



Multilateral Assessment *Luxembourg*

SBI46 – Bonn – 12 May 2017

André Weidenhaupt

Director General

Eric De Brabanter

Senior Economist



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère du Développement durable
et des Infrastructures

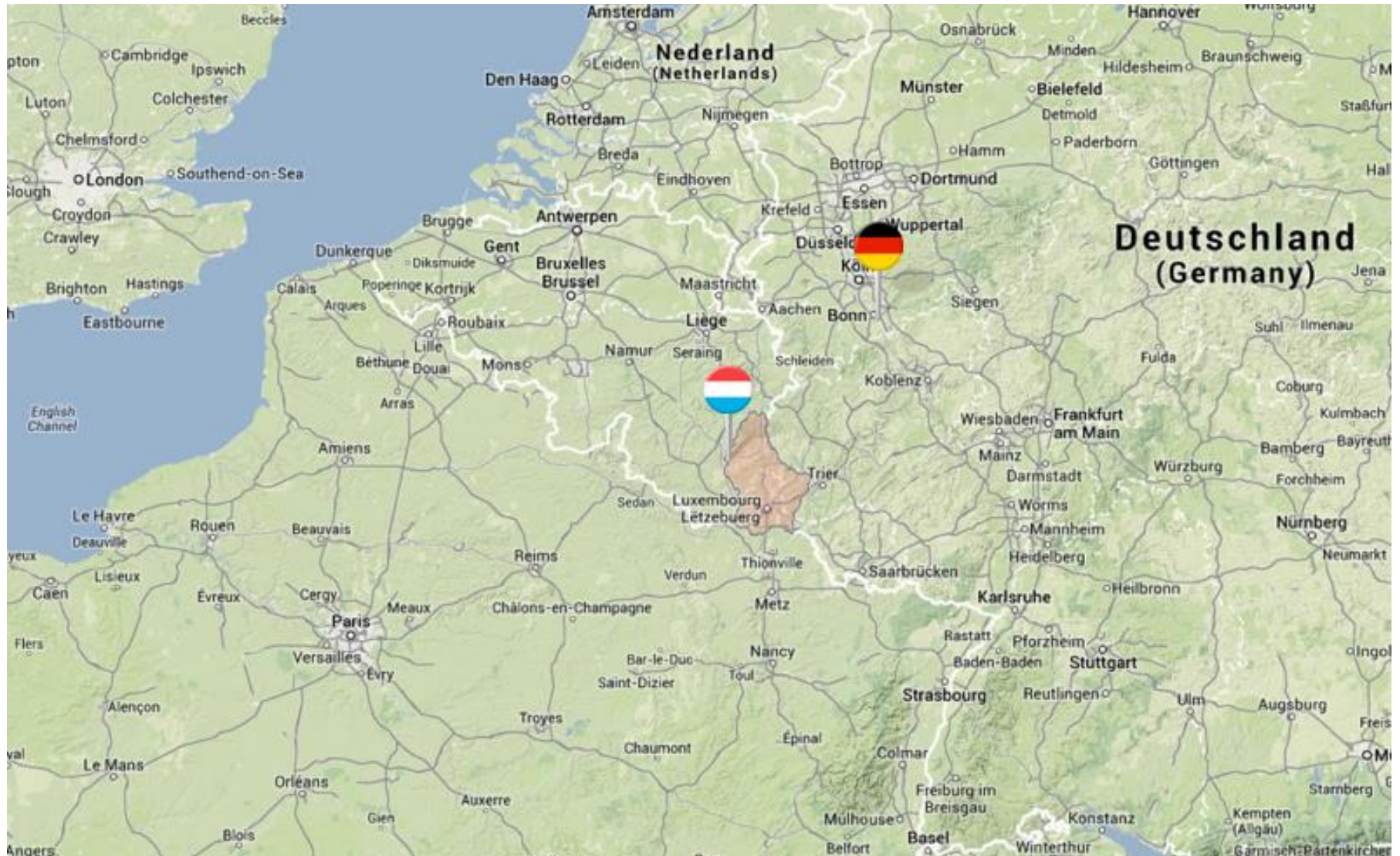
Département de l'environnement

National circumstances (1a)

location



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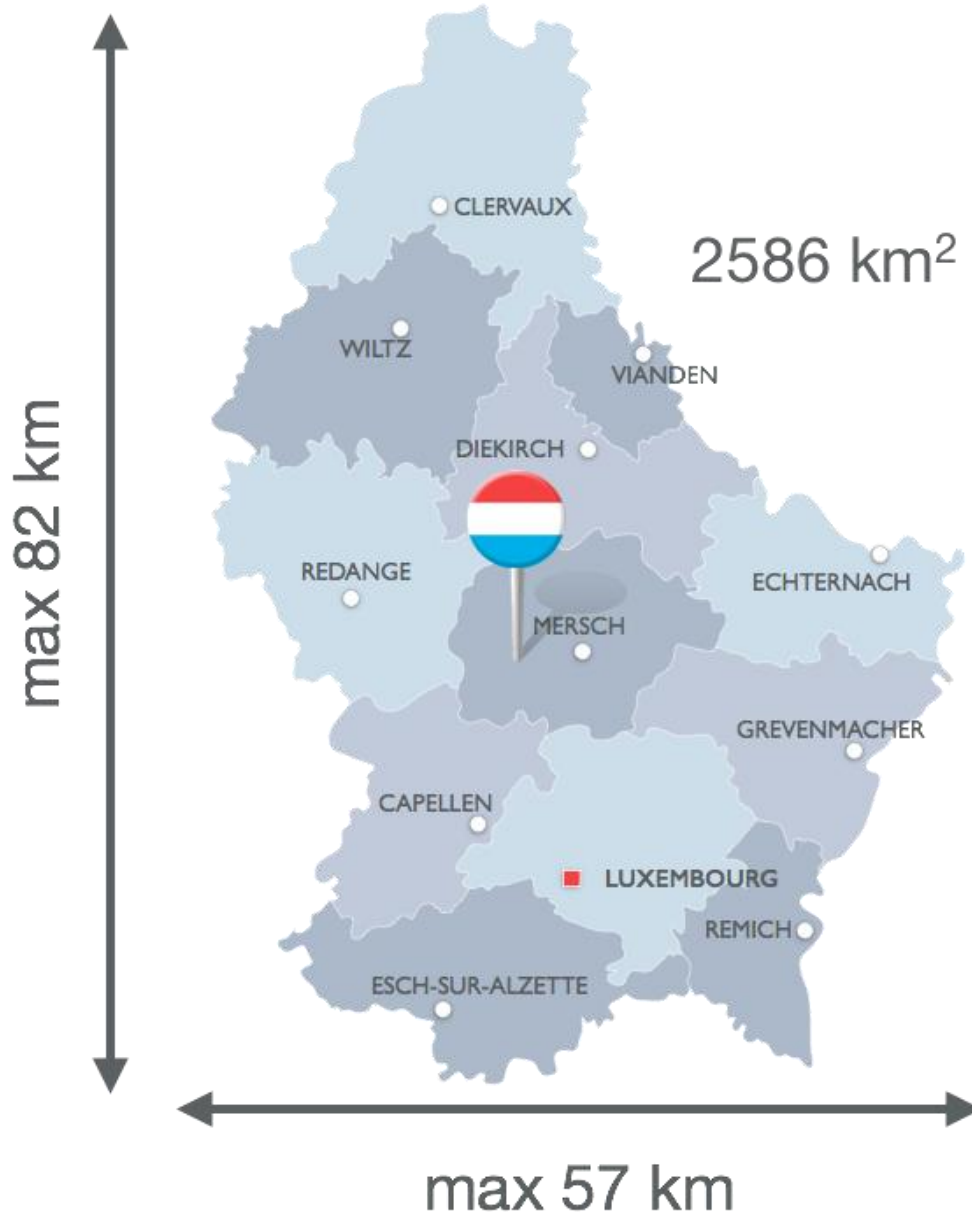


National circumstances (1b)

territory



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STRONG POPULATION GROWTH DUE TO IMMIGRATION



- 31st Dec. 2015: 576,200
- 1990-2015: + 52%
- est. 2050: 950,000

STRONG CROSS-BORDER COMMUTERS GROWTH DUE TO THE ECONOMIC DEVELOPMENT



- 31st Dec. 2015: 171,100
- 1990-2015: x 5
- est. 2050: 320,000



increase of
built-up areas



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COUNTRY LOCATION



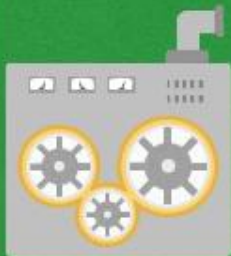
- at the heart of the main Western European N-S & E-W transit routes for both goods & passengers



increase of
built-up areas
&
transport flows



COUNTRY & ECONOMY SIZE



- significant impacts of single sources of emissions, i. e. of a single industrial project

ENERGY SUPPLY & SECURITY



- high dependence on energy imports

ENERGY PRODUCTION



- limited RES potential
- focus on wind, solar, biomass, heat pumps

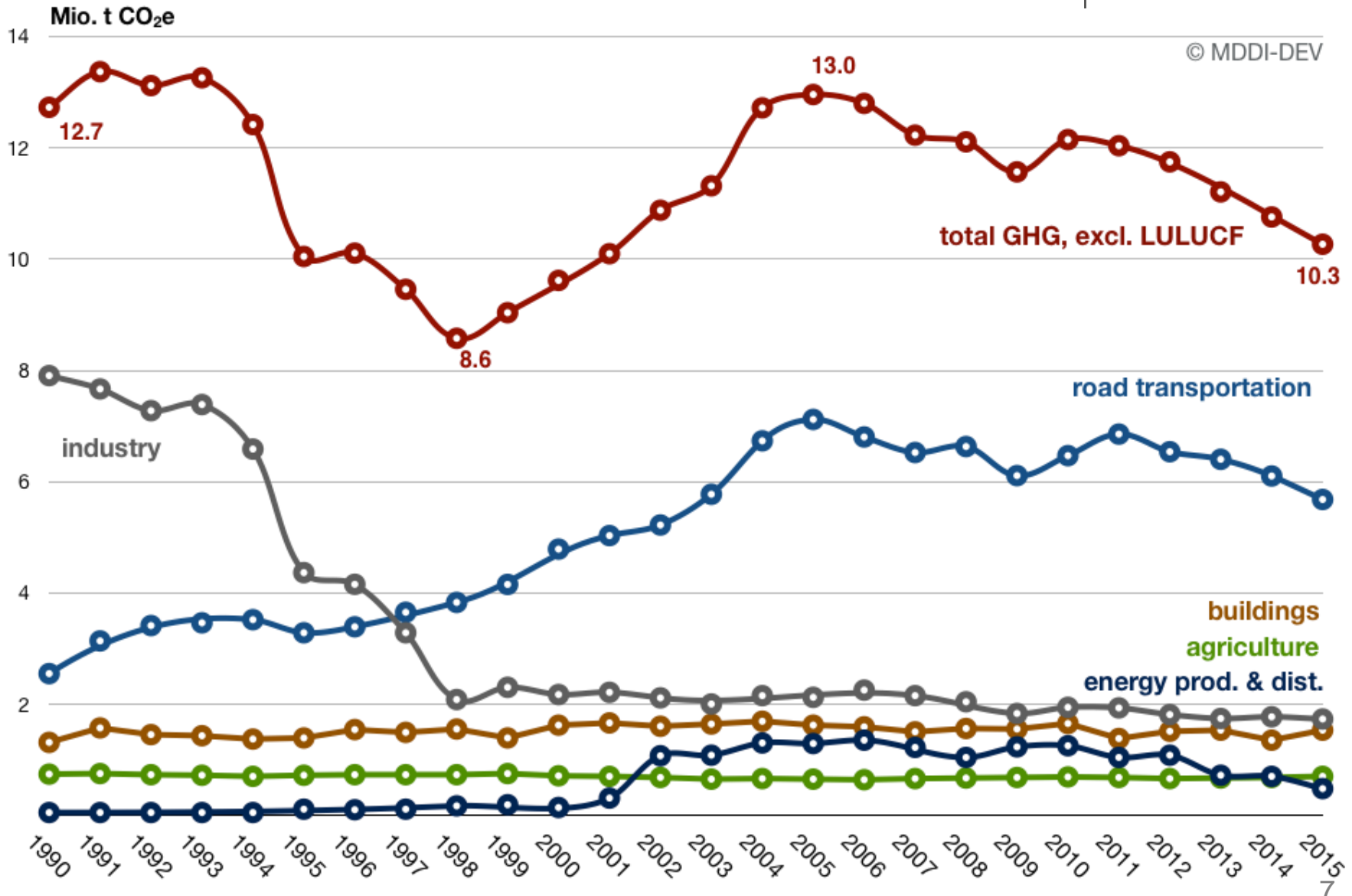


- 2030 Energy Strategy
- strategy of the Third Industrial Revolution (TIR)

GHG emissions trends 1990-2015 (1a)



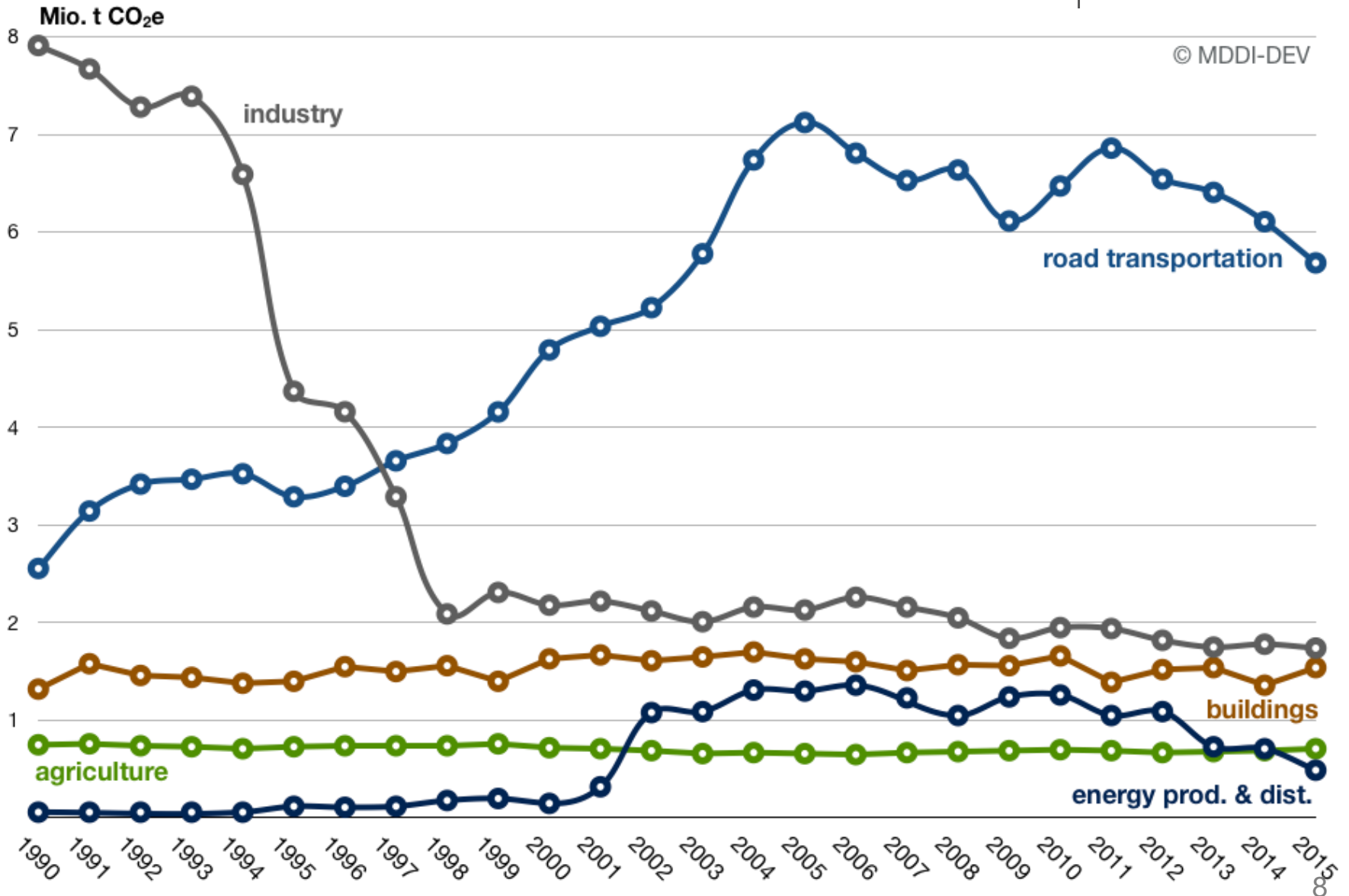
for main sources



GHG emissions trends 1990-2015 (1b)



for main sources



GHG emissions shares 1990 & 2015

in total GHG, excl. LULUCF, for main sources



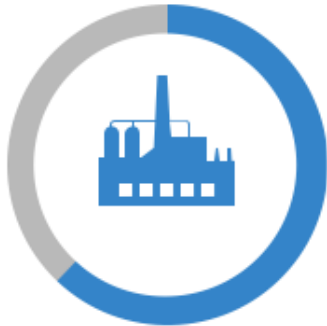
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1990



0.4%



62.1%

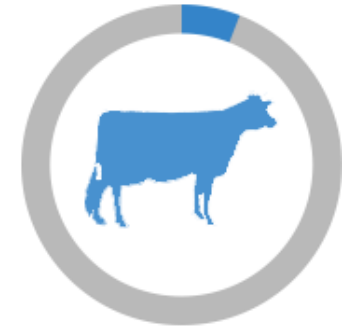


20.1%

nat: 6.8% / exp: 13.3%



10.4%

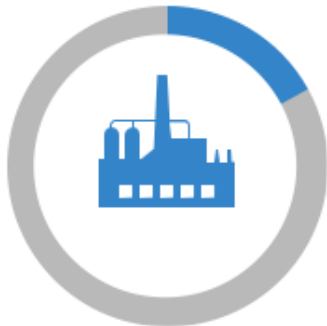


5.9%

2015



4.8%



17.0%



55.4%

ESD: 66.0%
nat: 16.6% / exp: 38.8%



15.0%

ESD: 17.9%



6.9%

ESD: 8.2%

GHG emissions projections 2020 & 2030

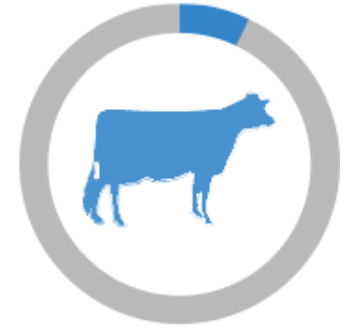
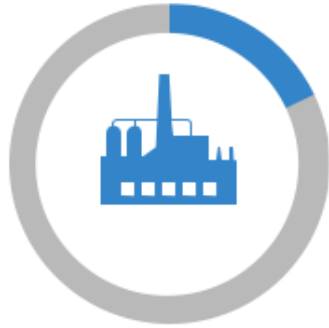
for main sources



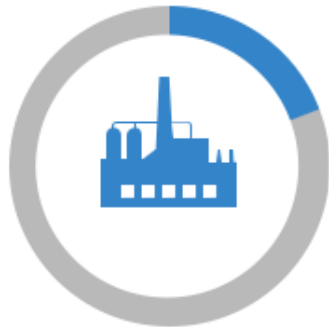
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2020



2030

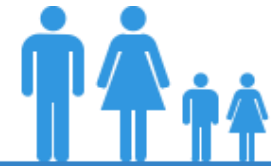
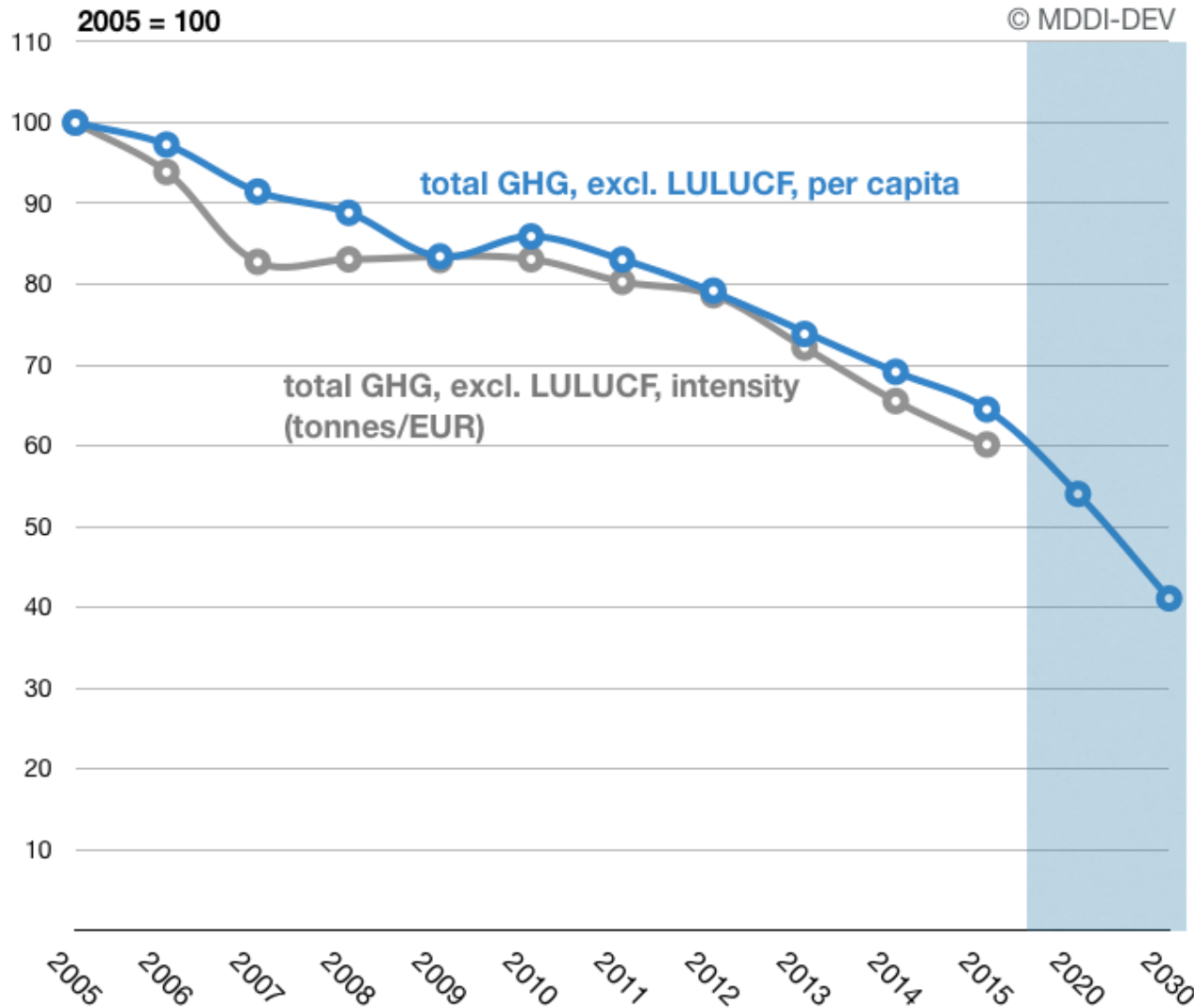


GHG emissions trends 2005-2015

per capita & per unit of GDP



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from 27.6 tonnes per capita in
2005 to 17.8 in 2015

-35 %

Forecasts 2020: 14.9
2030: 11.4

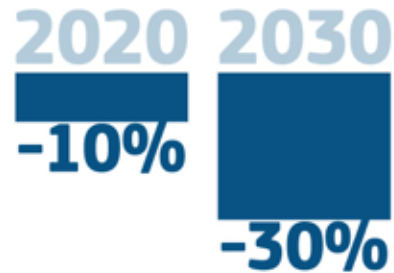


Luxembourg amongst the 5
EU Member States with the
lowest GHG intensity

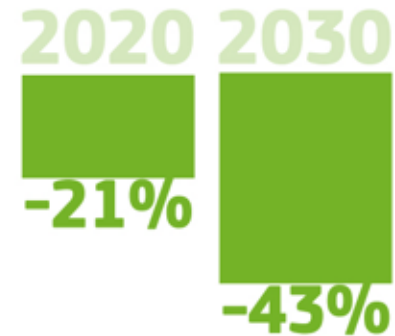
-40 %



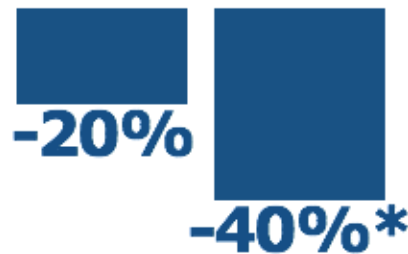
EMISSION REDUCTIONS IN ETS AND NON-ETS COMPARED TO 2005



**NON
ETS**
INCLUDING
ROAD TRANSPORT,
HOUSING,
AGRICULTURE
etc.



ETS
INCLUDING
POWER/ENERGY
SECTOR & INDUSTRY



* proposal



PLEDGE UNDER THE CONVENTION

unconditional **quantified economy wide emission reduction target (QEWRT)** of 20 % by 2020, compared to 1990 levels

BINDING COMMITMENT UNDER KYOTO PROTOCOL

joint commitment of the EU, its MS and Iceland to **reduce average annual emissions during 2013-2020 by 20%, compared to base year**

Implementing CP2 since 1st January 2013

2020 COMMITMENTS

TARGETS UNDER THE 2020 EU CLIMATE & ENERGY PACKAGE

Emission Trading Scheme (**ETS**):
allocation: - 21% / 2005

TARGETS UNDER THE 2020 EU CLIMATE & ENERGY PACKAGE

other sectors (**non ETS**):
effort sharing between Member States: - 20% / 2005 for Lux.



NDC UNDER THE PARIS AGREEMENT

the EU and its Member States are committed to a **binding target** of an **at least 40% domestic reduction in GHG emissions by 2030, compared to 1990 levels**

2030

COMMITMENTS

TARGETS UNDER
THE 2030 EU
CLIMATE & ENERGY
FRAMEWORK

Emission Trading Scheme (**ETS**):
allocation: - 43% / 2005

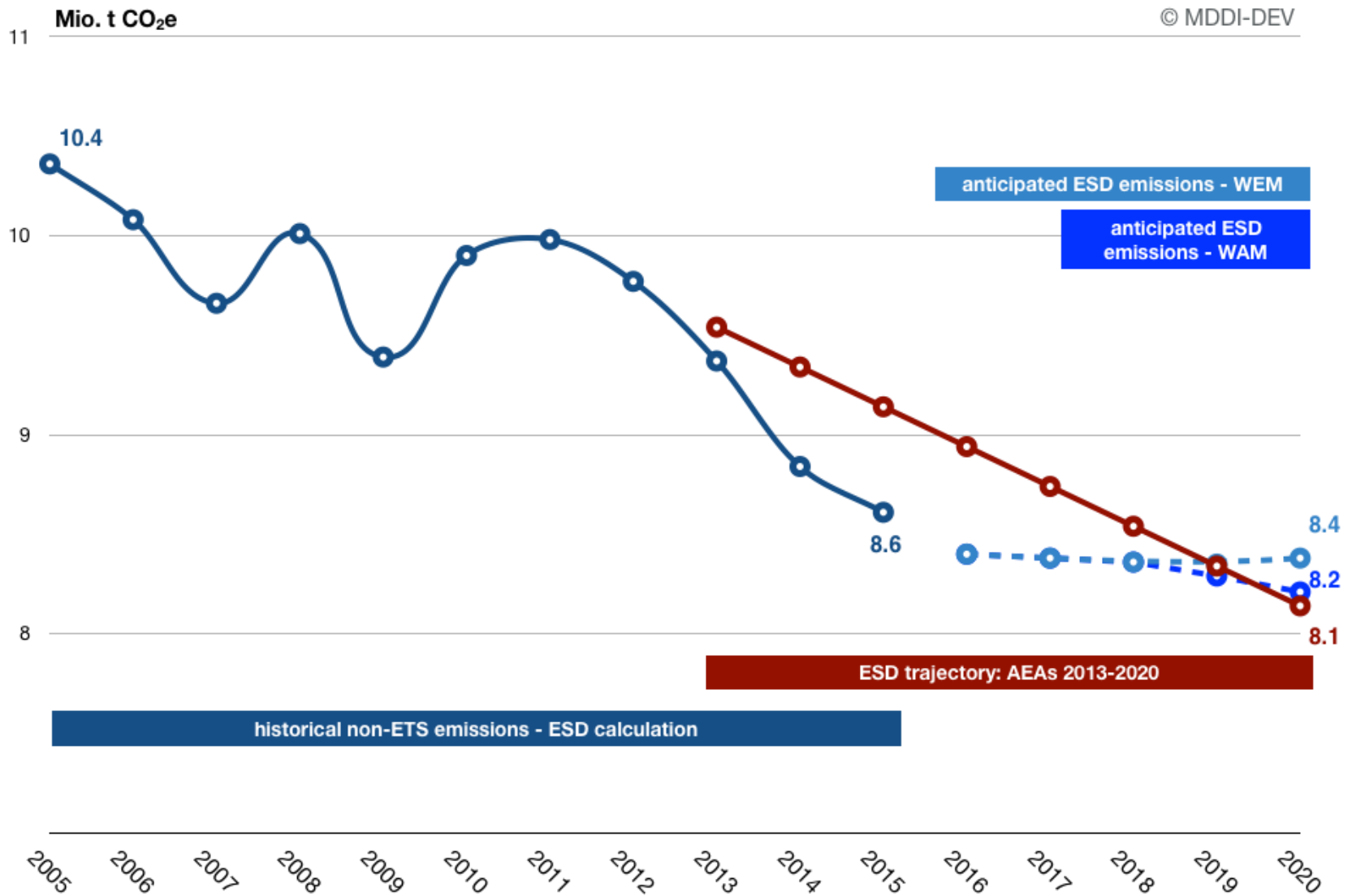
TARGETS UNDER
THE 2030 EU
CLIMATE & ENERGY
FRAMEWORK

other sectors (**non ETS**):
suggested effort sharing
between Member States:
- 40% / 2005 for Lux.

Towards 2020 & 2030 (3)



projected non-ETS emissions and 'ESD trajectory'





Nearly zero energy standards for new residential buildings;
financial support for increasing energy efficiency standards in
existing buildings and promoting the use of renewable energy

sources



PRIME House



KlimaBank



LENOZ certificate



One-stop shop

revised scheme in effect since 1 Jan. 2017

<https://www.myenergy.lu/fr/mediatheque/telechargements/telecharger/962>

Policies & measures – success stories (2)



Climate Agreement with the municipalities ('Pacte Climat')

'certification level'
under the European
Energy Award scheme

implementing a quality
management system
relating to the energy
and climate policy



implementing an
energy management
tool for the
infrastructures and
the equipment

benefiting from
technical and financial
support given by the
Government

<http://www.pacteclimat.lu/fr>

in effect since 1 Jan. 2013 / 2016: air quality criteria included / 2017: circular economy criteria included



the majority of the
country's large
industrial energy
consumers participate

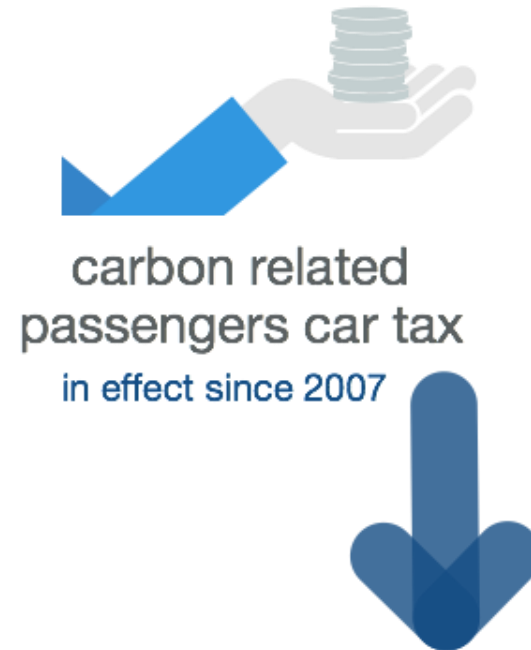
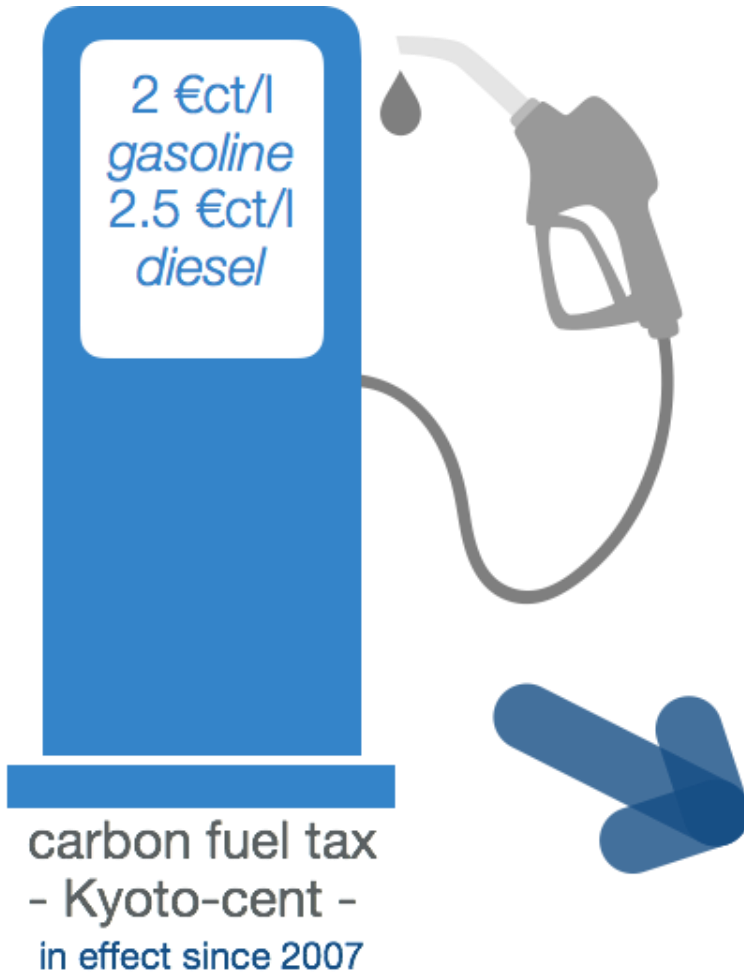
the aim is to improve
energy efficiency over
the period covered by
a general objective of
7 %



exemption from a
proportion of the tax
on electricity and gas
if the objective is met

obligation to introduce
an energy
management system
and to report annually

in effect since 1996, revised & renewed several times / latest agreement covers 2017-2020 and introduces training in energy efficiency management requirements and exchange of good practices



- international climate finance (120 million € 2014-2020, additional to ODA)
- national mitigation measures

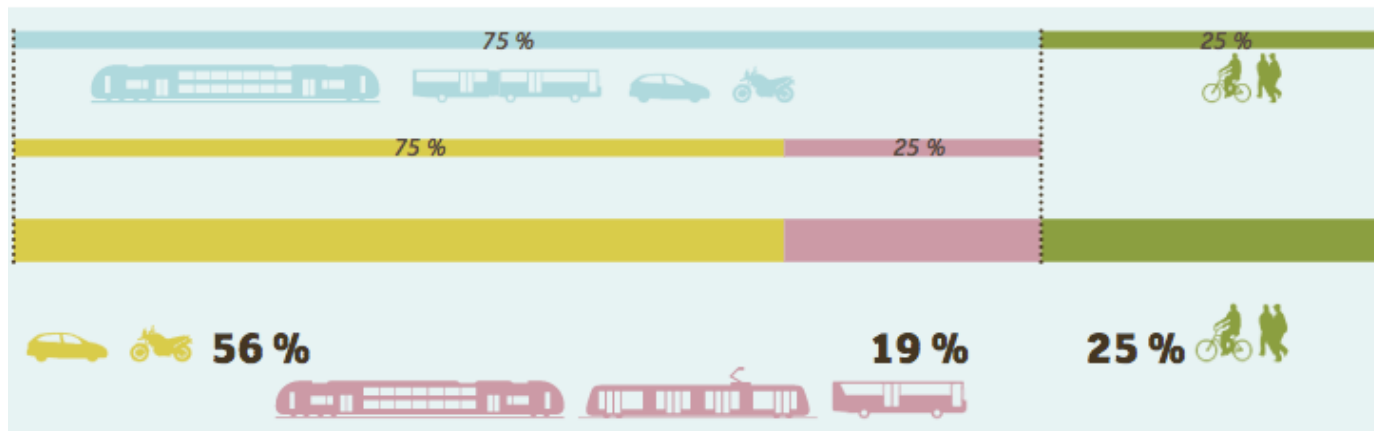
CLIMATE & ENERGY FUND

Policies & measures – the transport challenge (1)

a better mobility



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http://www.mt.public.lu/planification_mobilite/1strategie_modu/index.html

<http://www.luxtram.lu/>

Policies & measures – the transport challenge (2)

other mobility & transport related policies



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fiscal abatement for
zero or low emission
cars & (e-)bikes



deployment of the
e-mobility required
infrastructure

fiscal benefits in kind
for leased car now
based on CO₂
emissions per km and
propulsion means

2018: public admin.
will purchase
exclusively electric &
plug-in hybrid cars



2030 EU Climate &
Energy Framework



SDGs



Paris Agreement



3 THE THIRD
INDUSTRIAL
REVOLUTION
Lëtzebuerg

LCDS



2030 Energy
Strategy



3rd National Action Plan
for reducing CO₂
emissions





Thank you for your kind attention