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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*

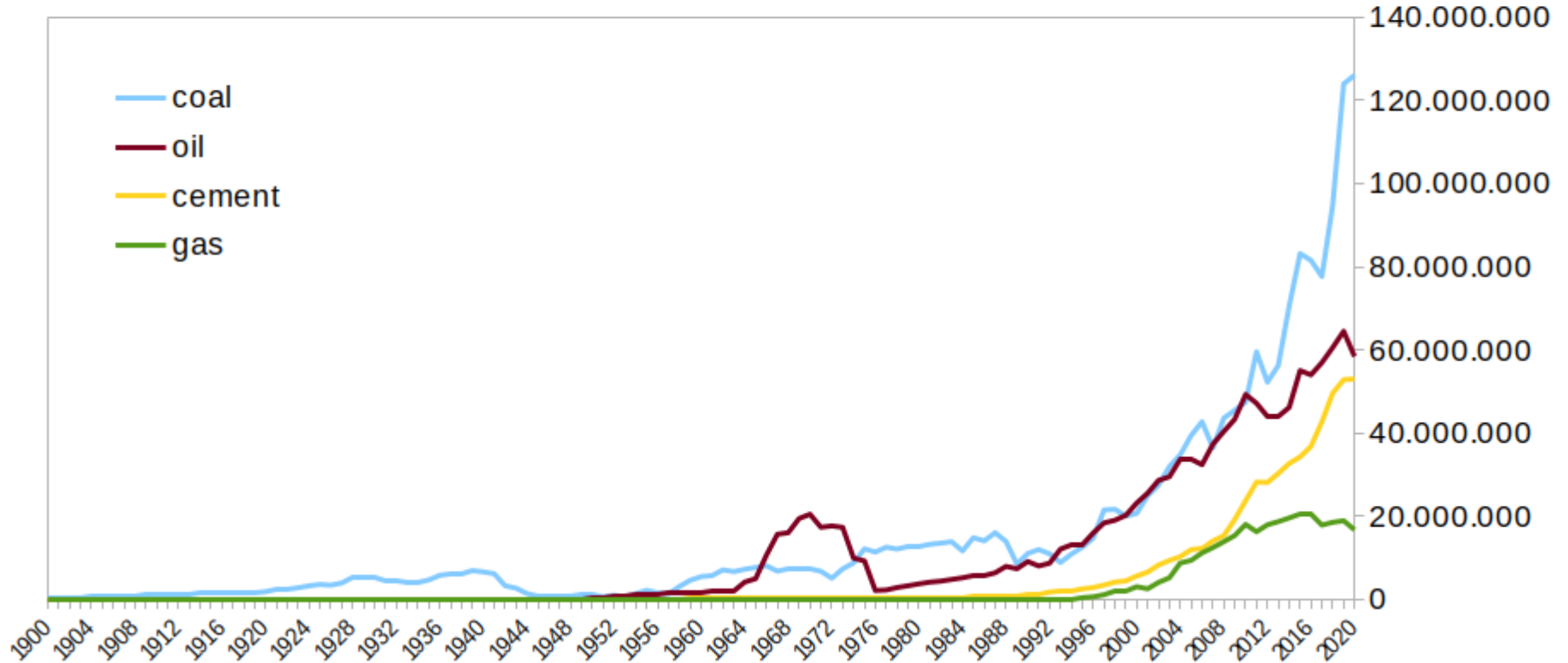
*2022-11-16*



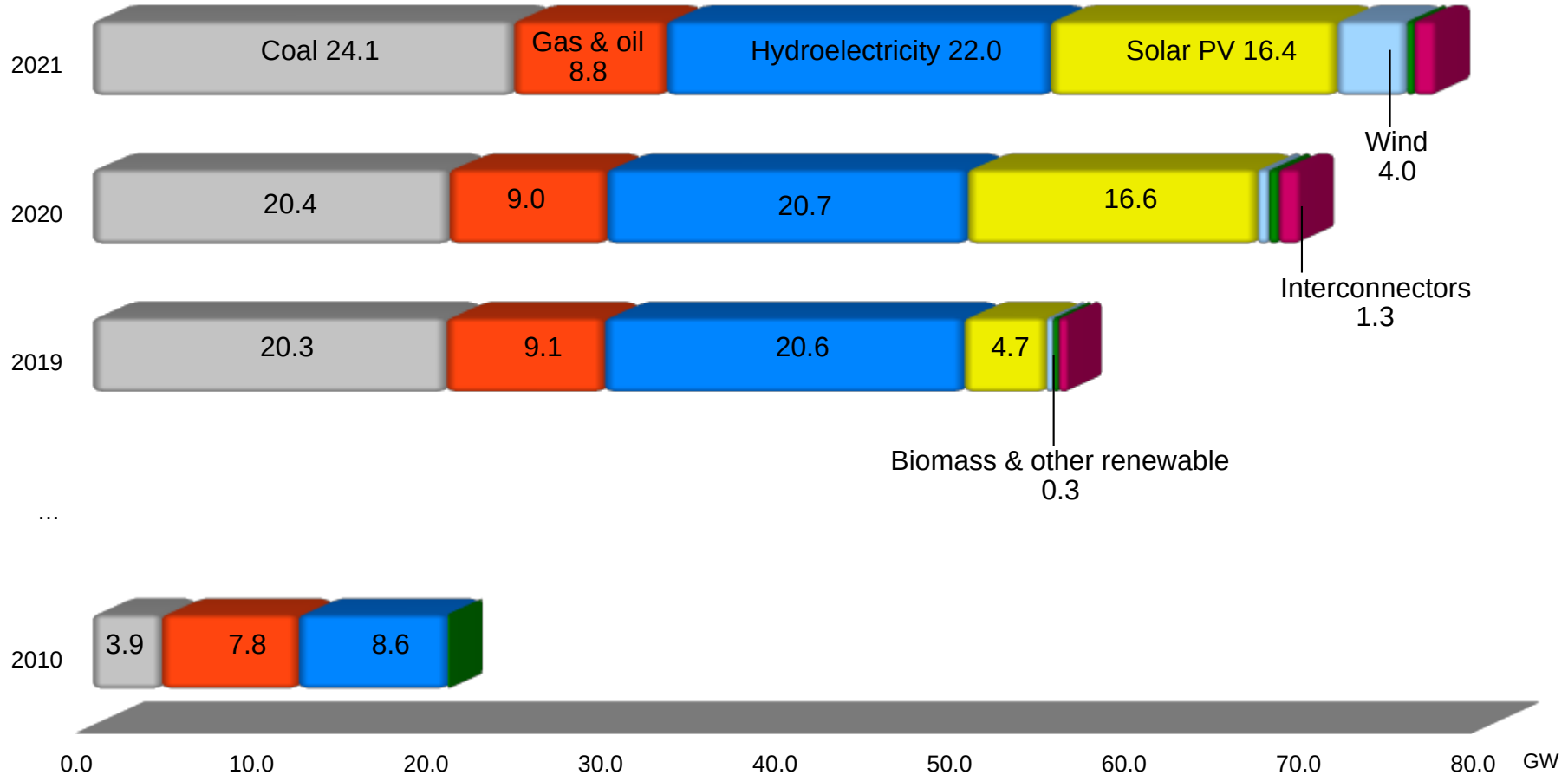
# Vietnam aims to achieve net-zero carbon emissions by 2050

# CO2 emissions of Vietnam by source

Annual carbon dioxide (CO<sub>2</sub>) emissions from different fuel types, measured in t per year.

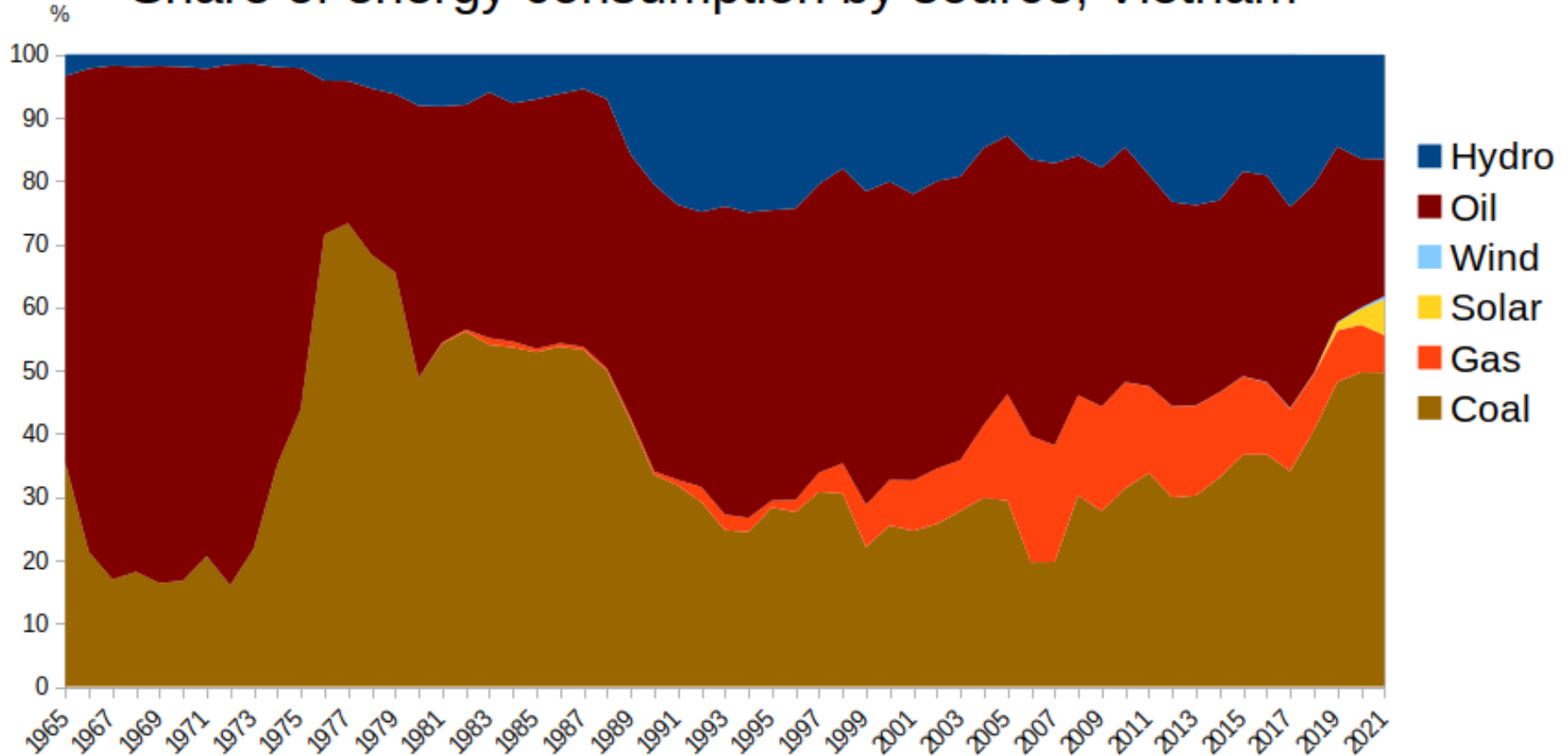


# Vietnam installed 40GW of power generation capacity in 2010-2021





# Share of energy consumption by source, Vietnam



# Power Plan 8

## Draft 6328

MW		2020	2030 <small>recommended</small>
<b>PMax</b>		<b>38.617</b>	<b>93.343</b>
Hydro		20.993	28.946
Coal	<b>+10GW</b>	21.383	30.127
Gas	<b>+30GW</b>	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
<b>Total installed capacity</b>		<b>69.342</b>	<b>159.044</b>

P = 45.528 MW  
on 2022-06-21

# Hydrogen in the proposed power plan

In 2035, start cofiring biomass, NH<sub>3</sub>, H<sub>2</sub>.

In 2050:

**100% biomass, NH<sub>3</sub> coal plants = 25 GW**

**100% H<sub>2</sub> gas power plants = 31 GW**



But H2 may not be affordable  
for the power sector

**Vietnam needs a national H2 strategy**

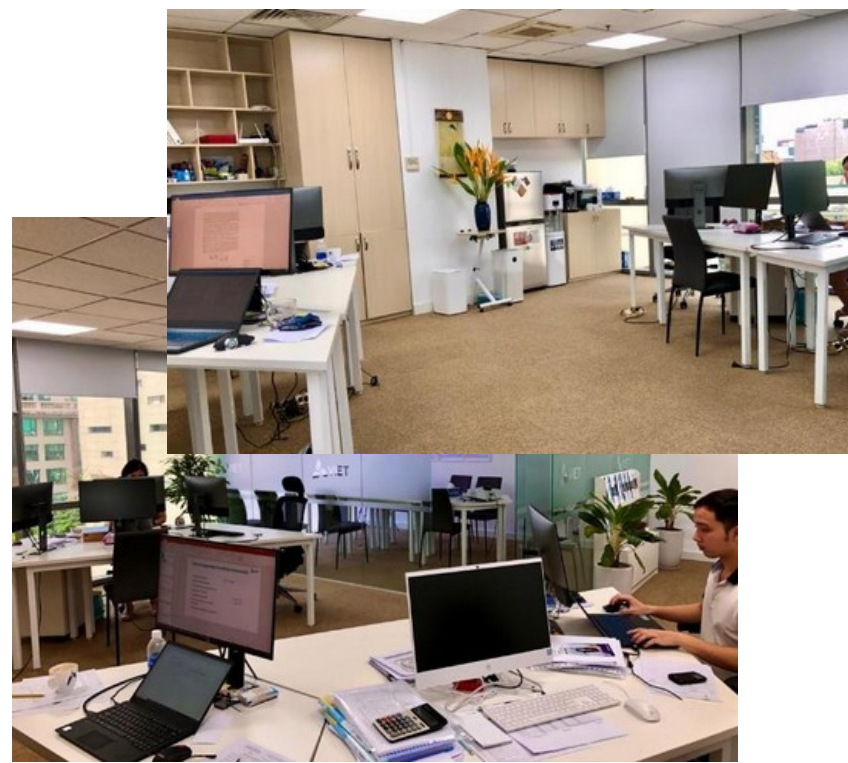
Principles: national security,  
competitiveness and carbon neutrality.

# 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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