



9 September, 2020

Global Alliance Powerfuels Annual Conference 2020

No low-carbon transition without powerfuels

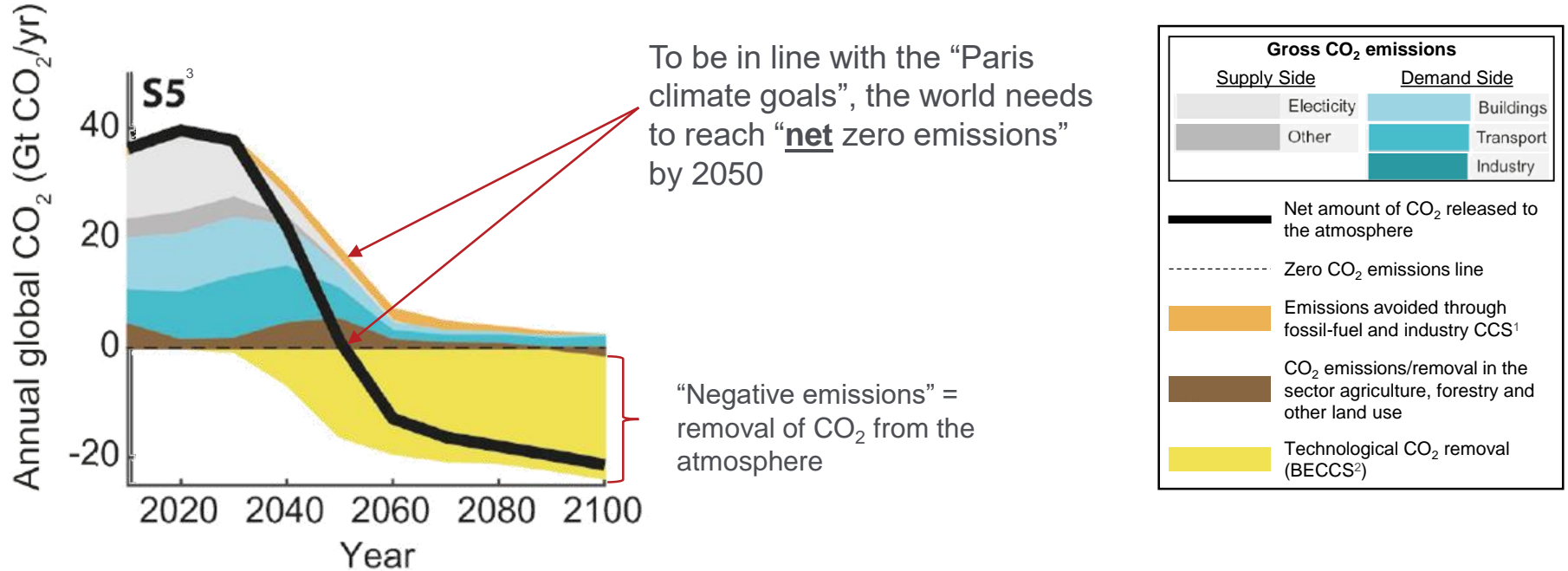
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Paris: all available zero-carbon technologies necessary powerfuels (with / without carbon capture) are key elements

IPCC Mitigation Pathway compatible with Paris goals



1) CCS = Carbon capture and storage. 2) BECCS = Bioenergy with carbon capture and storage. 3) S5 scenario reports the building and industry sector emissions jointly.
 Source: IPCC (10/2018), [Global warming of 1.5°C](#), p. 113;
 Source: ESP.

Munich Re's focus areas addressing climate change: managing risks of powerfuels = enabling measure

Adaptation measures

Providing financial protection /
risk management solutions for
climate risks
(e.g. natural catastrophes)

Disabling measures

Reducing the carbon intensity
of our reinsurance portfolio

(e.g. coal divestment /
underwriting policy)

Enabling measures

Enabling a carbon-neutral
economy (energy production,
technology, ...)

Improving bankability and
investability of low carbon
technologies (e.g. through
performance warranties)

Facilitation of new energy
technologies and business
models/partnerships (e.g.
hydrogen, powerfuels)

Energy and infrastructure projects

Risk Landscape



Financial and Credit Risks

- Economic risks during project planning and execution
- Counterparty risks for banks and insurers



Political Risks

- Political instability including any changes in law, regulation, subsidies and concessions



Project Risks

- Engineering and design risks and the application of technology during construction and operation
- Natural Hazards



Liability and Casualty Risks

- Liabilities arising from third parties, products, workers, etc.

Objective and comprehensive evaluation of all relevant risks to improve security of return on invest and increase transparency of hidden risks

Risk Examples

Insurance support for Financial and Political Risks


Financial and
Credit Risks

Risk	Insurability
Access to capital	-
Interest Rate Exchange Rate	Hedging
Devaluation	-
Inflation	Hedging
Banks / Insurers / Suppliers	Partly


Political Risks

Risk	Insurability
Customer`s risk / Regulatory risk – Change in subsidies, tax exemptions, feed in tariffs,	-
Sovereign Risk - Production Country: Expropriation, nationalization, forced buy-out, trade restrictions, taxation, tariffs, etc.	Partly
Political instability and violence	Partly

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