

Klimaatstad Gent

Word verliefd op
een energieke stad



gent: klimaatstad

GENEVE
Klimaatstad

Ghent Climate Plan

2014-2019

Fall in love with
an energetic city

Final approval from Commission:
January 2015



Cof-funded by the
European Union





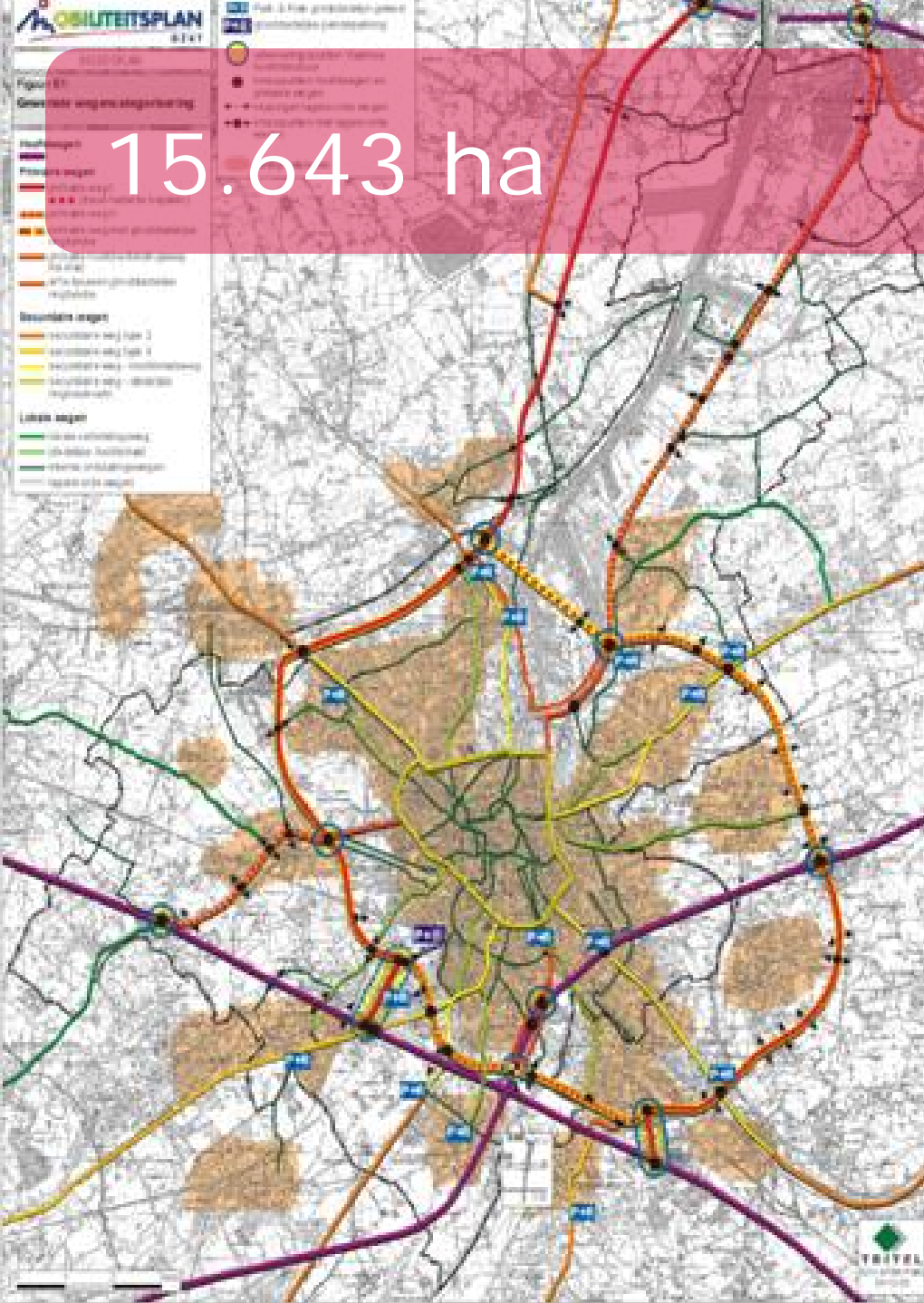
ATLANTISCHE
OCEAAN

GENT

MIDDELL

247.000 inhabitants- 113.000 families





56 squares



74 parks



29.000 parking places
10 central parkings

R40

↑ Zuid

P 3

Vrij

↑ Kouter

P 4-6

Vrij

↑ St-Pietersplein

P 10

Vrij

↑ Reep

P 2

Vrij

← St-Michiels

P 7 8

Vrij

← Vrijdagmarkt

P 1

Vrij

35 hotels and 450 restaurants



650 pubs



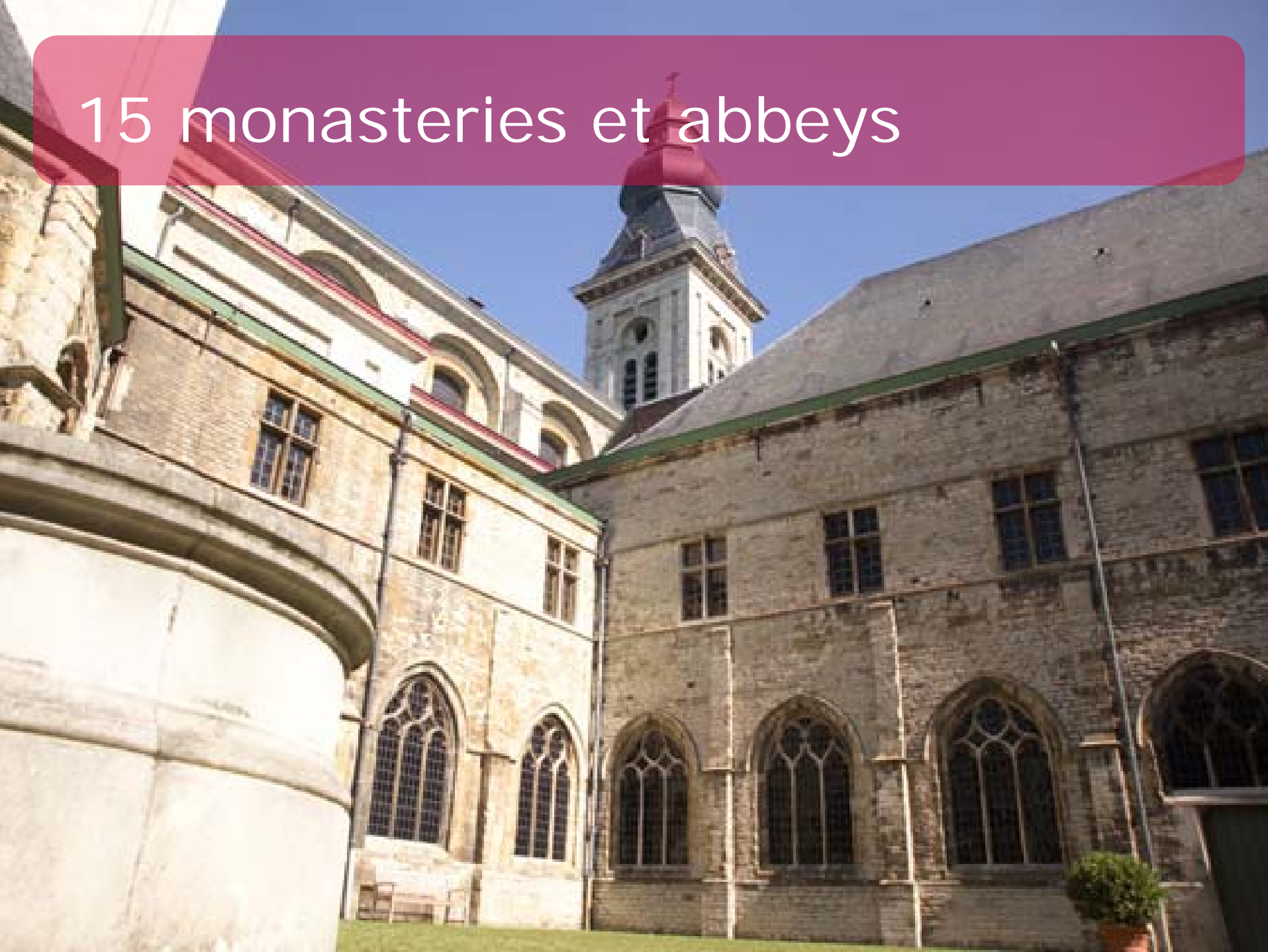
50 churches



10 museums



15 monasteries et abbeyes



300 schools
>130.000 students



10 theaters



1000 km roads
380 km bicycle paths



A large blue and white ship is being lifted by a crane. The ship's hull is blue, and its upper section is white. Thick, grey cables are attached to the ship's structure, and a large, textured, grey object is visible in the foreground, possibly a part of the crane or a support structure. The background shows a blue sky with scattered white clouds and a body of water.

And ...

- Port of Ghent:
 - 3.174 ships
 - 20.145.823 ton import
 - 4.951.929 ton export
- employment: 158.000 persons

One city ...



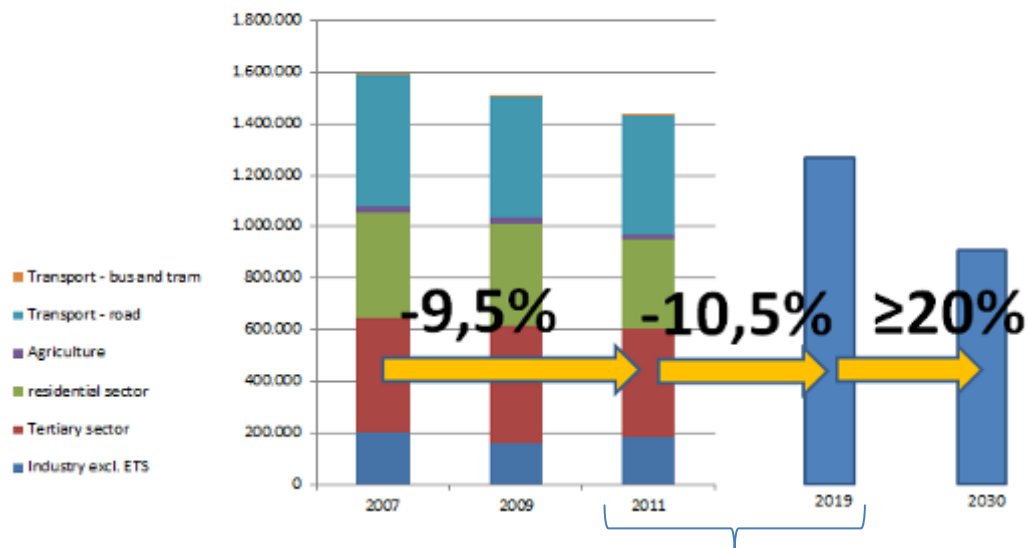
One mission

‘Gent is een open, solidaire, wijze en kindvriendelijke stad. Zij verbindt alle krachten om de stad uit te bouwen tot een blijvend leefbaar geheel en zo de toekomst verder vorm te geven. **In a creative way Ghent wants to be frontrunner in the transition towards a low carbon city.** We bouwen verder aan een milieuvriendelijke en gediversifieerde economie die welvaart brengt voor iedereen. Zo ontwikkelen we ons tot een gemeenschap van verantwoordelijke burgers die zich vrij kunnen ontplooiën en op de nodige ondersteuning kunnen rekenen’.

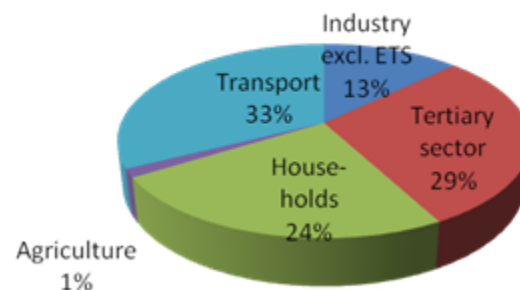


Challenge

CO₂ emissions



% CO₂ per sector (2011)



Still 10,5% or 169.000 ton CO₂/y to go =



277.000 times flying between London and New York



7.041.000 trees to plant



42.250 houses to be made CO₂N



24.400.000 days no car

Climate is more than energy ...



Building on ...



Our new SEAP says something about ...

Residential
sector

City
as example

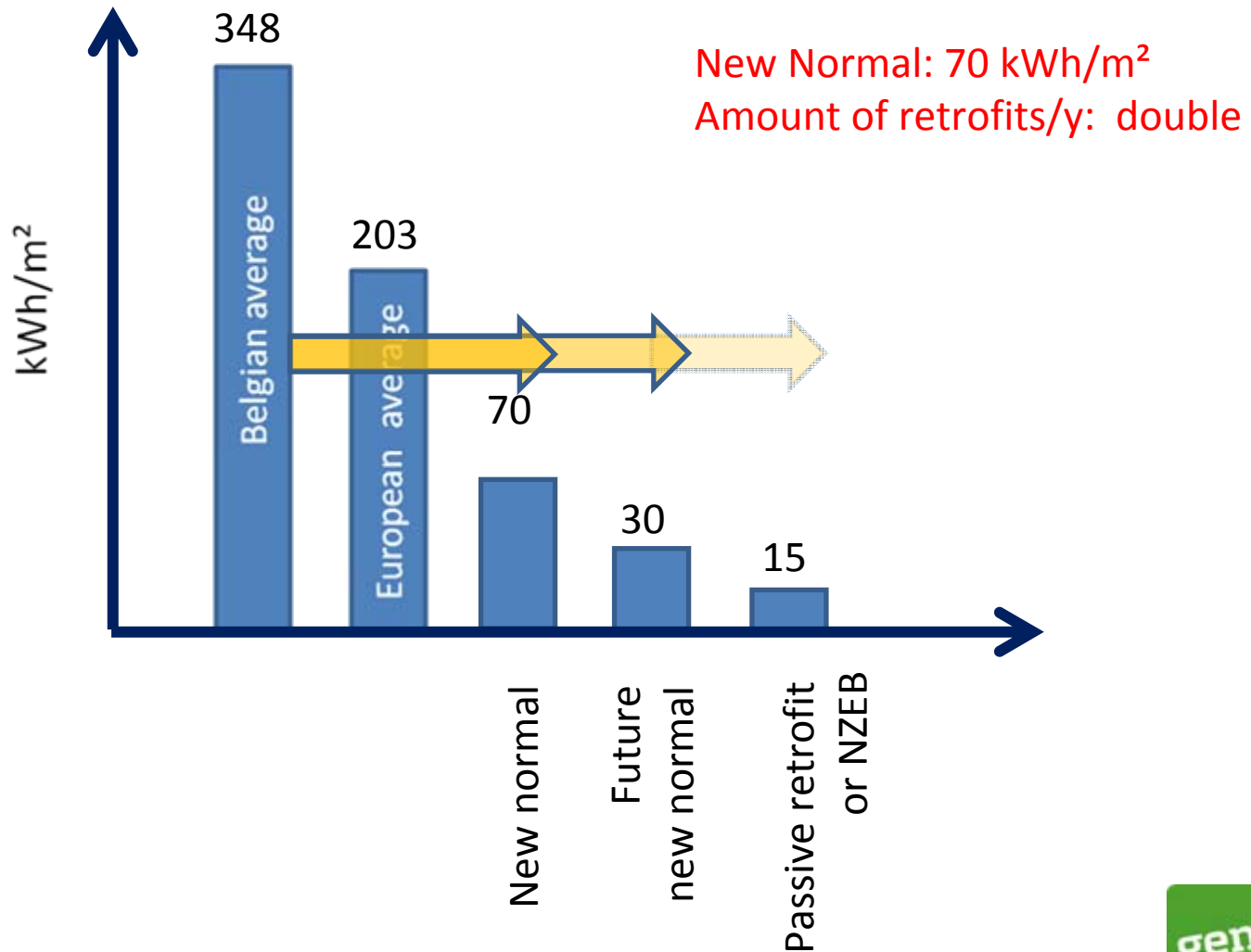
Businesses and
Tertiary sector

Renewable
Energy and
waste heat

Transport

Food

Ambitions for retrofit



What motivates ?





Measures:

- Ghent Climate City - Platform to exchange ideas and actions



- Campaign for retrofit assistance:



- Energy scans especially for socially weak households:

Energy Agency REGent



- Activation stakeholder initiatives: sustainable districts



Duurzame wijken

- ICT tools and events:



GhentLivingLab



A
(APPS FOR)
Ghent



>1.000.000 €

Measures:

- Free sustainable building advice at home
- Simulations of financial levers and filling in the necessary papers

• Unburdening project: taking over practical issues for implementing a retrofit measure like finding a contractor for socially weak households

and from mid 2015 for all households

with special focus on elderly people





> 8.224.000 €

Measures:

- Energy subsidies tailor made on the income of households
- Link with subsidies for qualitative living
- Cheap loans (2%) for energy investments especially for social weak households (0%)
- Subsidies for bottom up projects of citizens and other stakeholders: sustainable districts
- Crowdfunding and participation platform



Duurzame wijken



One place to be:



Gents adviespunt voor
energiezuinig renoveren

energiecentrale@gent.be
09/266.52.00

Innovative project

District Sint-Amandsberg-Dampoort



How to make an existing district climate neutral?

Linking

- opportunities
- Citizen engagement
- already running pilots/experiments
- available tools and financial levers
- Interaction with projects nearby (Old Docs)

Social houses

- Speeding up retrofit: 2.000.000€
- Renovationplan on energy from most important social housing company: Woningent
- More cooperation between social housing companies and Energy Agency REGent



New houses

- Flemish policy, no levers
- Use of land ownership: towards NZEB and innovation
- Big and small sustainable projects: > 17M€

Innovatieve project: Old Docks

CO2N district with energy from waste water and kitchen waste



Measuring system for sustainability

... fase 3 fase 4 fase 5 fase 6

VERPLICHT							0.	Geïntegreerd projectproces						
0	0	0	0	0	0	0	14	27	29	30	30	30	1.	Inplanting en functie
0	0	0	0	0	0	0	0	0	16	17	19	20	2.	Mobiliteit
0	0	0	0	0	0	0	0	5	10	16	20	20	3.	Natuurlijk milieu
0	0	0	0	0	0	0	0	8	8	10	10	10	4.	Water
0	0	0	0	0	0	0	0	0	2	2	10	10	5.	Grondstoffen en afval
0	0	0	0	0	0	0	0	0	30	30	30	30	6.	Energie
0	0	0	0	0	0	0	6	9	16	19	19	20	7.	Gezondheid, leefbaarheid en toegankelijkheid
0	0	0	0	0	0	0	0	2	6	6	8	10	8.	Economie en werk
0	0	0	0	0	0	0	0	0	5	5	5	10	9.	Innovatie
VERPLICHT							10.	Beheer						
0	0	0	0	0	0	0	30	51	122	135	151	160	TOTALE SCORE	

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City as example

For buildings and fleet: energy efficiency of 3% per jaar or 15% in 2019

Also for OCMW (Social Welfare) en FARYS (Water Company)

- Speeding up retrofit: 8,36 M€
 - energy performance contracts (EPC) with private Energy Saving Company (ESCO) and Eandis
 - Own projects
- Continuation of purchasing 100% green power
- Increasing own renewable energy production
- NZEB and passive building for new buildings
- Continuation energy efficiency public lighting (2,6 M€)
- Sustainable procurement
- Greening the fleet and car sharing
- Greener transport of cargo for the City
- ...



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Measures:

- Coaching energy management for individual companies: towards >10% CO2 reduction



	Low	Medium	High
Energy use/y	< 250.000 kWh	< 2,5 M kWh	< 27,7 M kWh (=0,1 PJ)
% of energy use sector	33%	33%	33%
Amount of companies	95%	4,5%	0,5%

Small SMEs
in the



- Higher terrace taxes in case of terrace heaters

Ghent received the Climate Star for energy coaching for SMEs in October 2014





Measures:

- Measuring system for sustainability used for all business parks (based on BREEAM)
- BREEAM communities for Eiland Zwijnaarde and (tbd) BREEAM excellence for the buildings



- Experiment in Wiedauwkaai: coaching by energy expert is linked to procurement of plots



- Coaching business park management towards business park of the future



20% energy efficiency using their position as manager of harbour area:

support sustainable projects like wind energy,

B2B district heating

energy criteria linked to concession,

energy for ships from ashore,

bio-economy,

...

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Residential
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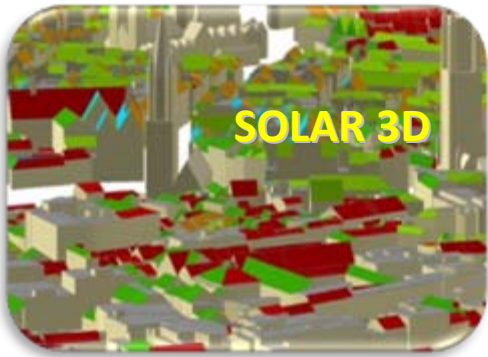
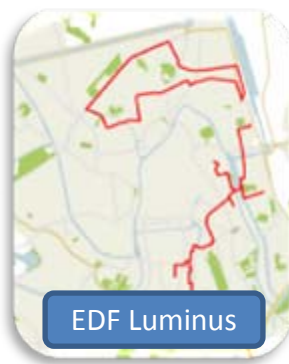
City
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15.000 ton CO2/y



energy forever

75 MWth,



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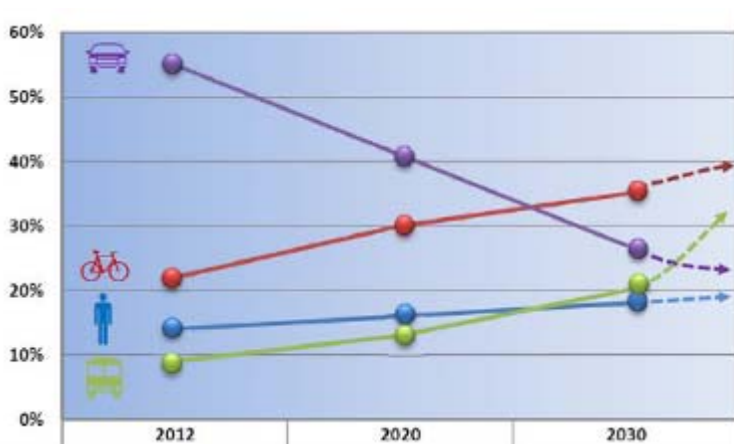
TRANSPORT



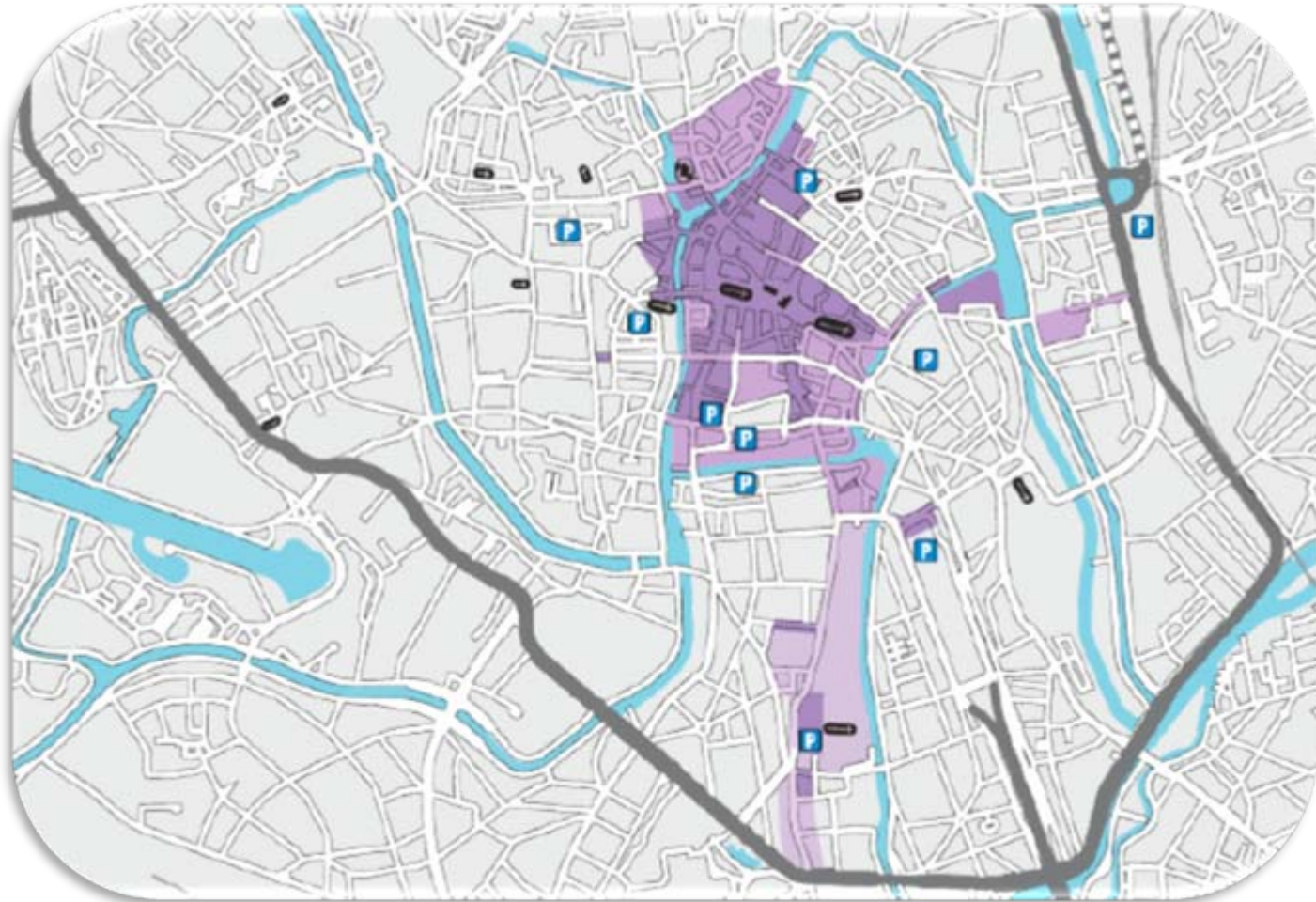
	2012	2019
On foot	14%	16%
Bikers	22%	30%
Public transport	9%	13%
Cars	55%	41%

Modal shift

- Expansion pedestrian area
- Stronger biking network and infrastructure
- Better public transport and more trams
- Expansion zone 30
- Redevelopment school environments in function of sustainable mobility
- Subsidies for car and bikesharing
- Subsidies for elektric bikes, load infrastructure, elektric car sharing and CNG
- More parking at a distance
- Developments of city distribution system
- Special attention for students and mobility
- Sustainable transport for tourist
- ...



Pedestrian area doubled



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Gent en garde

Objectives:

- encourage a shorter and more visible food chain
- sustainable food production and consumption
- stimulating social added value
- initiatives about reducing food waste
- food waste as raw material



And the result is?

Excl. district heating in harbour area

> 100 M



Excl. staff

-169.872 ton



-11,8%

