

*Navigating the Roadmap for Clean, Secure
and Efficient Energy Innovation*



The macroeconomic impacts of the SET-NAV pathway

*Final Conference
CEPS, Brussels
21th March 2019*



SEURECO, SINTEF



SEURECO
ERAΣME



METHODOLOGY

- ❑ National champions pathway used as reference

- ❑ Introduce in the model the data of the other pathways in difference wrt this reference
 - Buildings
 - Industry
 - Transports
 - Supply

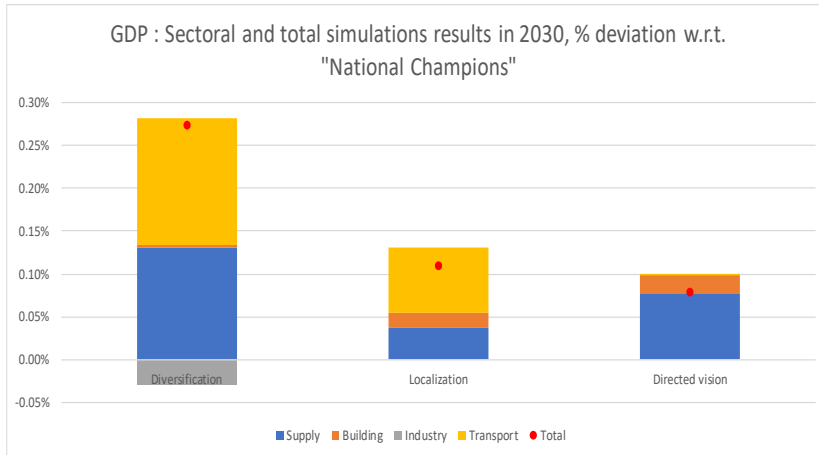


ANALYSING THE RESULTS

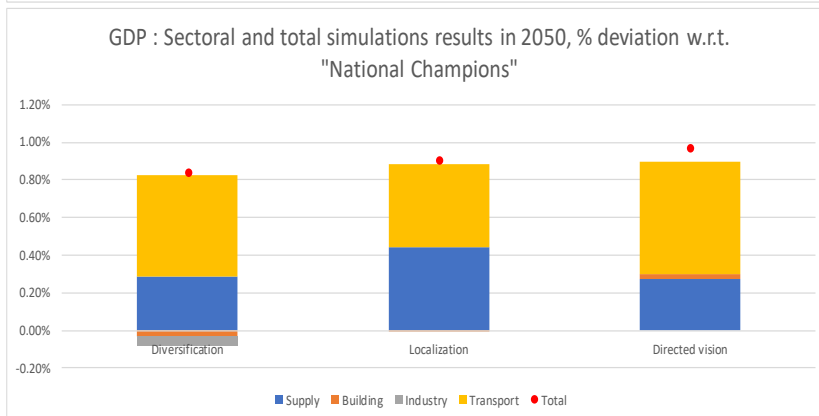
- The macroeconomic results have to be explained by two factors :
 - The relative contribution of each inputs (building, Industry...) in the global results
 - What are the main drivers for the economy of each sectors
 - Investment
 - Final consumption
 - External trade



CONTRIBUTIONS OF EACH INPUTS

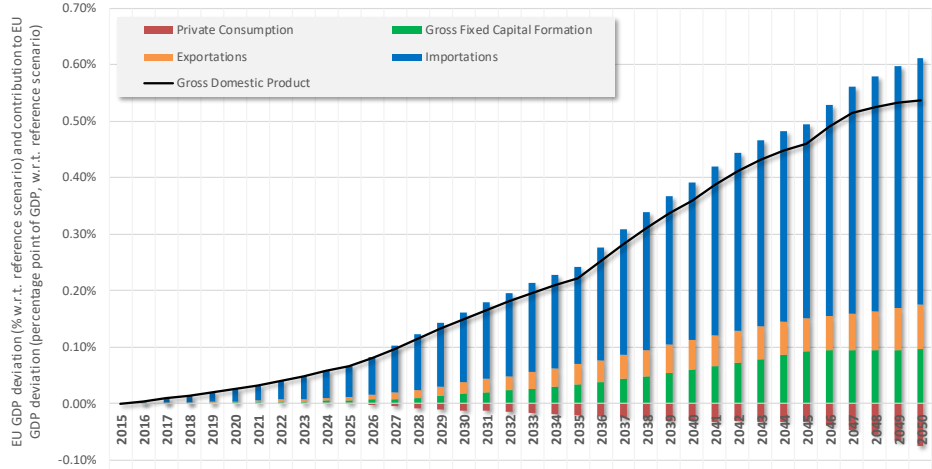


- Industry and buildings contributions are weak
- GDP deviations are mainly driven by the transports and supply sectors

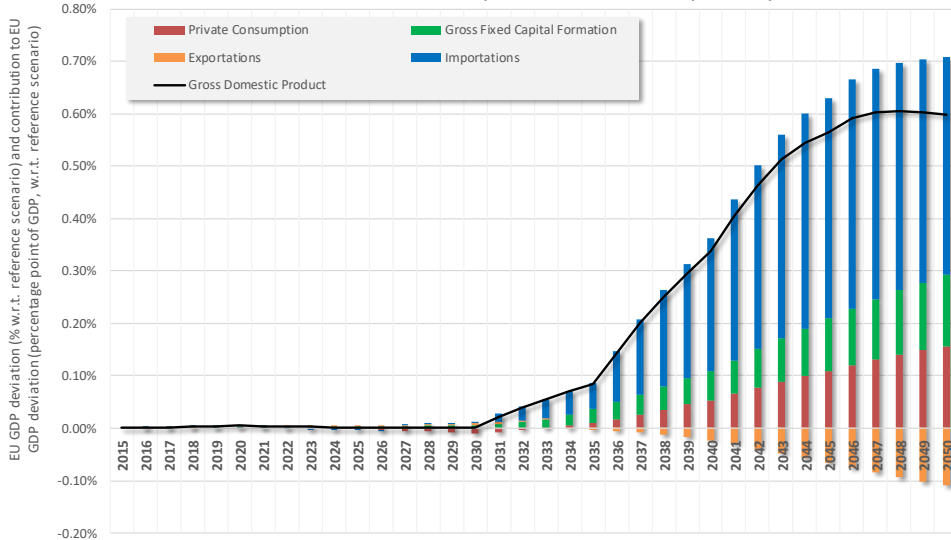


TRANSPORTS : MAIN RESULTS

GDP and contributions: Transport diversification pathway



GDP and contributions: Transport Directed vision pathway

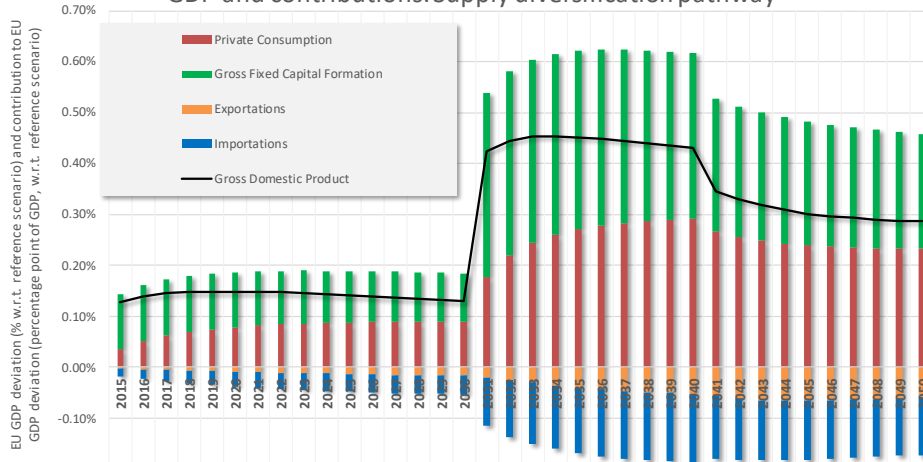


- GDP is mainly pulled up by the decreasing imports of fossil fuels
- In the diversification pathway, final consumption contribute negatively due to the decreasing employment (-270 thousand) resulting from the strong decrease of car expenditures
- In the directed vision pathway job creation (+400 thousand) pulled up final consumption



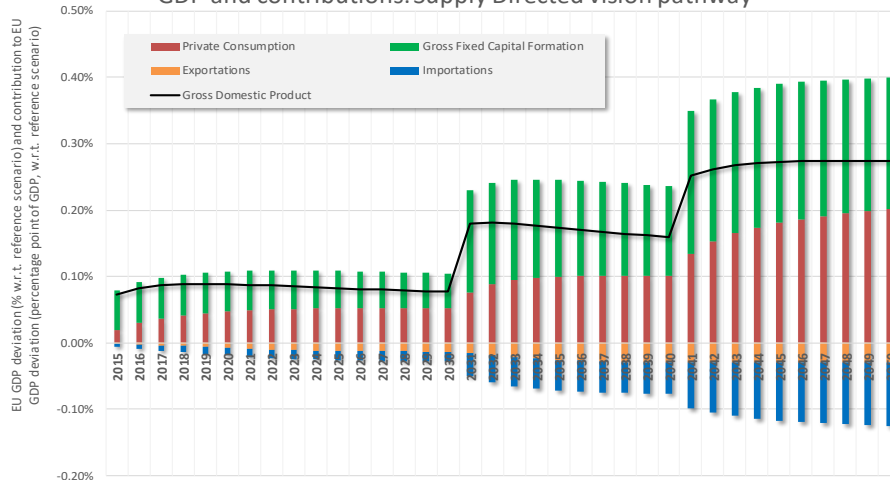
SUPPLY : MAIN RESULTS

GDP and contributions: Supply diversification pathway



- GDP is pulled up by investment
- Increasing production lead to job creation

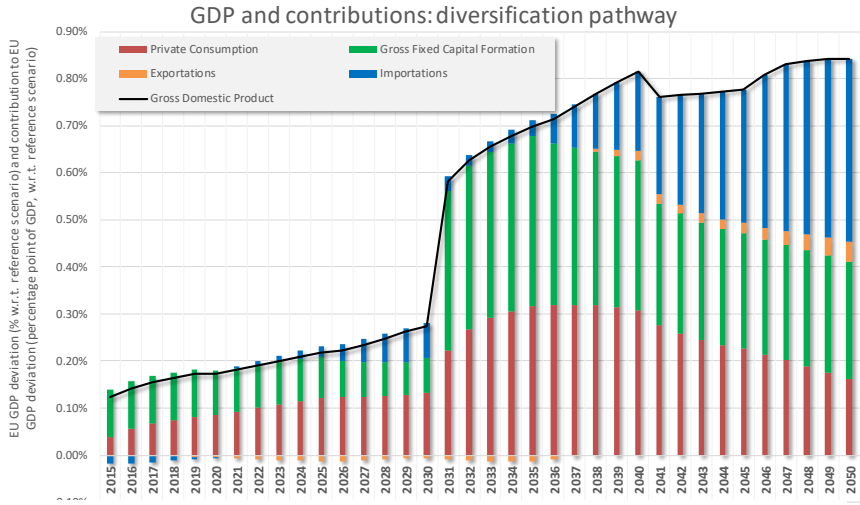
GDP and contributions: Supply Directed vision pathway



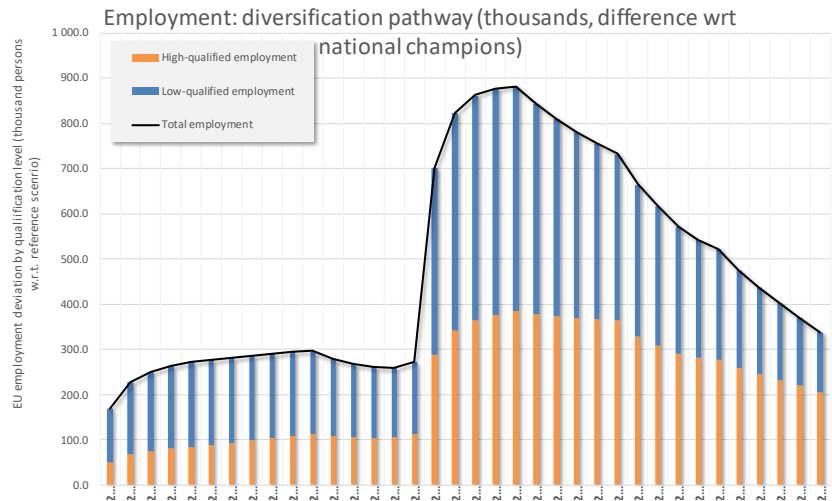
- Job creations (+500 thousands) allow increasing households consumption



DIVERSIFICATION PATHWAY



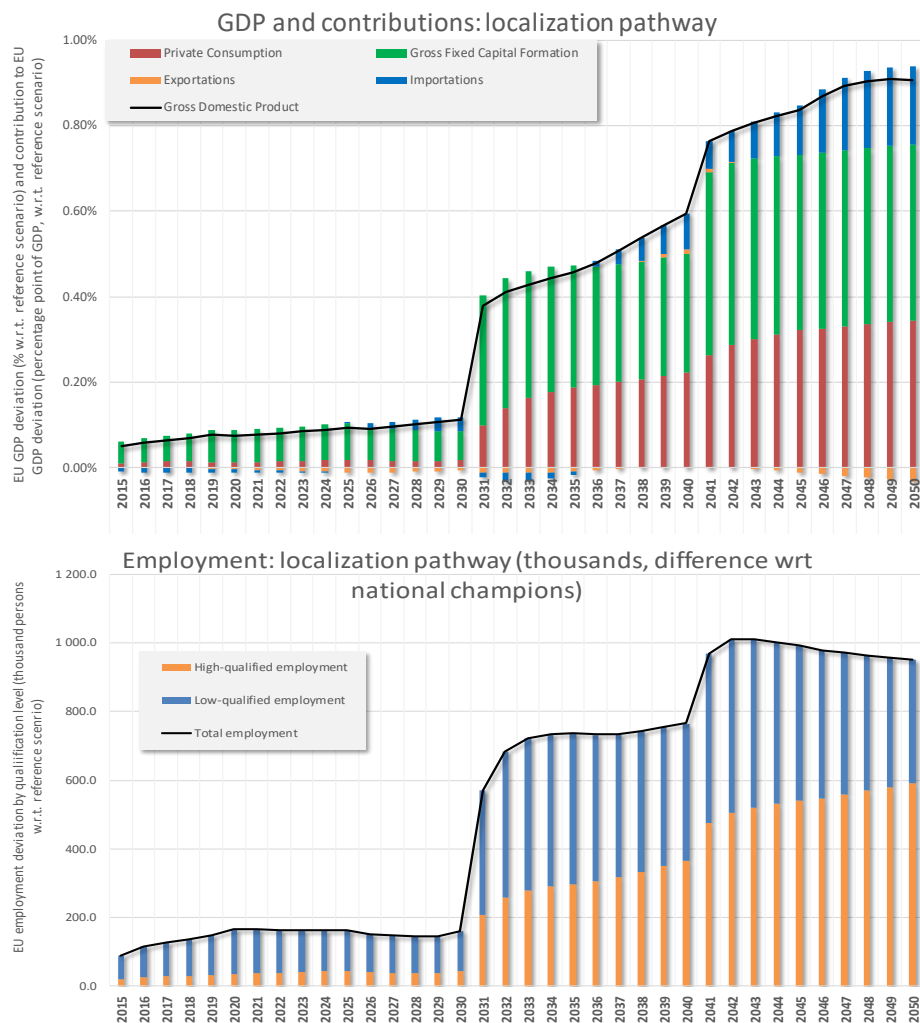
- GDP reach +0,84% compared to the national champions pathway
- Mainly pulled up by investment and the decrease of fossil fuel imports



- Employment is rising sharply after 2030 (+881 thousands in 2035) due to the strong increase of investments, then decline progressively (+340 thousands in 2050) due to car expenditure decrease



LOCALIZATION PATHWAY

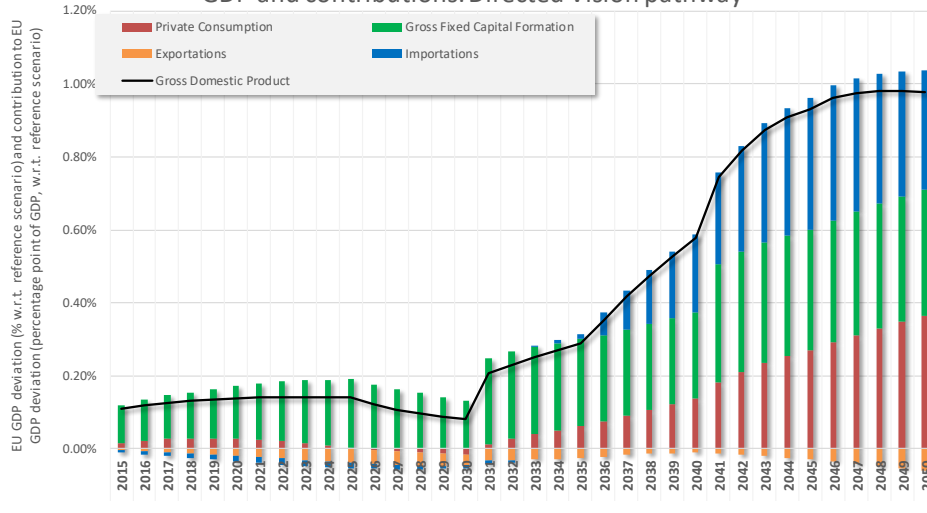


- GDP rise up to +0,91% in 2050 wrt to the national champions pathway
- Mainly pulled up by investment and final households consumption
- Consumption rise due to the increase of employment (+ 951 thousands in 2050)



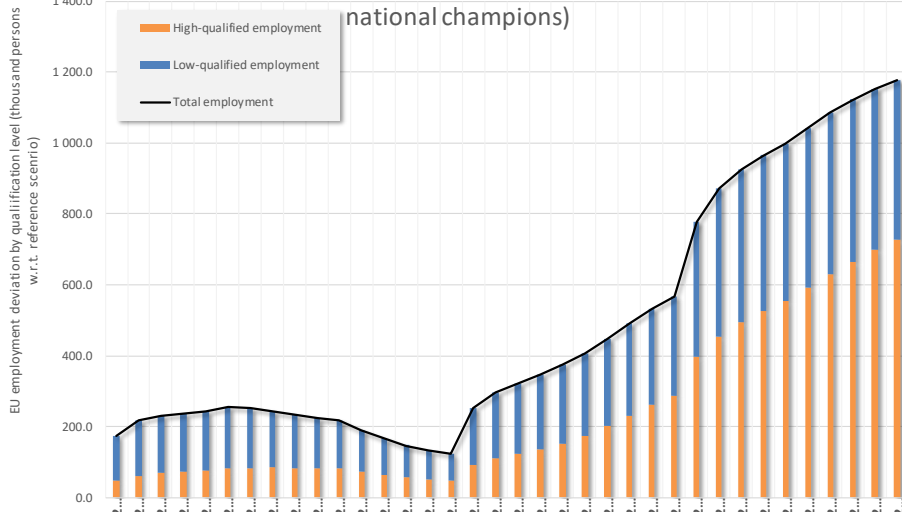
DIRECTED VISION PATHWAY

GDP and contributions: Directed Vision pathway



- GDP gains are of +0,98% in 2050 wrt to the national champions pathway
- Pulled up by investments, final households consumption and the decrease of fossil fuel imports

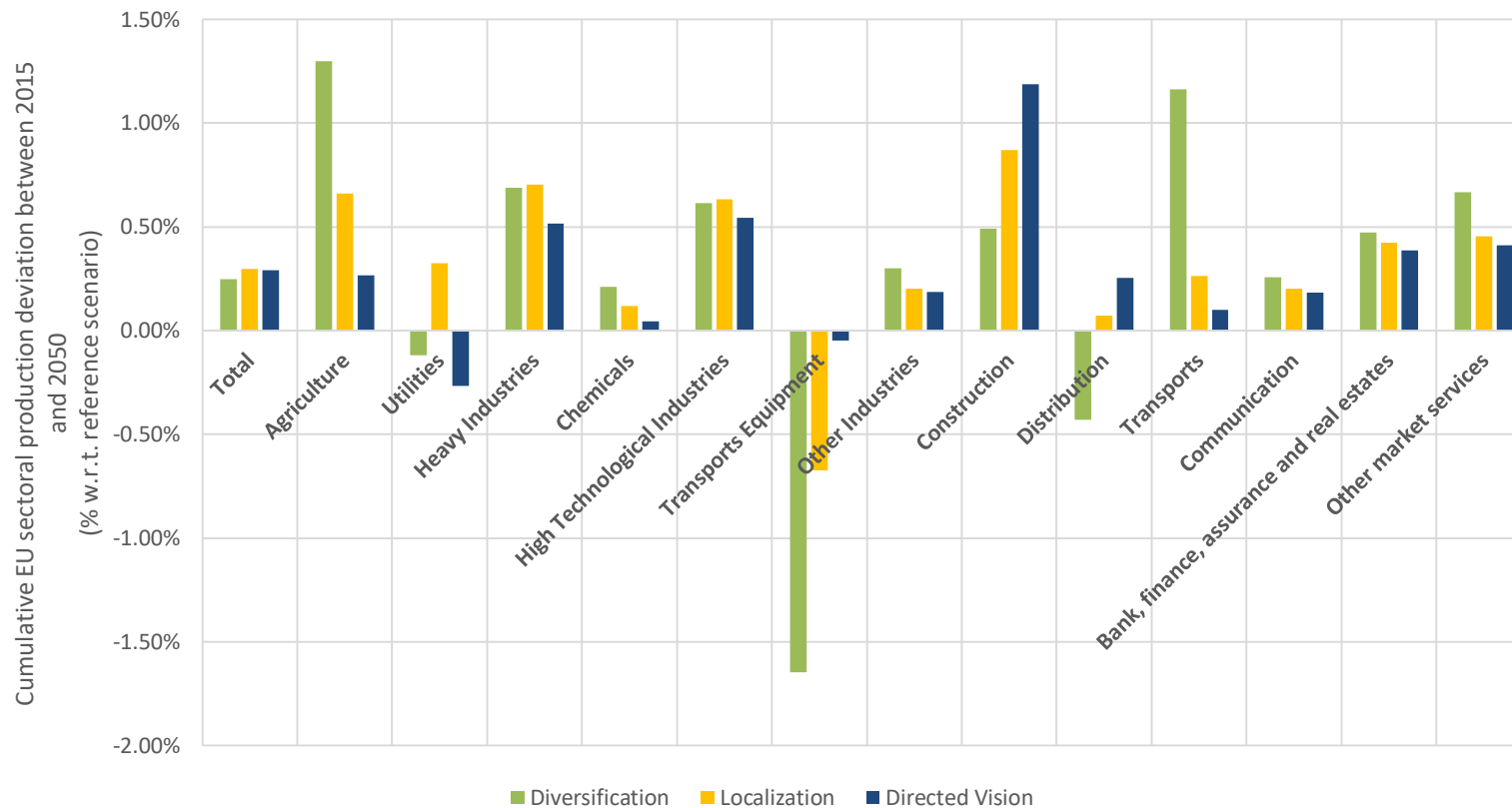
Employment: Directed vision pathway (thousands, difference wrt national champions)



- Employment is increasing by more than 1,1 million in 2050



SOME SECTORAL RESULTS : OUTPUT



CONCLUSION

- ❖ Macroeconomic results are mainly driven by transports and supply side
- ❖ When compared to the national champions pathway, the three other pathways leads to higher GDP and Employment
- ❖ The directed vision is the best pathway either in term of GDP gains (+0,98% in 2050) and employment (+1,1 million in 2050)
- ❖ The diversification pathway is penalised by the drastic reduction of expenditures for cars by households



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Thank you!

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