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**Net Zero by 2050:  
What Role for Biofuels and  
Other Non-fossil Fuels?**

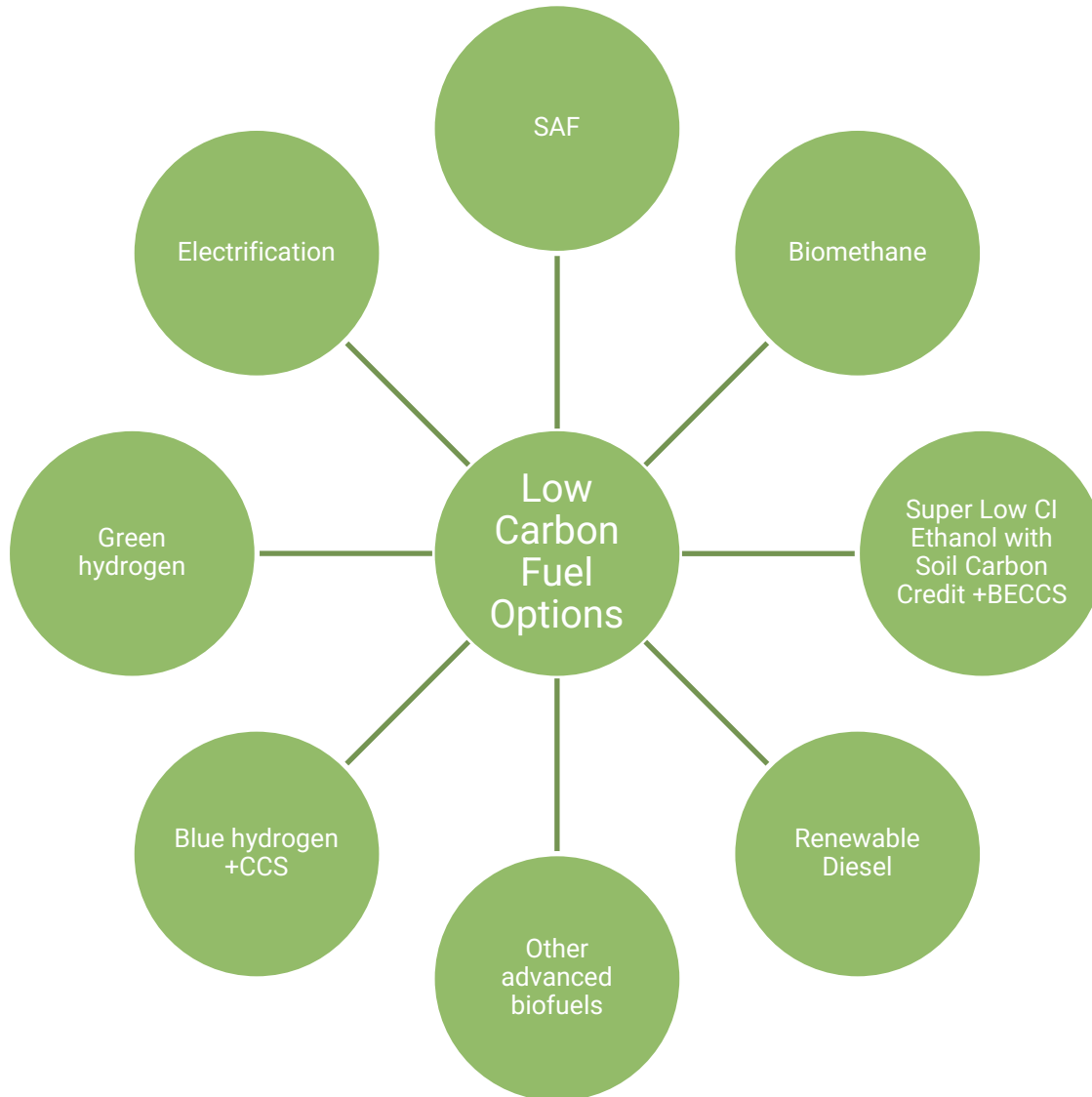
*Scaling Up Conference*

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# No One Fuel or Technology Will Dominate the Future

*It will be a mix of fuels and technologies that gets us to net zero*

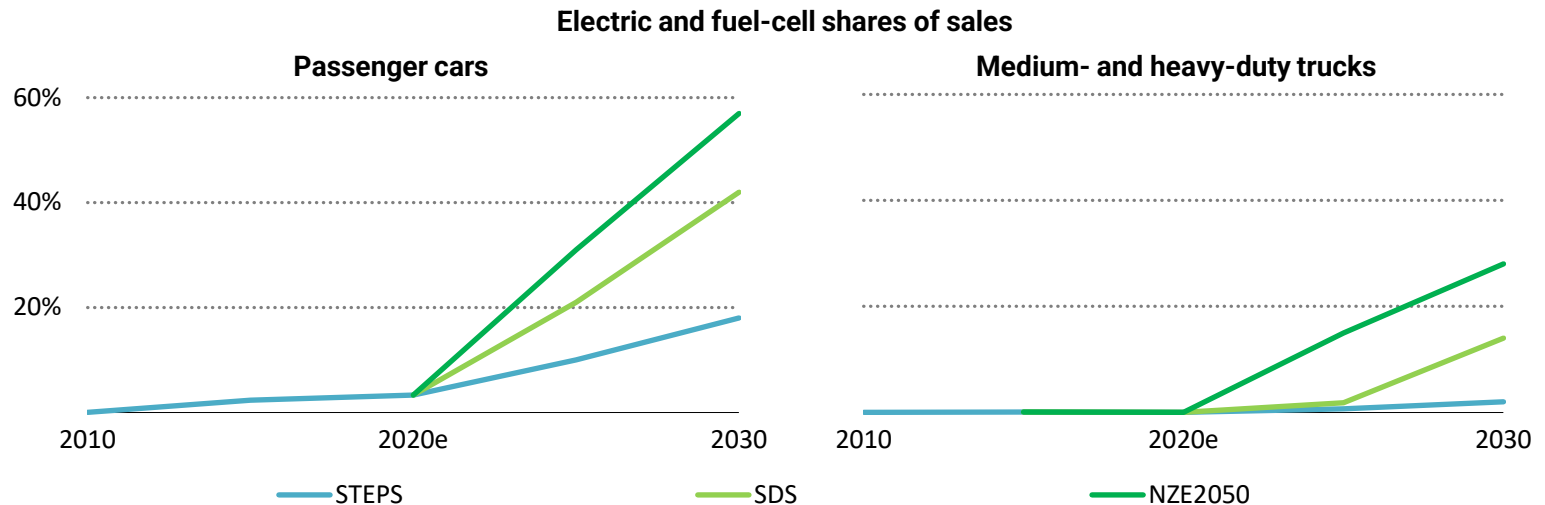
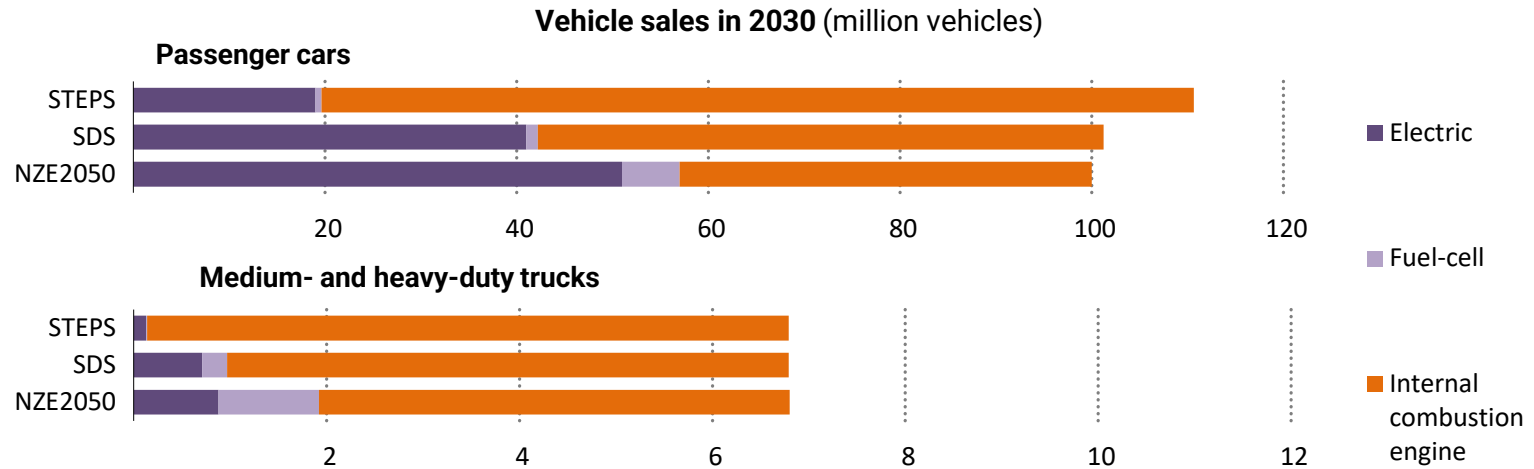


- We are in the energy transition
- Refiners are looking at multiple solutions to deliver low, no and even net negative fuels
- Advanced biofuels production technologies are being closely watched (e.g. gasification, fast pyrolysis and HTL)
- All of these fuels are on the table
- Some of these fuels will be integrated together at the refinery



# Electrification Will Grow But Not Be a Silver Bullet

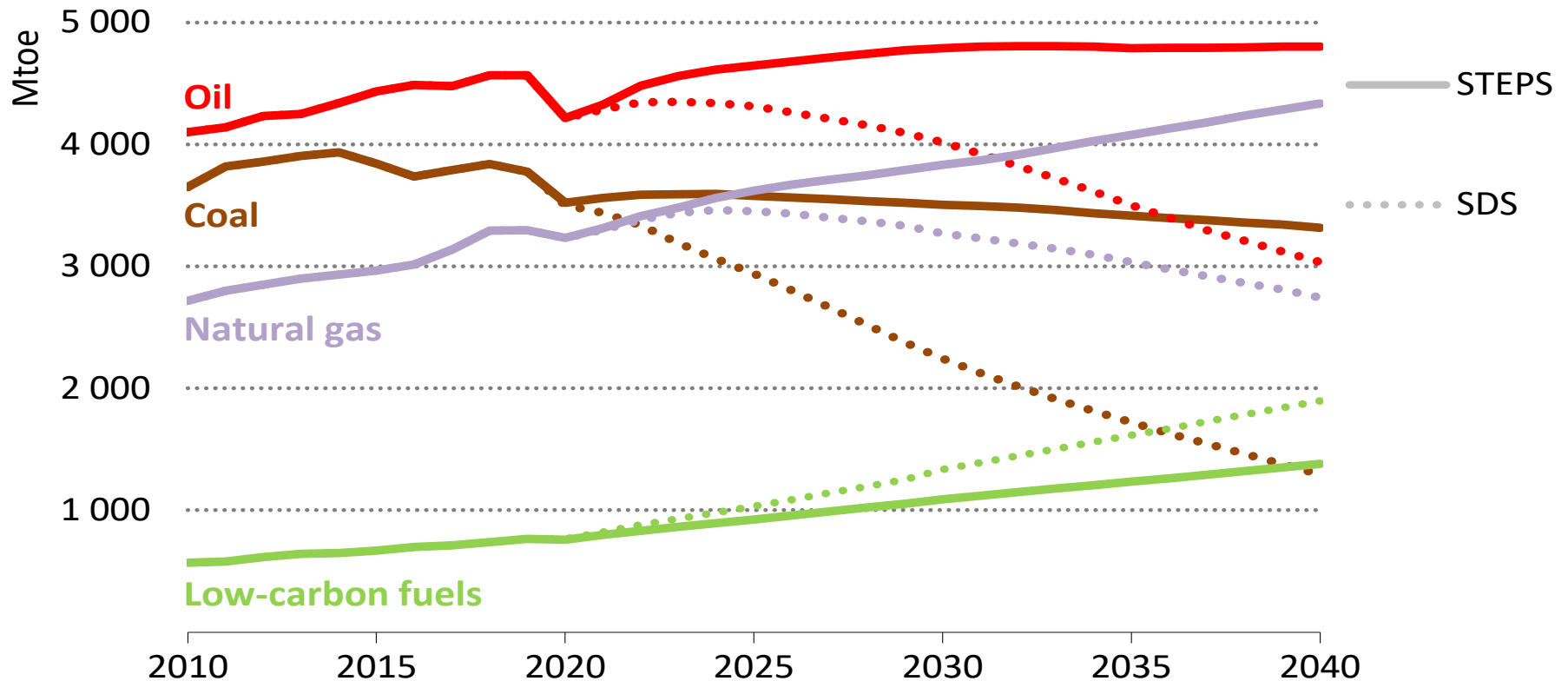
*The SDS scenario is probably the most realistic...what will fuel these ICE vehicles?*





# Low Carbon Fuel Demand Will Increase

- Even if countries set no other policies than what is on the books now (STEPS scenario), low carbon fuel demand will increase in our current economic situation and with the pandemic.
- If countries take bolder policy actions (SDS scenario) the increase will be steeper.





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# Questions?

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