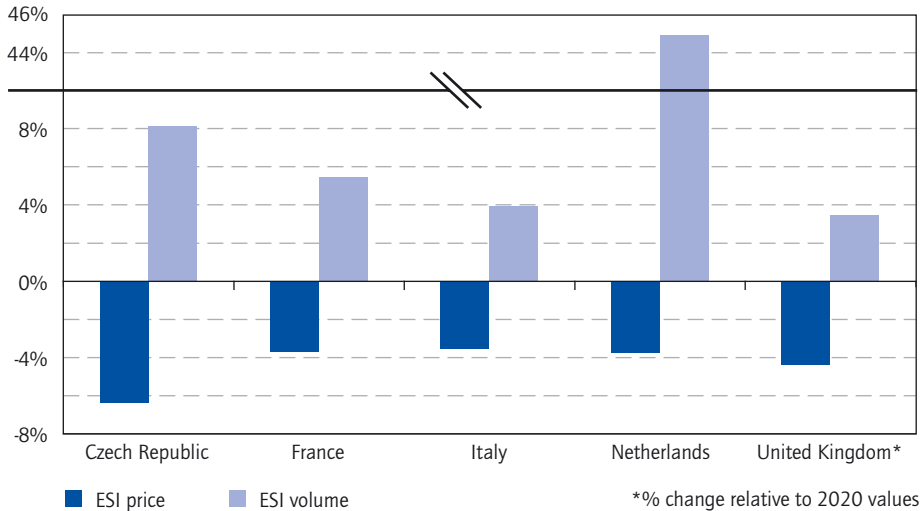


FIGURE 38

### Change in 2030 $ESI_{price}$ and $ESI_{volume}$ compared to reference scenario values: 5% emissions reduction target reached through a switch to biofuels in road transport



## Summary

The adoption of a quantitative framework to assess policy impacts in terms of  $CO_2$ ,  $ESI_{price}$  and  $ESI_{volume}$  allows identifying and gauging possible policy synergies and conflicts. This section provides an illustration of how specific climate policy mitigation measures in the electricity and transport sectors could affect the energy security outlook of various countries. For the sake of simplicity, all policy measures considered are compared against an identical 5% reduction in countries' emissions from baseline by 2030.

End-use efficiency improvements and an enhanced reliance on non-fossil fuel technologies (renewables or nuclear) in the electricity sector have positive impacts of similar magnitude on energy security. This can be explained by the similarity of the resulting underlying changes in fuel mix required to achieve a 5% reduction in emissions: a move away from coal and gas in power generation. Country specificities, however, imply different effects.