ICAO STOCKTAKING 2021

IRENA
International Renewable Energy Agency

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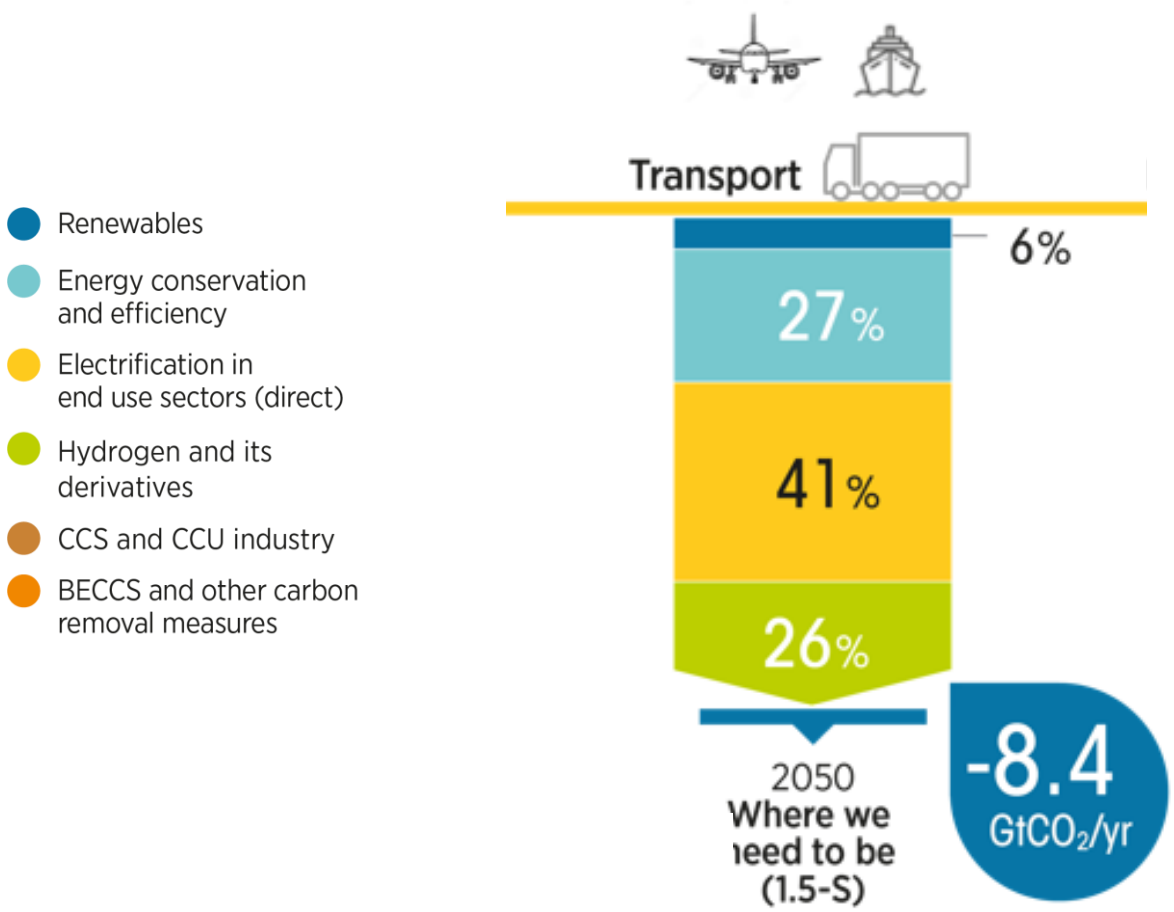
Key messages

Hydrogen, eFuels and bioFuels offer significant carbon reductions

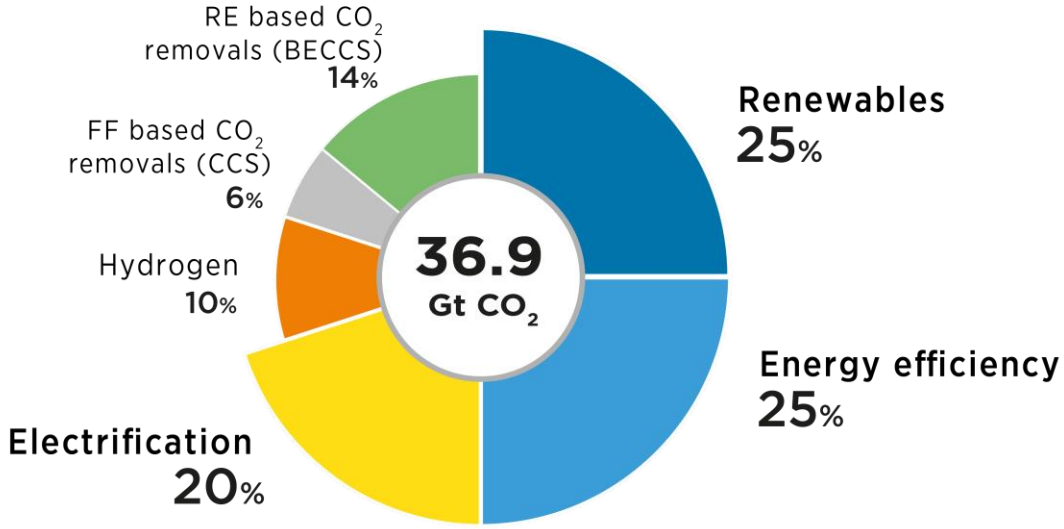
Transportation and storage of hydrogen and efuels is technically feasible

Policy is needed to accelerate uptake of green fuels at airports

Hydrogen plays key role in abating CO_2



Six components of the energy transition strategy, IRENA WETO 2021



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Hydrogen can reduce 26% carbon emissions in aviation, shipping & HDV

Hydrogen is technology mature in transportation

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Commercial and heavy lifting

Source: Hyster

31,000 FC cars globally

Source: Toyota

Concept of FC plane

Source: Airbus

Tube-trailers H2 gas

Source: BOC

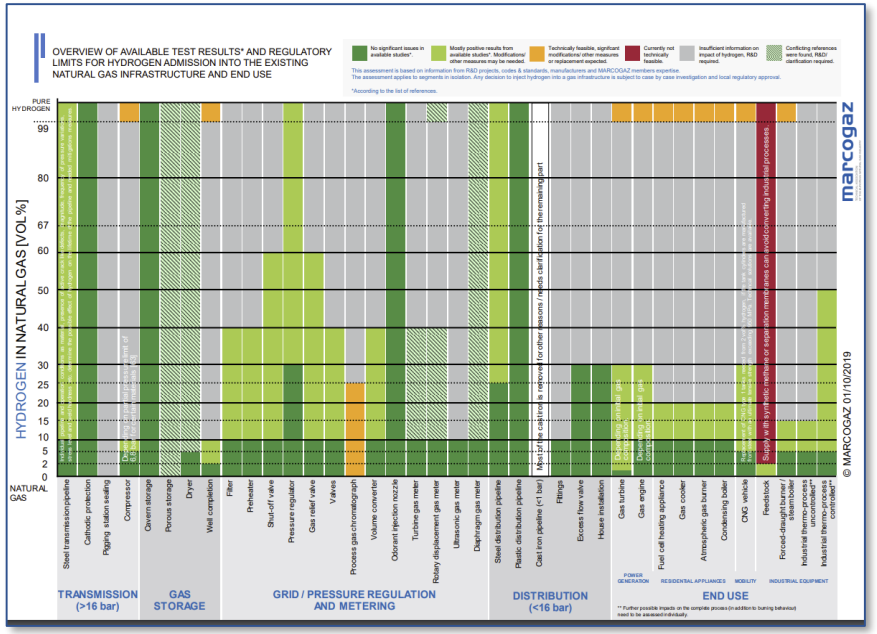
Above ground liquid storage

Source: NASA

Liquid hydrogen trucks

Source: Air Products

H2 can be added safely to all parts of gas chain



Policy Implications

Develop national H2 strategies that prioritise aviation fuels

Fund R&D for production and delivery of E/bio fuels

Incentivise cost competitive E/bio fuels

Develop and adopt technical and safety standards

Collaborate within global aviation industry such as with ICAO

Collaboration, collaboration, collaboration!

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Thank You

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