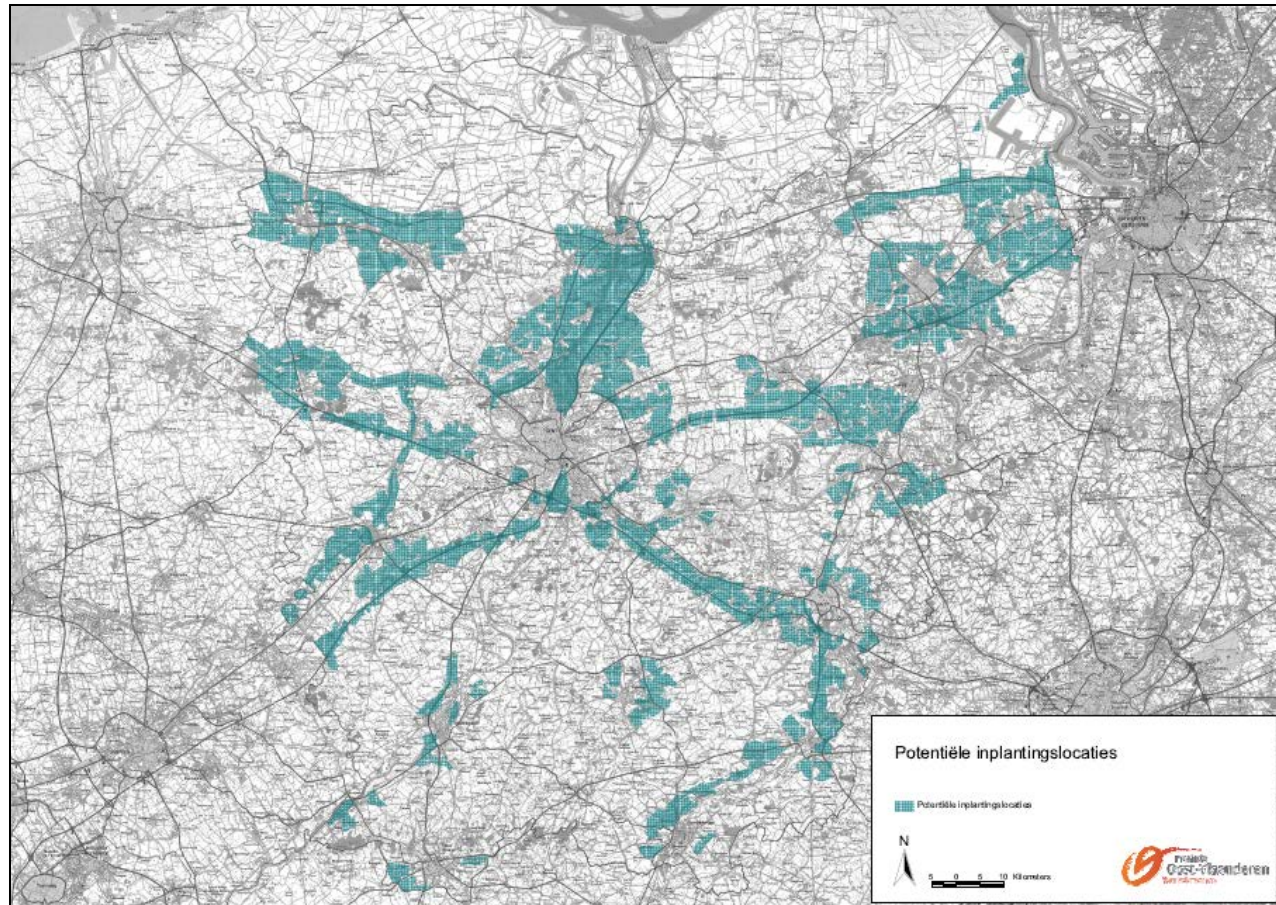
Coöperative attitude to have as much energy as possible in the area for windturbines

3. Creating involvement

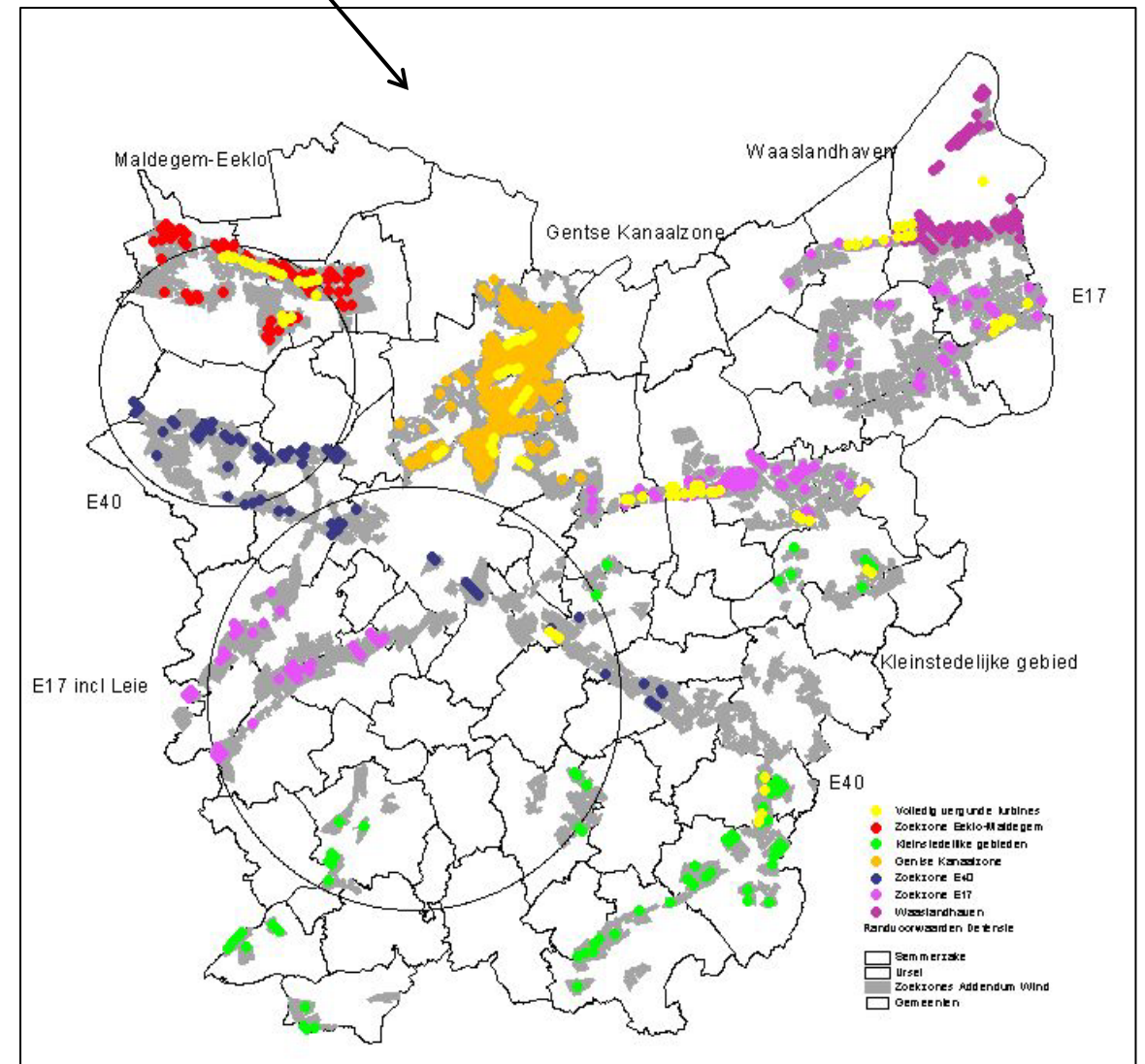
1. Participation and transparent communication
2. Renewable energyscan
3. Towards a shared ownership..
4. Creating an fund to improve the environment (800m around the concentrationzone)



Renewable energyscan



Addendum Wind 2009



Zoekzone	Aantal volledig vergunde turbines	Inschatting van het potentieel	Gerealiseerd %
Gentse Kanaalzone	25	90	28
Waaslandhaven	7	40	18
E17-netwerk	30	60	50
Eeklo-Maldegem	21	45	47
E40 van Aalter tot Aalst	3	46	7
Kleinsted. Gebieden en econ. knpt.	6	19	32
Totaal	92	300	31

Beleidsmatige analyse op basis van vergunningsaanvragen

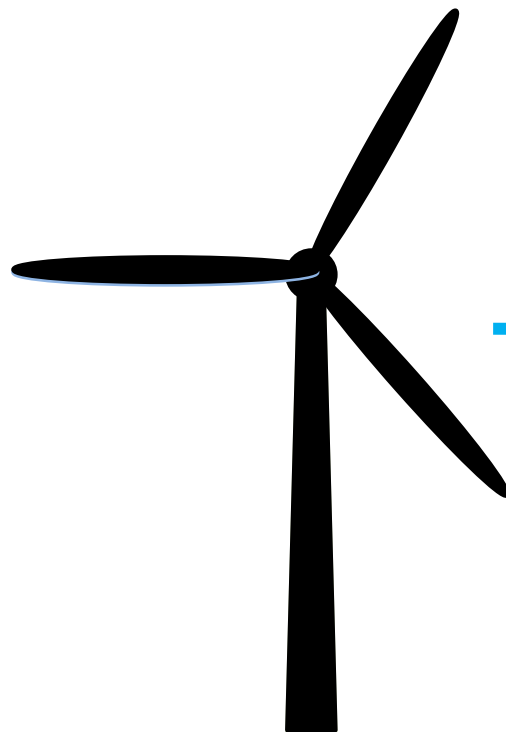
300 windturbines in O.Vl.

Model against 'nimby'



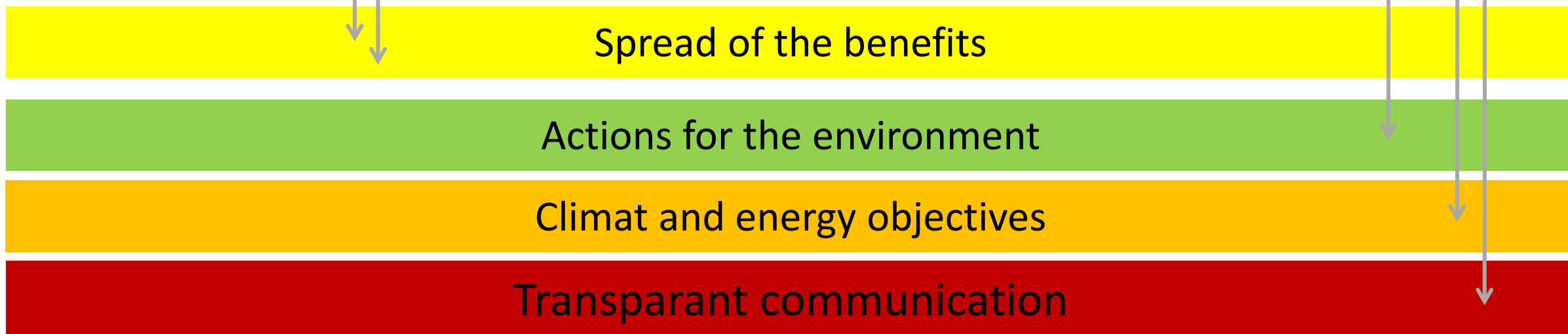
Input

Shared ownership

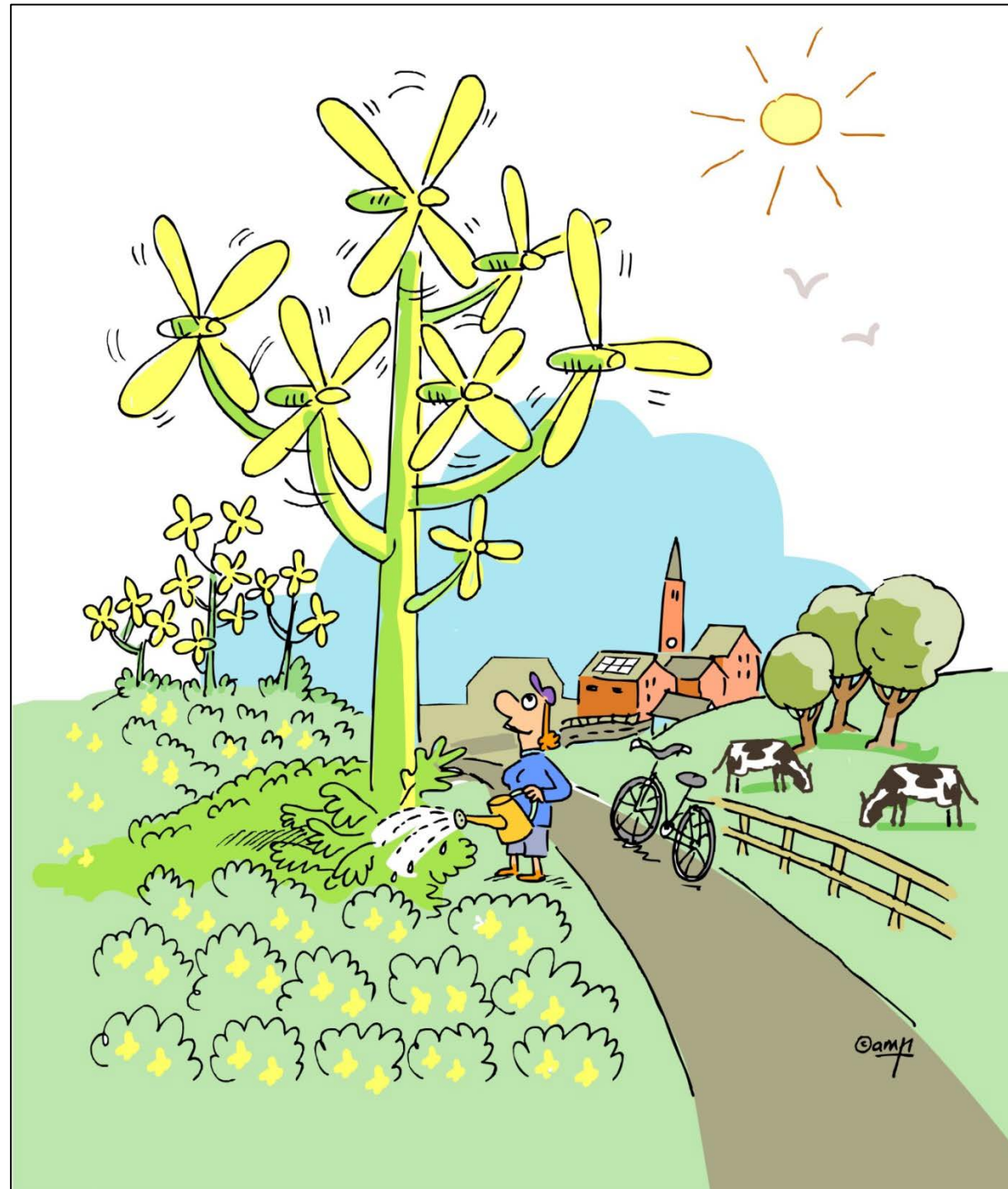


Output

Fund to improve the environment around the concentration zones (800m)



Fund to improve the environment



Fund to improve the environment

- A fund sponsored from the benefits of the windenergy (windfirms):
 - Foundation ‘without interests’=> statutes
 - The neighbours decide which actions/projects can be sponsored in their environment (800 m).
 - The windfirms have a advising partner (with veto)
- A symbolic recognition of the differente actors (windfirms, neighbours, farmers, etc)
- Lever towards an energylandscape with a long term vision!



4. Recommendations

- Concentration and contrast!
- Integral plan: spatial planning + engagement windfirms + participation and transparent communication with different actors
- The proces takes time but definitely le(a)d to more windturbines (EM: +20 wt ; E40: +18)
- Neutral actor is important:
Oost-Vlaanderen Energielandscape
- Toolkit Oost-Vlaanderen Energielandschap: being translated in English

4. Recommendations

Oost-Vlaanderen Energielandschap is looking for partners for (European) projects !

Province East Flanders, Dep. Spatial Planning
karen.dhollander@oost-vlaanderen.be

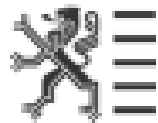
09 267 75 95

Oost-Vlaanderen Energielandschap
moira.callens@energielandschap.be

09 267 75 65

STRATEGISCH PROJECT

Ruimtelijk Structuurplan Vlaanderen



Provincie
Oost-Vlaanderen
Voor ieder van ons



Energielandschap
OOST-VLAANDEREN

info@energielandschap.be

www.energielandschap.be

<http://www.facebook.com/OostVlaanderenEnergielandschap>