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where chemistry meets life sciences



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Europe's 2040 climate target

27/02/2024

VLEVA

Els Brouwers

Head of Energy, Climate and Economy



A long value chain of innovative products providing the solutions for the climate



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Chemistry lets the sun shine brighter

Ethylene

Plastics

Anti-freeze

Lubricants and high-tech materials keep your energy running

Insulation material

Medical material /diagnostics

Propylene

Coatings

Cosmetics

Butadiene

The mobility of the future is driven by chemistry

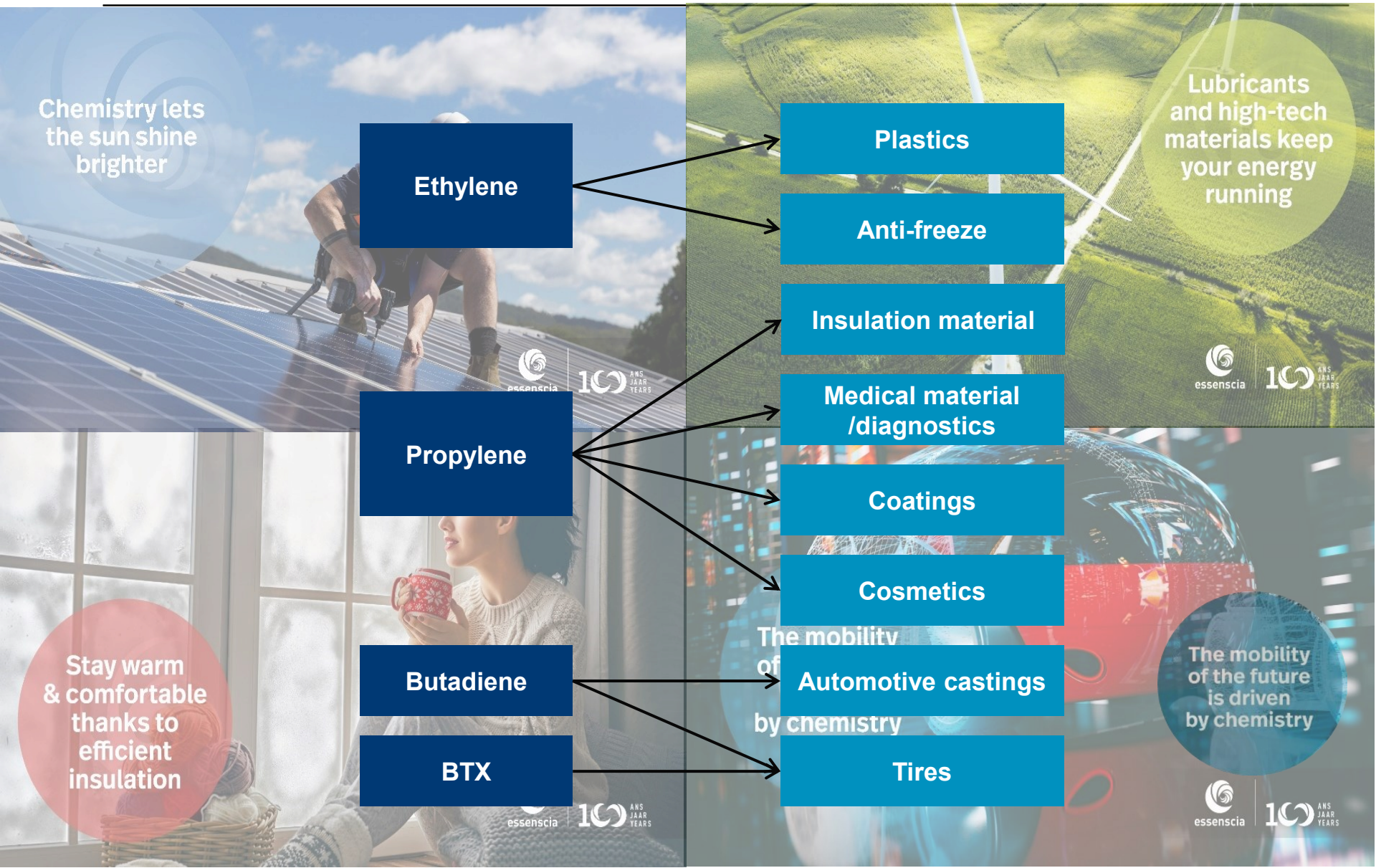
Automotive castings

The mobility of the future is driven by chemistry

BTX

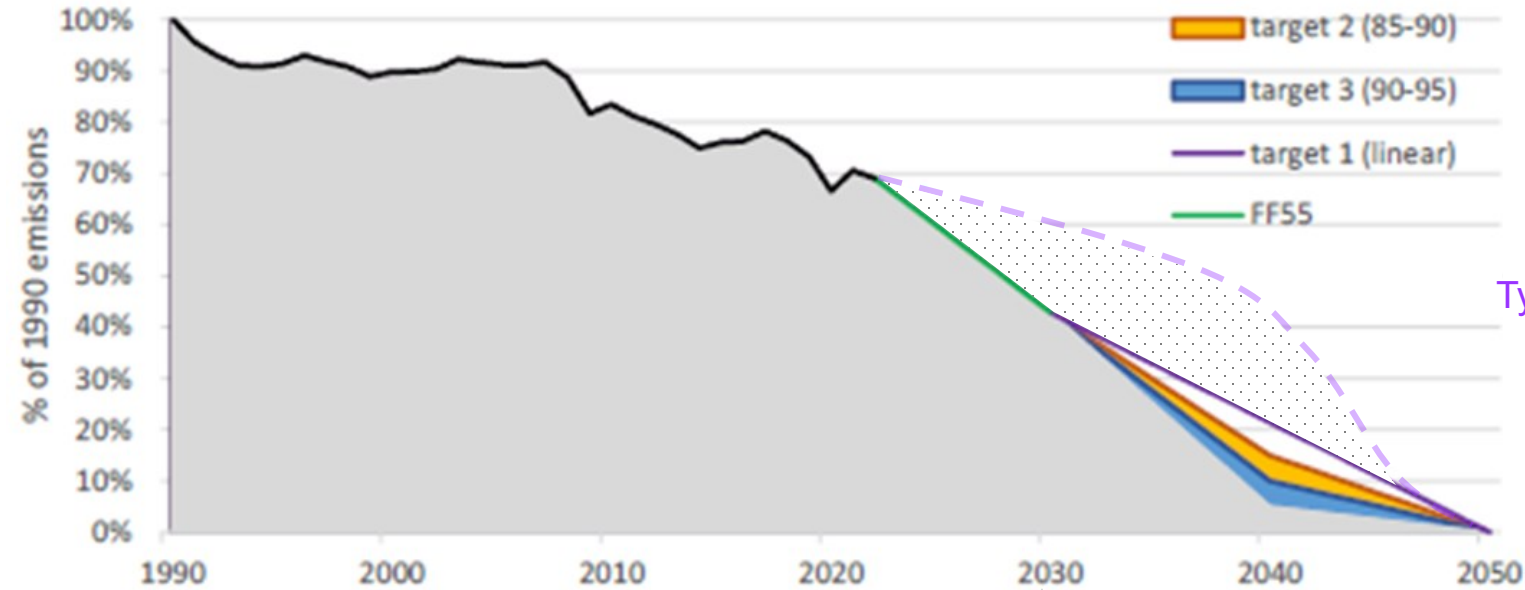
Tires

Stay warm & comfortable thanks to efficient insulation





A GHG emission reduction path challenging technological and economical feasibility



Typical innovation curve

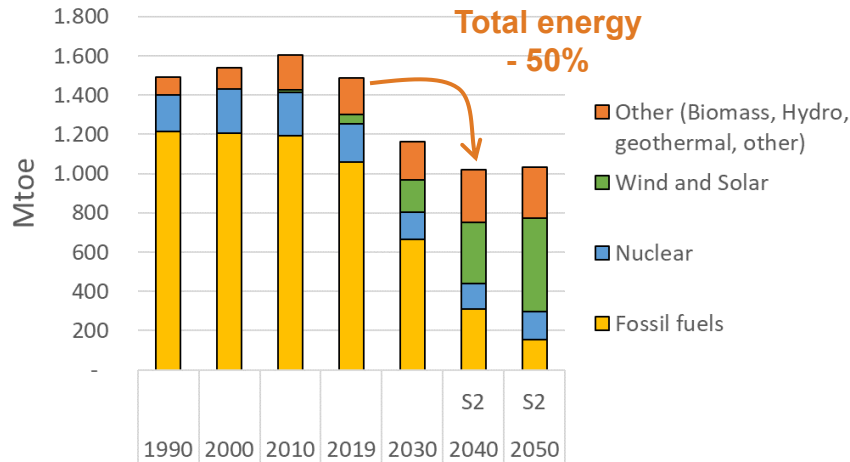
	1990-2010	2010-2030	2030-2040	2040-2050	Scenario
S1	-0.9%/yr	-2.0%/yr	-2.2%/yr	-2.2%/yr	Linear reduction (-78%)
S2	-0.9%/yr	-2.0%/yr	-2.8%/yr	-1.5%/yr	Prolongation current policy (-88%)
S3	-0.9%/yr	-2.0%/yr	-3.3%/yr	-1.0%/yr	EC proposed scenario (-92%)



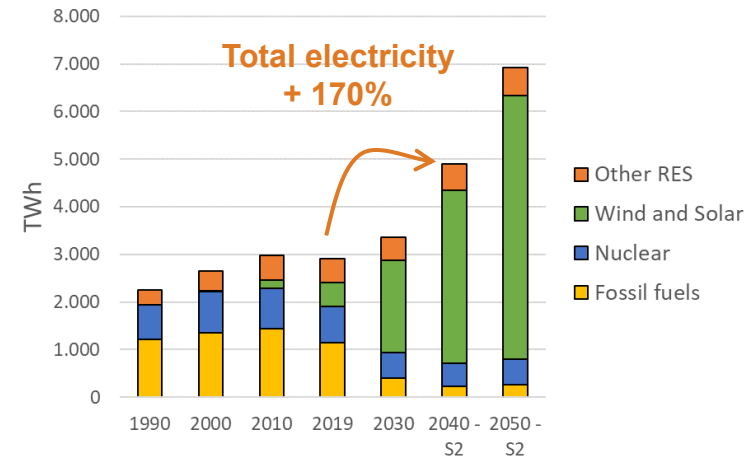
The energy system transformation is huge...

Energy (MWh)

Gross available energy by energy vector

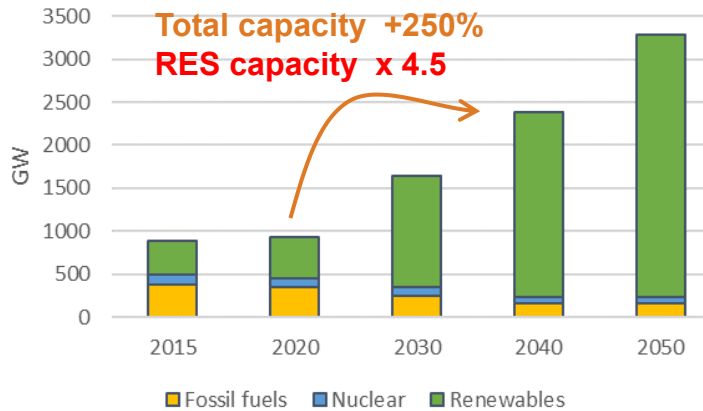


Electricity generation by energy vector

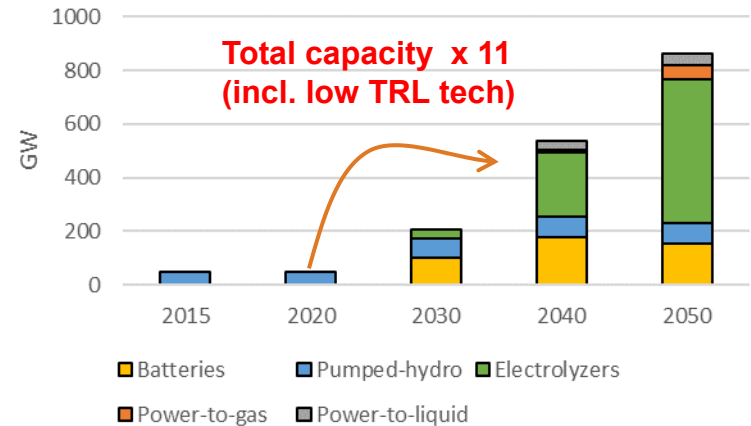


Capacity (MW)

Net installed capacity by energy carrier (Sc. 2)



Net installed storage and new fuels production capacity (Sc. 2)

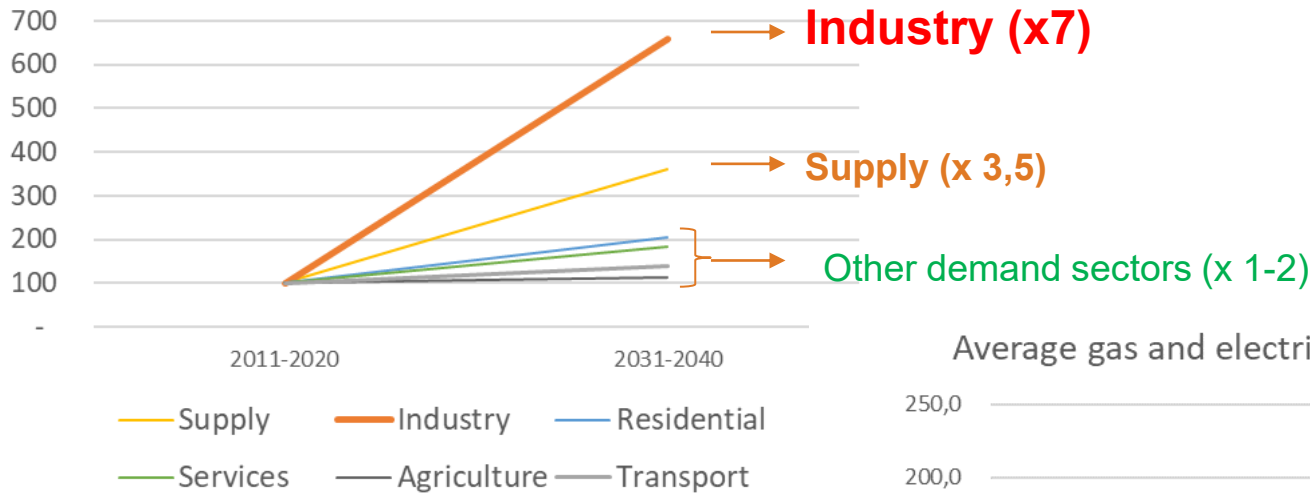




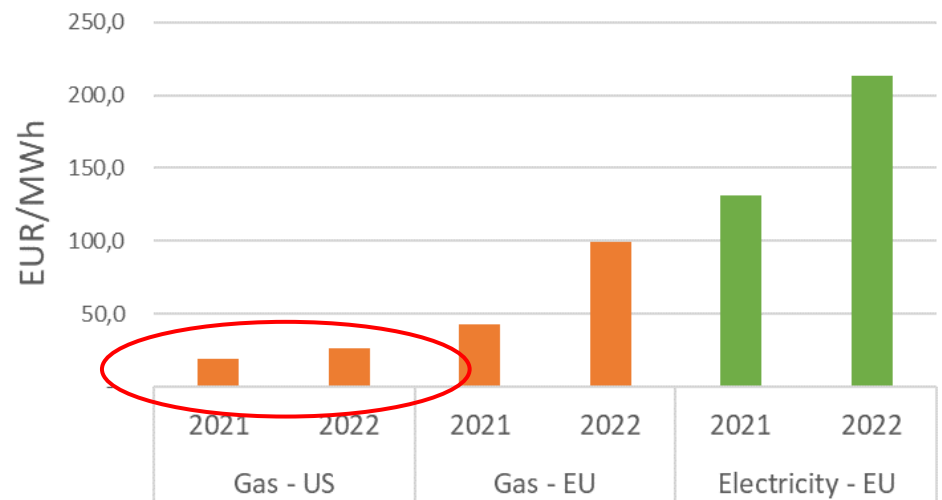
... especially in industry competing globally

Energy system investment needs relative to the GDP should almost double from 1,7% in 2011-2020 to 3,3% in 2031-2040

Energy system investment needs index, Sc. 2
(2011-2020 = 100)



Average gas and electricity prices for industry





Bouwstenen voor Vlaanderen



Energievisie

Infrastructuur voor vervoer en import/export

Koolstof



Waterstof



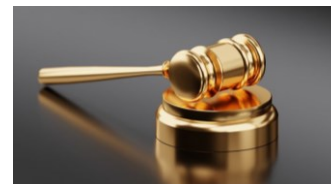
Elektronen



...

Industrieel beleid

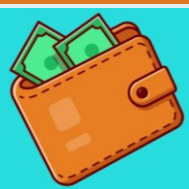
Rechtszekerheid



Transitie-instrument



Vergunningen



Budget

Bedankt

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