JOBS IN A CLEAN FUTURE AUTOMOTIVE INDUSTRY

ETUC/ETUI conference: The World(s) of Work in Transition
28th June 2018
LOW CARBON CARS HAVE NET POSITIVE EFFECTS ON JOBS BUT REDUCE EMPLOYMENT IN SOME SECTORS

Upsides

• Lower running costs
• Added value from efficient techs inc PHEV
• More available spending
• Job creation in other sectors
• Less oil imports
• Local energy production & infrastructure

• International competitiveness
• Higher vehicle prices

Downsides

• Fewer refining jobs
• Fewer jobs in BEV manufacture & maintenance
FUELLING EUROPE’S FUTURE

DATA INPUTS

- Data on volume of energy needed to provide mobility service
- Data on cost & efficiency of energy-converting technology
- Data on price of oil, gas and electricity
- Economic projections

EXPERT PANEL

Reviews:
- Data
- Scenarios
- Assumptions

STOCK MODEL

Calculates the stock of capital assets & energy consumption per sector on an annual basis

SIMULATION MODEL

MODEL OUTPUTS

- Employment impact across sectors
- Impacts on household budgets
- Changes to consumption, GDP
- Changes to energy trade balance
- Changes to CO₂, NOₓ, particulates
LOW CARBON CARS DELIVER GDP GROWTH

Current policy

Low emission scenarios
LOW CARBON CARS ARE GOOD FOR JOBS
DELOITTE SCENARIOS SHOW MIXED IMPACTS ON JOBS

- 5% increase
- 1.7% decrease
- 50% decrease
- 24% decrease
ELAB STUDY SHOWS A LOSS OF JOBS IN A BEV SCENARIO BUT PRODUCTIVITY IMPROVEMENTS ARE A BIGGER DRIVER
EU CARMARKERS ARE INVESTING IN CHINA NOT HERE

EU carmakers invested 7 times more in China than EU
China is leading the race for electric car investments

Investments in the EU
€3.2 billion

Investments in China
€21.7 billion

Source: Transport & Environment
The jobs risk is from EVs not being made in the EU.

Car manufacturing job projections for 2030

- Jobs from ICE production
- Jobs from EV production
- Jobs from battery production

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Number of Jobs</th>
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<tr>
<td>Baseline (2020)</td>
<td>1,500,000</td>
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<tr>
<td>No EV production in the EU</td>
<td>1,000,000</td>
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<tr>
<td>10% of EV sales made in the EU</td>
<td>900,000</td>
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<tr>
<td>90% of EV sales made in the EU</td>
<td>1,080,000</td>
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<td>120% of EV sales made in the EU</td>
<td>1,100,000</td>
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ZEV MANDATE WILL DRIVE INVESTMENT AND IS WIN-WIN-WIN FOR EU ECONOMY

Aids smart, renewable grid balancing

Creates pathway to 2050 goals

Creates charging infrastructure business case

Drives EU investment in EV & cell manufacturing

Reduces long term compliance costs

Increased choice of models & marketing

ZEV sales target
KEY REQUIREMENTS

Ambitious targets

- 2025 target -25% from 2020
- 2030 goal 50-60%

A target for low and zero emission vehicles

- 20% 2025
- 40-60% 2030

Real world saving to match test results