

Volvo Car Group

LTH & ZJU Student project

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The World of Volvo Car Corporation



Sweden

- Head office, Gothenburg
- Product development, Gothenburg
- Marketing, Gothenburg
- Administration, Gothenburg
- Design centre, Gothenburg
- Component manufacturing, Skövde, Flöby and Olofström
- Car production, Gothenburg and Uddevalla

Belgium

Car production, Gent

Spain

Design centre, Barcelona

USA

Design centre, Camarillo

Sweden	14,550
Belgium	3,981
China	732
Thailand	0
Malaysia	341
Market companies	1,908

Volvo Car Corporation is represented in about 100 countries at approximately 2,300 dealers

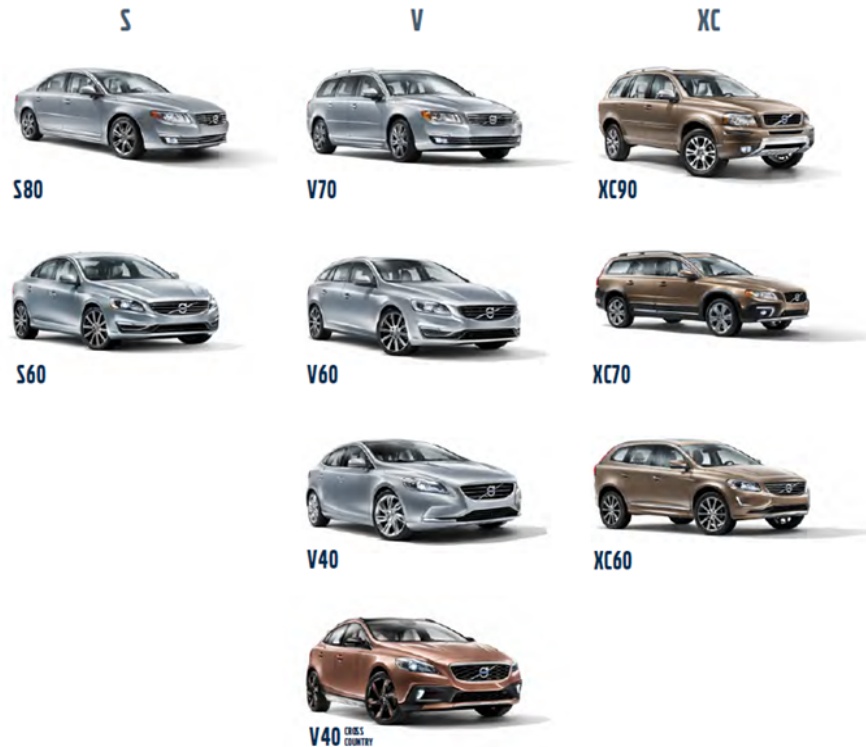
TOTAL	21,511
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Volvo Car Corporation in China



Volvo Car Corporation

Sweden's second largest export industry



Export	
1.	Ericsson
2.	Volvo Personvagnar AB
3.	AB Volvo
4.	Preem AB
5.	AstraZeneca AB
6.	SSAB AB
7.	Sandvik AB
8.	LKAB
9.	AB Tetra Pak
10.	Saab (koncernen)

Source: Nordic Netproducts AB

$440.000 \text{ cars / yr} = 2.000 \text{ / work day} = 80 \text{ cars / hr}$

Strategic Challenges for the Industry



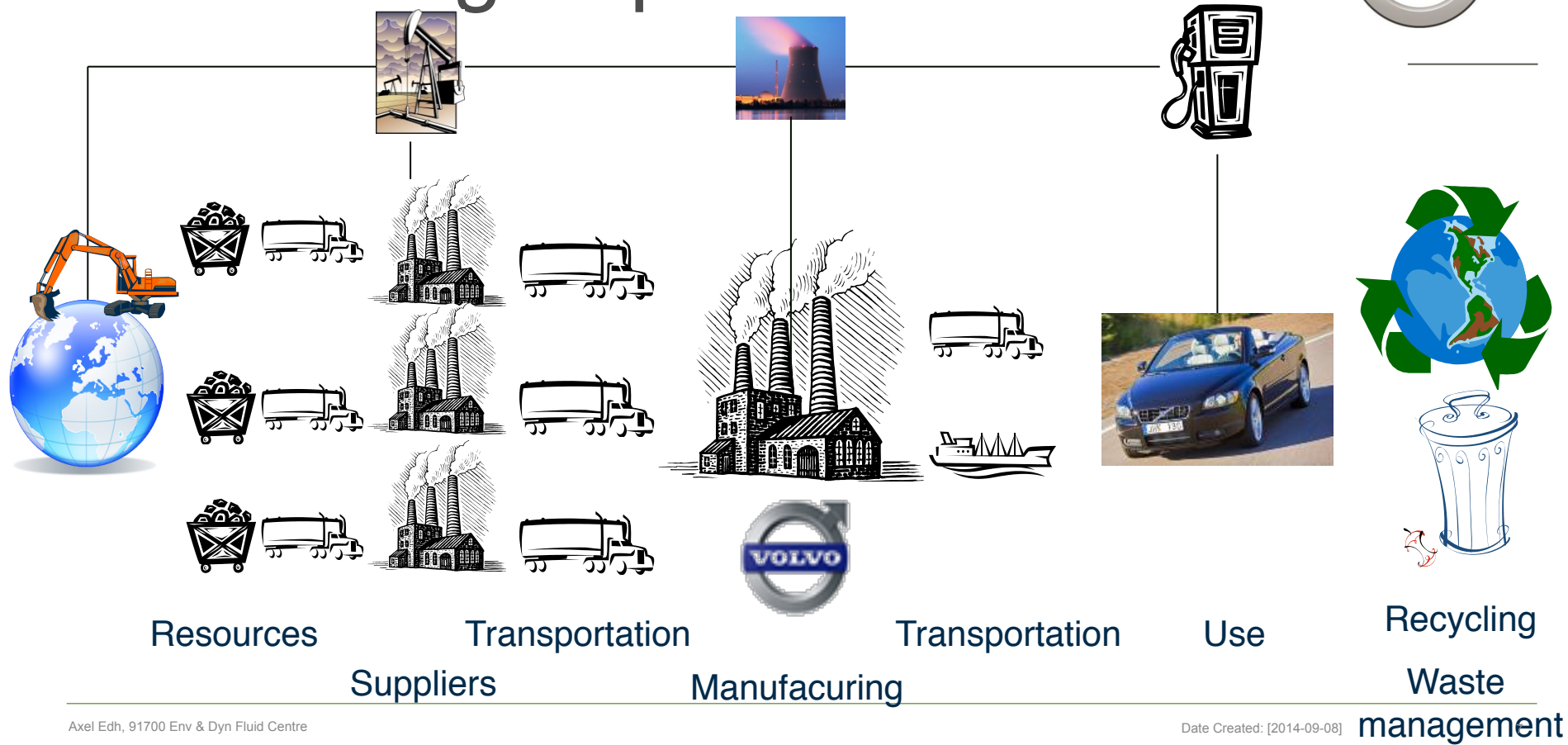
- Increasingly growing pressure to reduce CO₂ emissions
- Very strict CO₂ targets on all major markets 2020:
 - EU 95 g/km
 - US 54,5mpg (2025)
 - CH 5,0 l/100km
- The CO₂ targets require some level of electrification
- In addition; specific EV requirement on some markets, such as California ZEV mandate
- In addition to legislation the major market driver is CO₂ taxations and Bonus/Malus systems which leads to very fragmented market situation with no harmonization
- A clear political agenda to reduce CO₂ emissions and to reduce dependence on crude oil as sole energy source

Strategic Challenges for the Industry

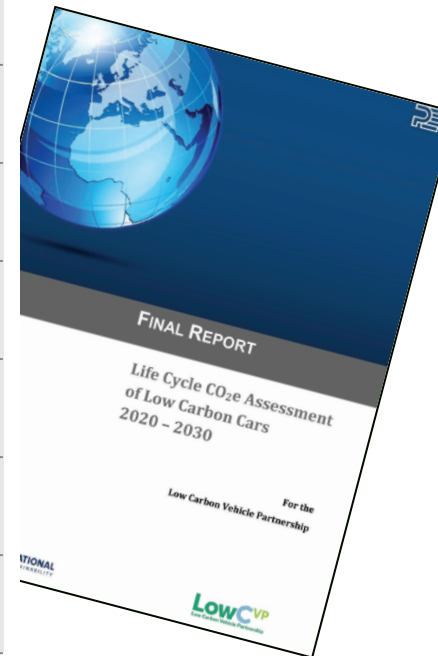
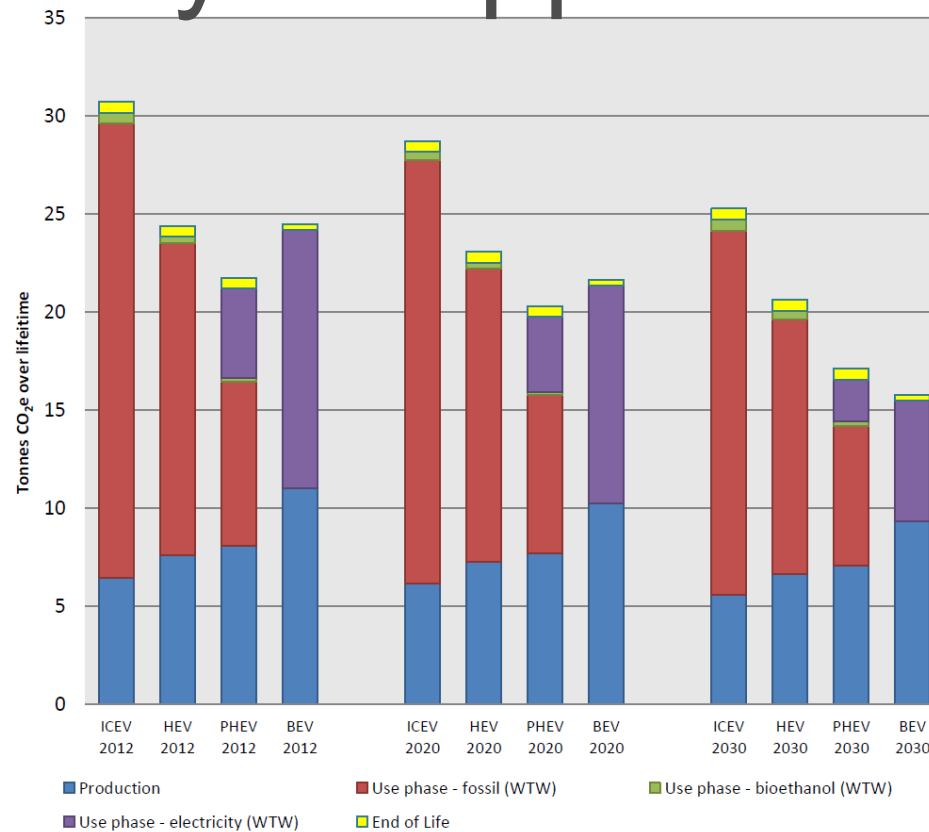


- A successful solution requires three main elements:
 - Feasibility - it must be technically possible
 - Desirability - customers must want it and be willing to pay for it
 - Viability - it must be possible to generate profits at least in the long run
- All three components must be in place for a successful implementation plan. Currently electrical vehicles struggle with all three elements.
- There is a clear need for an increased level of electrification in all vehicles the coming years.
- VCC have started an ambitious electrification program with C30 BEV and V60 Plug-in-Hybrid. The next phase will be very critical if the roll-out should continue as needed.

Volvo car group



life cycle approach



Environment, FRAME WORK



Energy efficiency

- Minimize the energy needed to use our products and their functions.

Health

- Personal health for our customers and people who come in contact with our products.

Resource efficiency

- Maximise the use of renewable, recycled materials and the reuse of our products.
- Minimise the amount of material and energy needed for our systems and components.

Technology roadmap risks



