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Side event : Green hydrogen: how to reconcile North/South stakes in the development of the future market

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Views on green hydrogen, from a middle income country

Dr. Minh Ha-Duong

Vietnam Initiative for Energy Transition

COP27 side event

*Green hydrogen: how to reconcile North/South stakes in the
development of the future market*

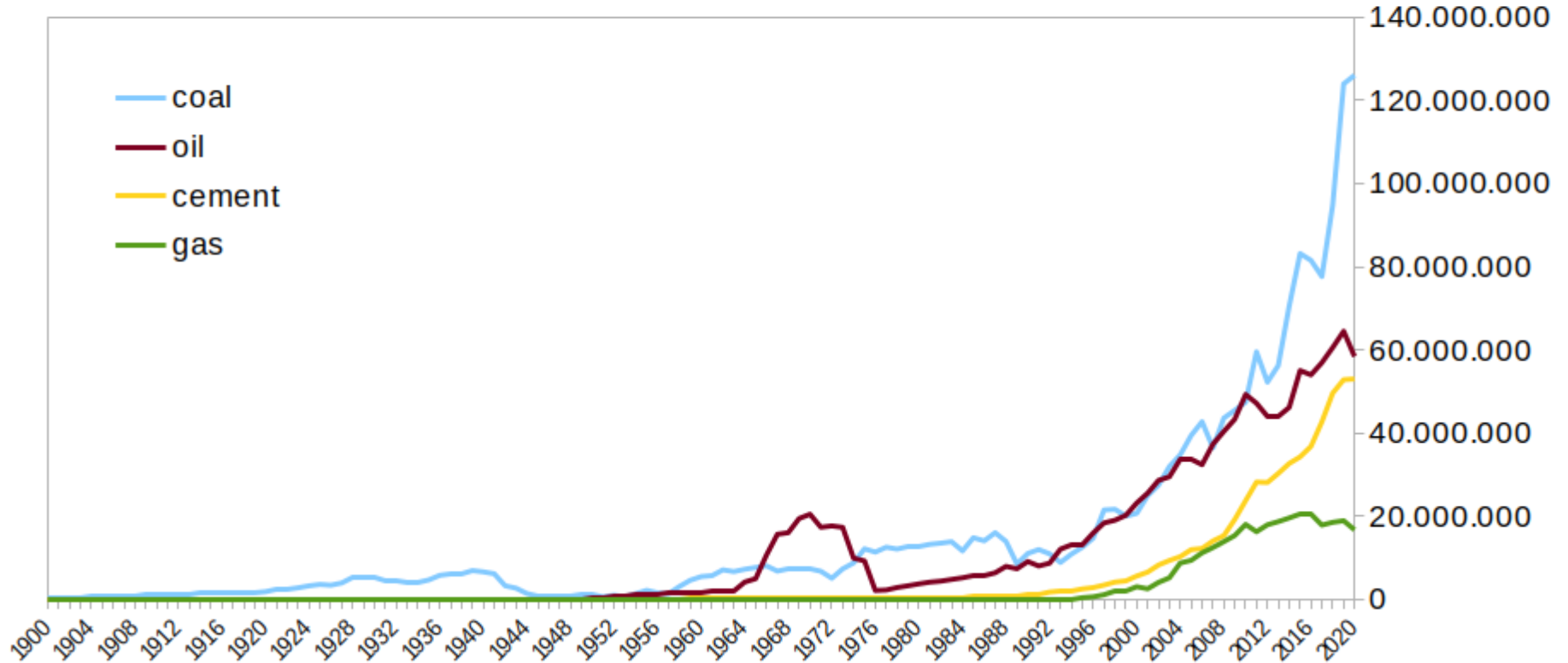
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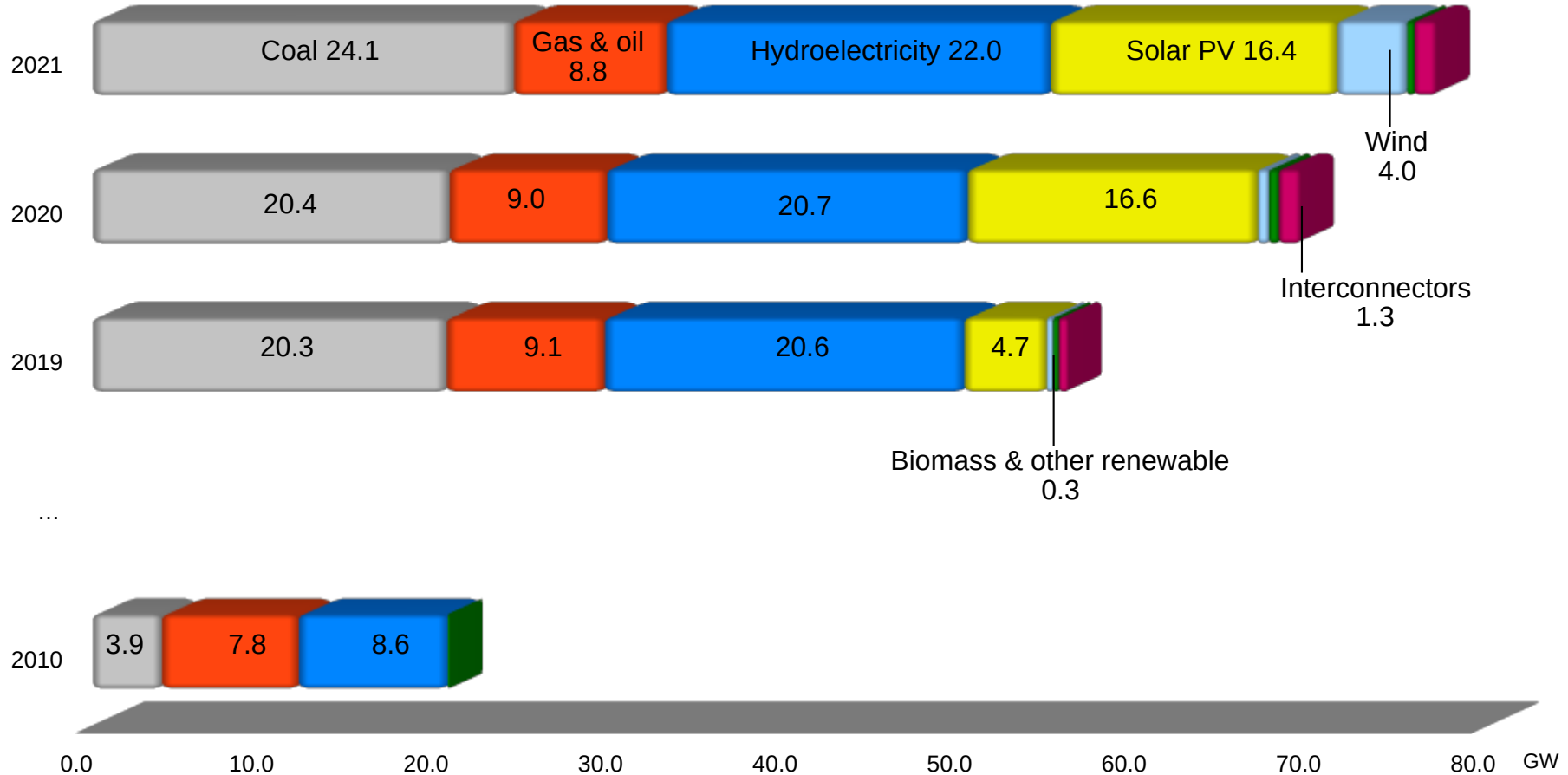
Vietnam aims to achieve net-zero carbon emissions by 2050

CO2 emissions of Vietnam by source

Annual carbon dioxide (CO₂) emissions from different fuel types, measured in t per year.

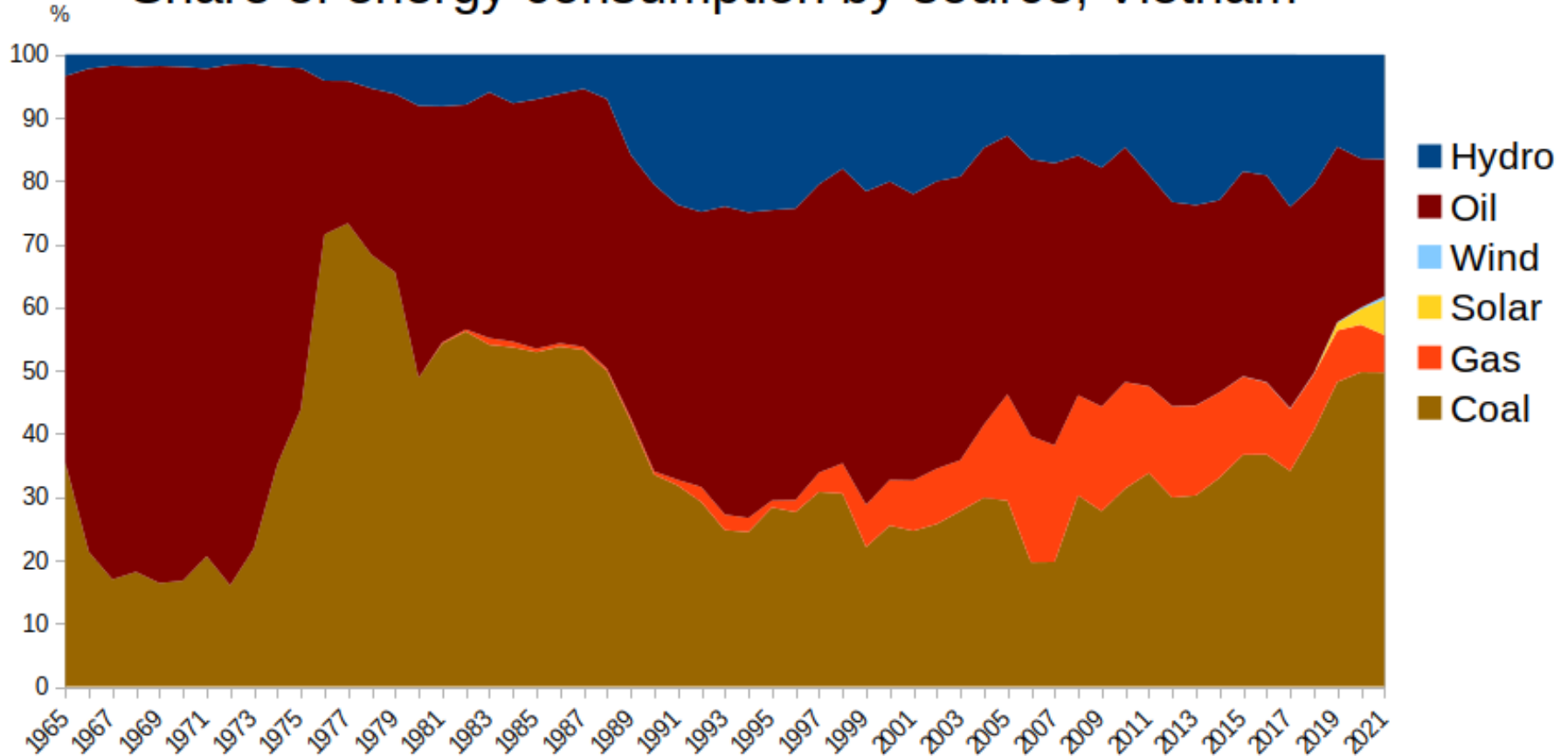


Vietnam installed 40GW of power generation capacity in 2010-2021





Share of energy consumption by source, Vietnam



Power Plan 8

Draft 6328

MW		2020	2030 _{recommended}
PMax		38.617	93.343
Hydro		20.993	28.946
Coal	+10GW	21.383	30.127
Gas	+30GW	7.422	38.830
Oil & flexible engines		1.603	300
Wind		538	28.480
Solar		8.751	11.164
Solar rooftop, <i>at least</i>		7.755	10.755
Biomass + cogeneration		325	5.170
Interconnectors + storage		572	7.700
Total installed capacity		69.342	159.044

P = 45.528 MW
on 2022-06-21

Hydrogen in the proposed power plan

In 2035, start cofiring biomass, NH₃, H₂.

In 2050:

100% biomass, NH₃ coal plants = 25 GW

100% H₂ gas power plants = 31 GW

But H2 may not be affordable
for the power sector

Vietnam needs a national H2 strategy

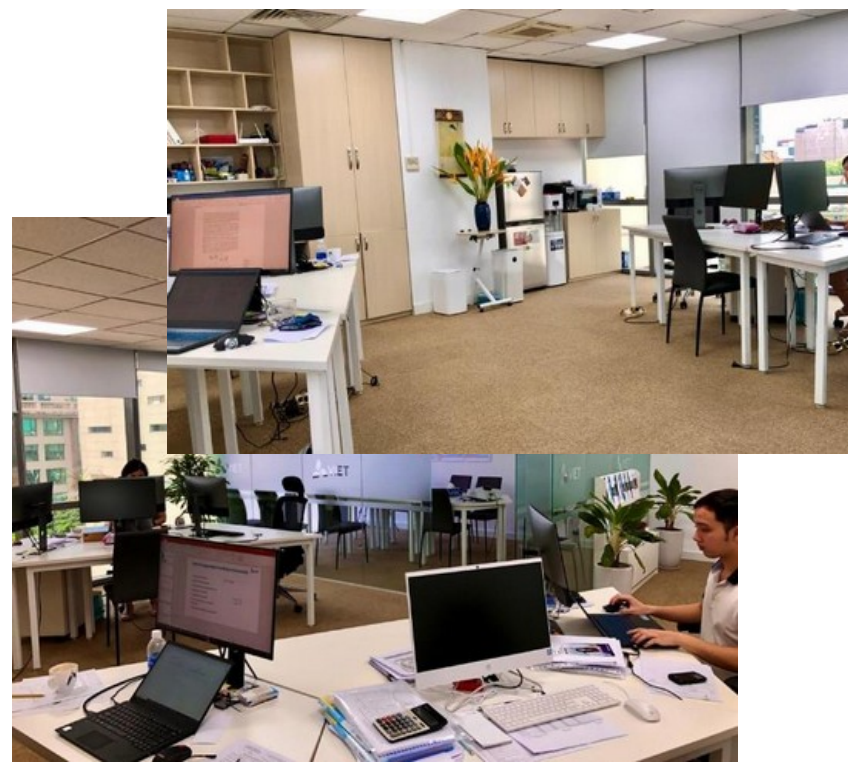
Principles: national security,
competitiveness and carbon neutrality.

Conclusion

Priorities for a national H2 strategy

1. Decarbonize existing production
2. Grow it to meet domestic demand
3. Produce locally cheaper than imports

Thank you!



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