

**How Much Do We Know about the GHG Mitigation
Policy in Germany?
(as Compared to That in Taiwan, Still Developing)**

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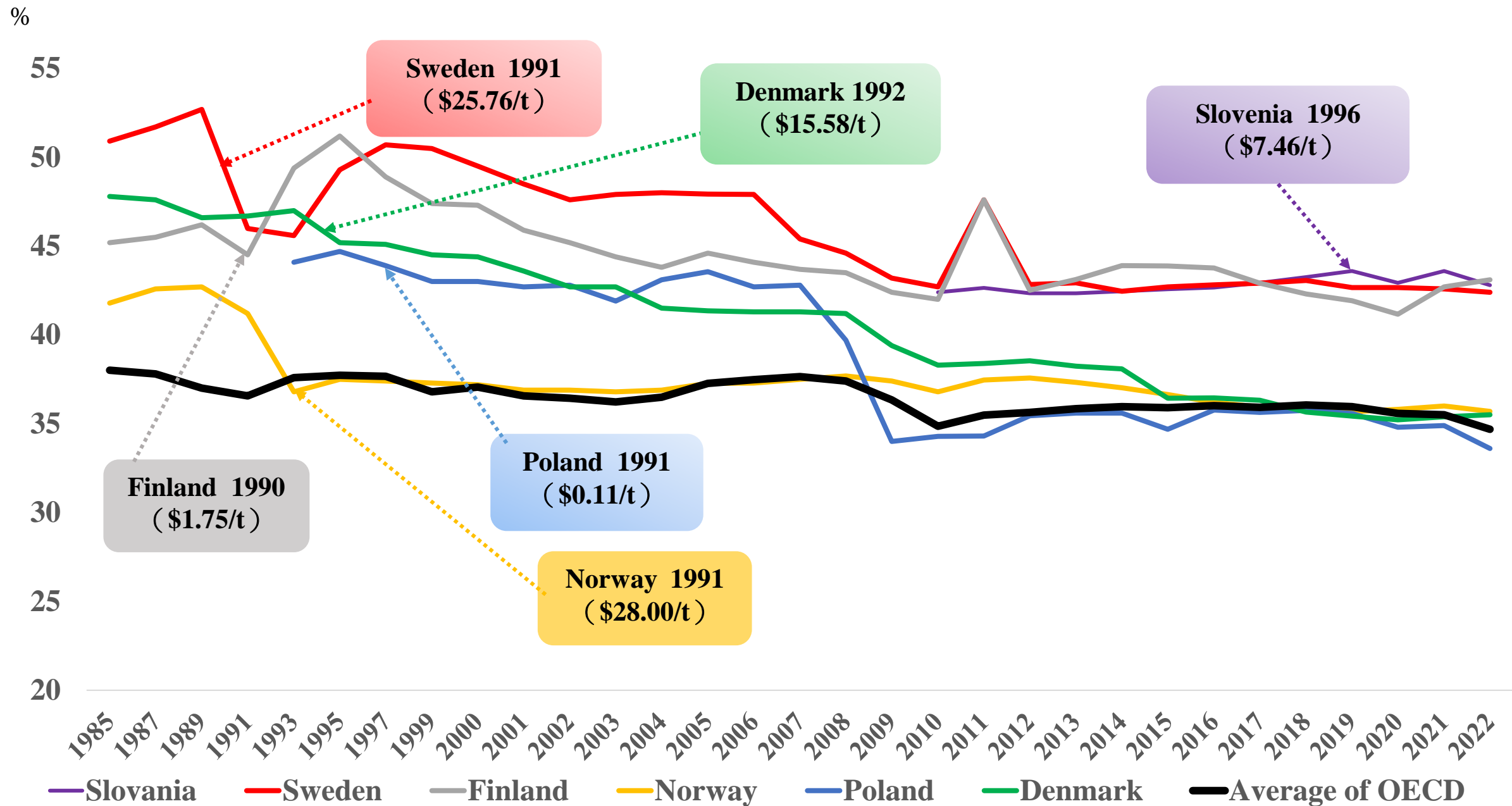
★ **Some people in Taiwan are intertwined in the name and the function of mitigation policy, carbon fee (碳費) or carbon tax (碳稅) ?**

★ **Why doesn't Germany impose carbon tax?**

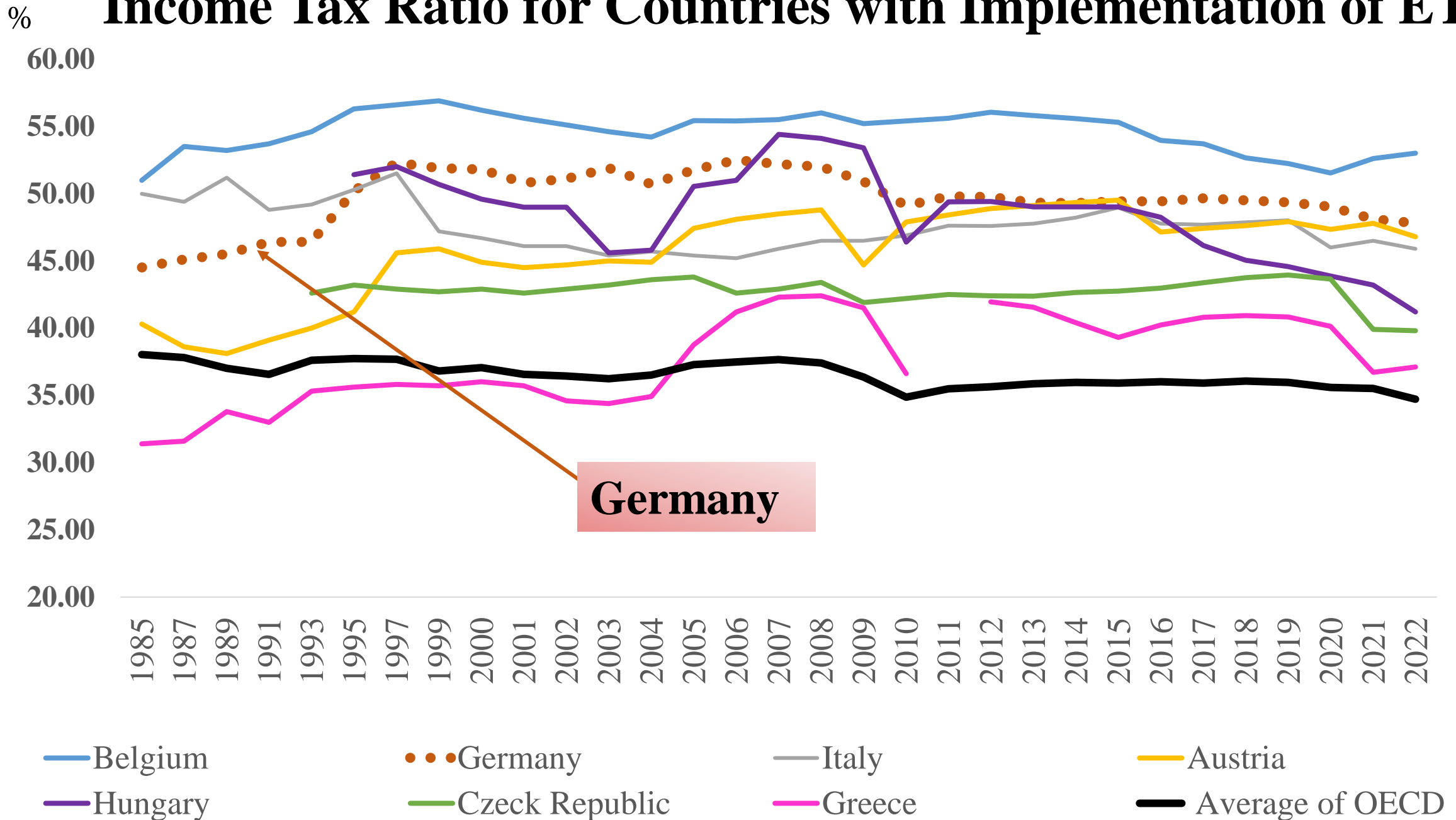
★ **How confidence does Germany have to achieve the GHG reduction goal by 2030 and then get net zero in 2045 from the performance you have so far?**

★ **Germany and the flexibility mechanism, offset, in ETS?**

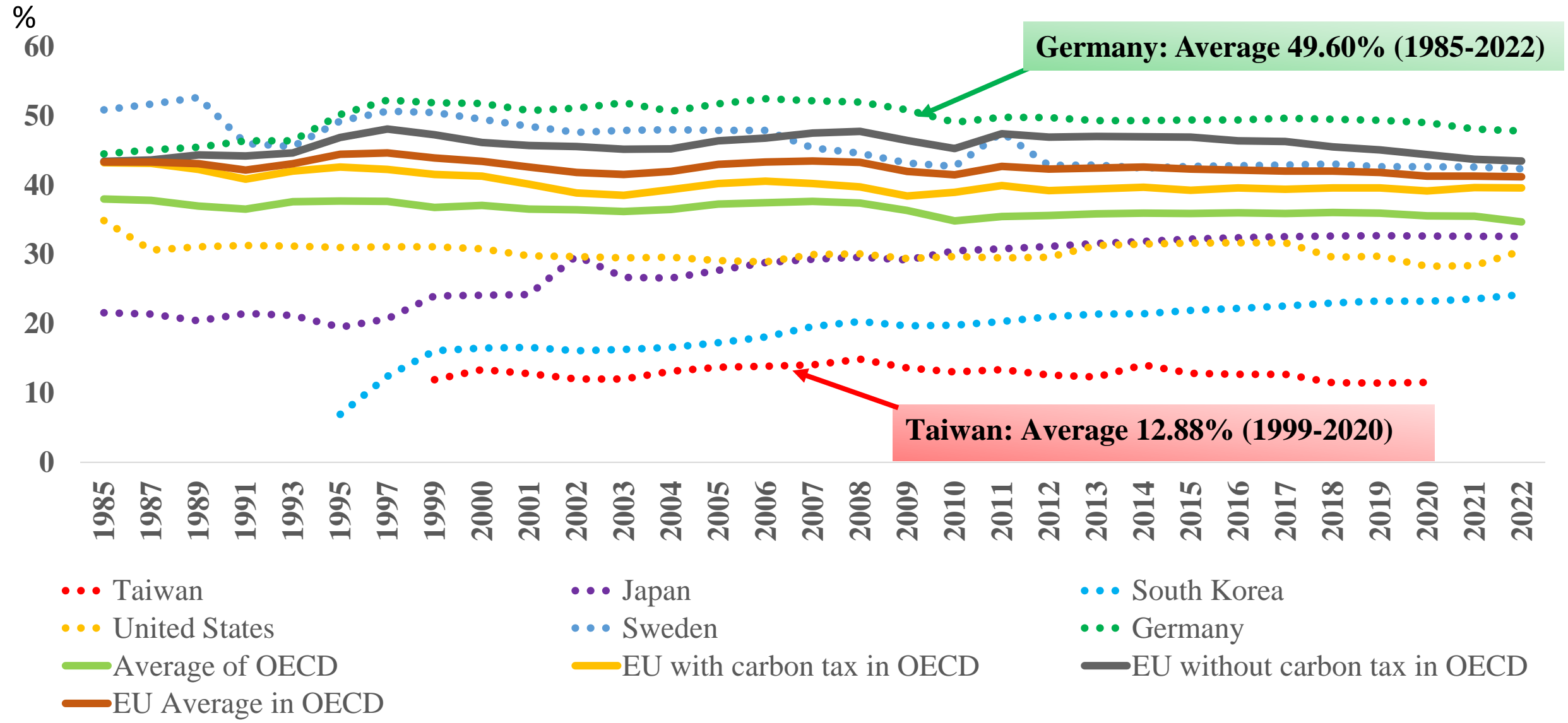
Income Tax Ratio for the First Group of Countries with Implementation of Carbon Tax



Income Tax Ratio for Countries with Implementation of ETS



Income Tax Ratio Comparison for Individual Country or Group of Countries



★ The income tax ratio is also very high in Germany, why isn't there pressure from households to ask for tax reform? That is, government can reduce personal income tax and give room to bring in **carbon tax**?

★ Is this the reason why Germany joins EU **emission trading scheme** and not imposes **carbon tax**?

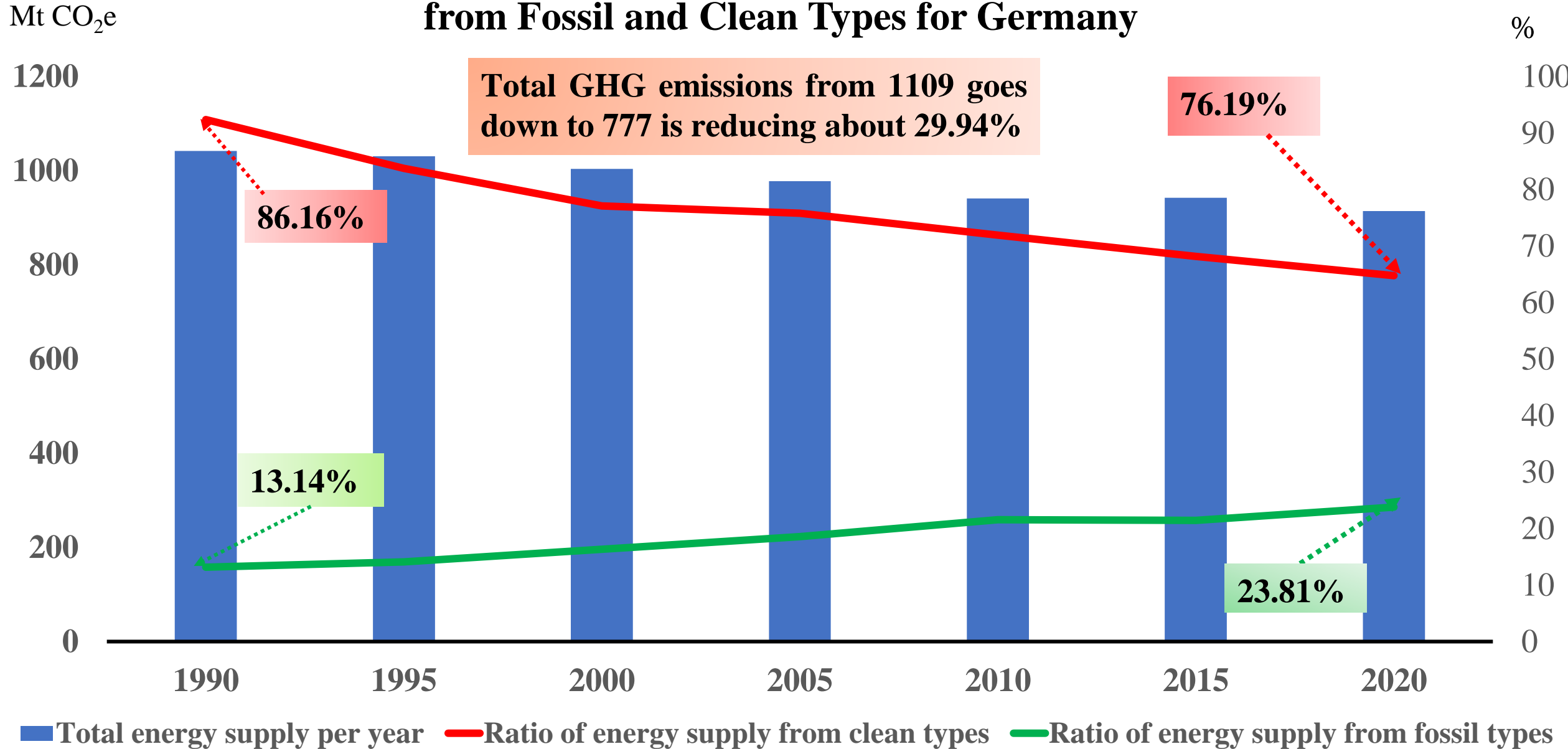
Or

What are the reasons for Germany not imposing carbon tax?

★ Germany then further implements **another emission trading scheme**.

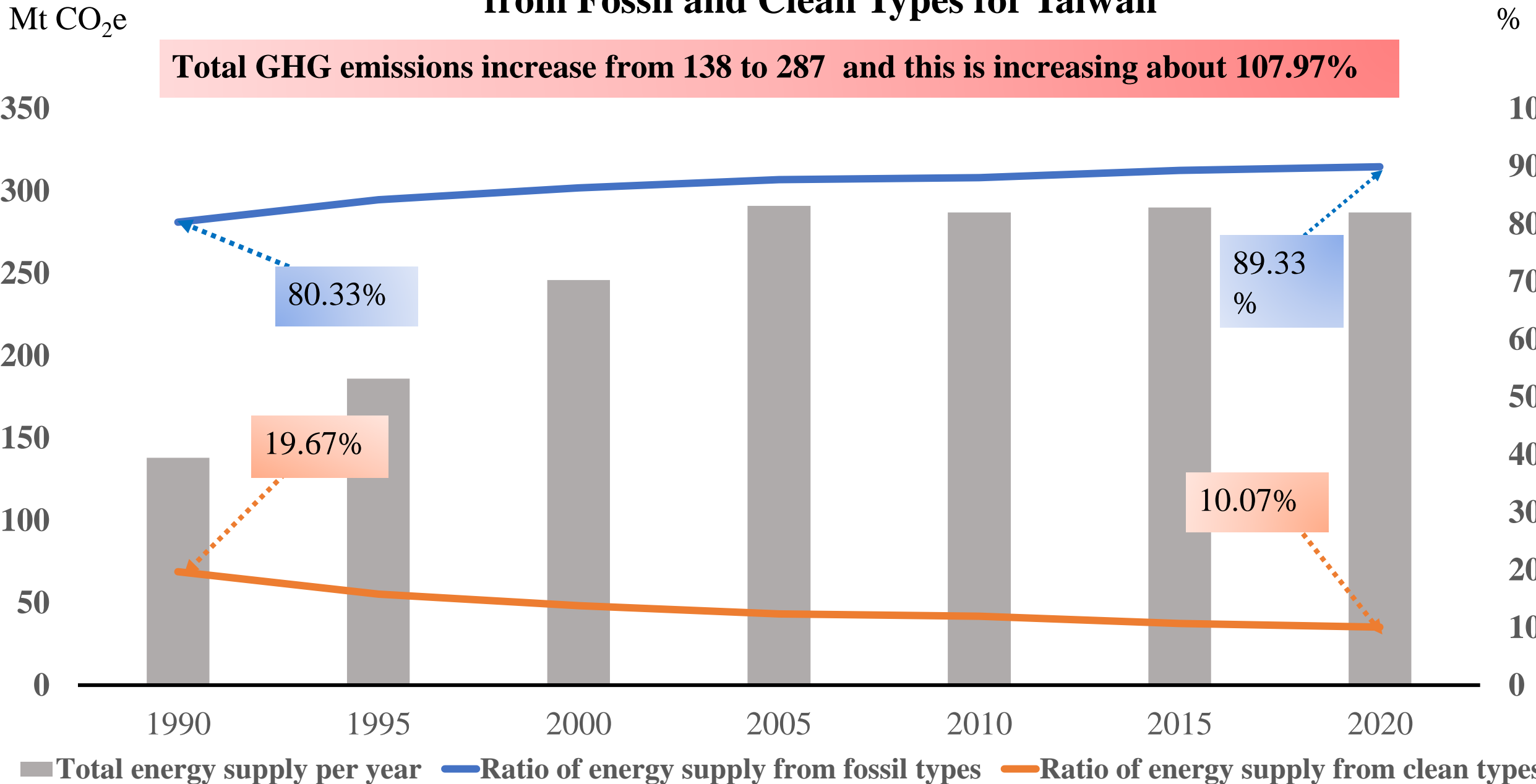
- ★ There is almost no room for Taiwan to reduce the income tax to introduce carbon tax by reaching tax neutrality.
- ★ Carbon tax will obviously be an extra and bland new item in income tax if it is imposed on all sectors.
- ★ If carbon tax is only imposed on industrial sectors, direct or indirect GHG emissions, the tax on goods and services (營業稅) will be more or less affected, i.e. increased, at different levels of supply chain.

The Relationship between GHG Emissions and the Ratio of Energy Supply from Fossil and Clean Types for Germany



Clean types of energy source: wind, solar, hydro, biofuels, nuclear Fossil types of energy source: oil, coal, natural gas

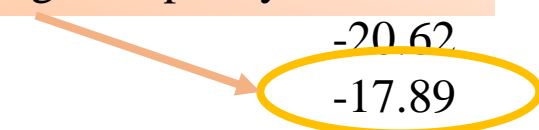
The Relationship between GHG Emissions and the Ratio of Energy Supply from Fossil and Clean Types for Taiwan



Change of GHG emissions at different stages for countries with implementation of ETS

Country (year of ETS implement)	(1) Change of GHG emissions between year 1990 to 2004 before joining EU ETS	(2) Change of GHG emissions from the implementation of EU ETS in to Paris Agreement in 2015	(3) Change of GHG emissions when Paris Agreement comes into effect in 2016 to the newest year 2022	(4) Change of GHG emission from 2005 to 2022
1. Austria (2005, 2022)	19.51	-13.27	0.00	-13.27
2. Belgium (2005)	Germany has not implemented any mitigation policy	-10.74	-0.76	-12.08
3. Cyprus (2005)		-11.11	0.00	0.00
4. Czech Republic (2005)		-20.62	-12.08	-0.76
5. Germany (2005, 2021)	-17.89	-7.71	-4.38	-11.36
6. Greece (2005)	23.76	-27.34	-1.08	-28.12
7. Hungary (2005)	-15.63	-18.99	3.08	-15.19
8. Italy (2005)	9.98	-26.20	3.42	3.42
9. Lithuania (2005)	-55.32	9.09	9.09	9.09
10. Malta (2005)	0.00	-33.33	0.00	-33.33
11. Slovak Republic (2005)	-29.73	-13.46	4.35	-7.69
12. Bulgaria (2007)	-37.86	-3.08	0.00	-7.69
13. Romania (2007)	-40.98	-18.44	4.39	-15.60
14. New Zealand (2008)	26.47	-1.16	0.00	0.00
15. Croatia (2013)	-8.82	-16.13	-3.70	-16.13
16. Kazakhstan (2013)	-34.68	46.86	1.94	53.57
17. South Korea (2015)	79.81	23.28	3.69	30.69
18. China (2021)	91.56	58.30	4.29	64.16

Germany has not implemented any mitigation policy



Implement ETS for a long period of time



What makes Germany **smoothly** increase the percentage of clean types of energy supply?

- ★ What is the long-term goal of designated percentages for both types of energy source?
- ★ If not smoothly, what are the troubles you have encountered?
- ★ What are the challenges and difficulties that Germany expects to have when more percentage of energy supply from clean types?
- ★ What might be the solution to the above challenges and difficulties?

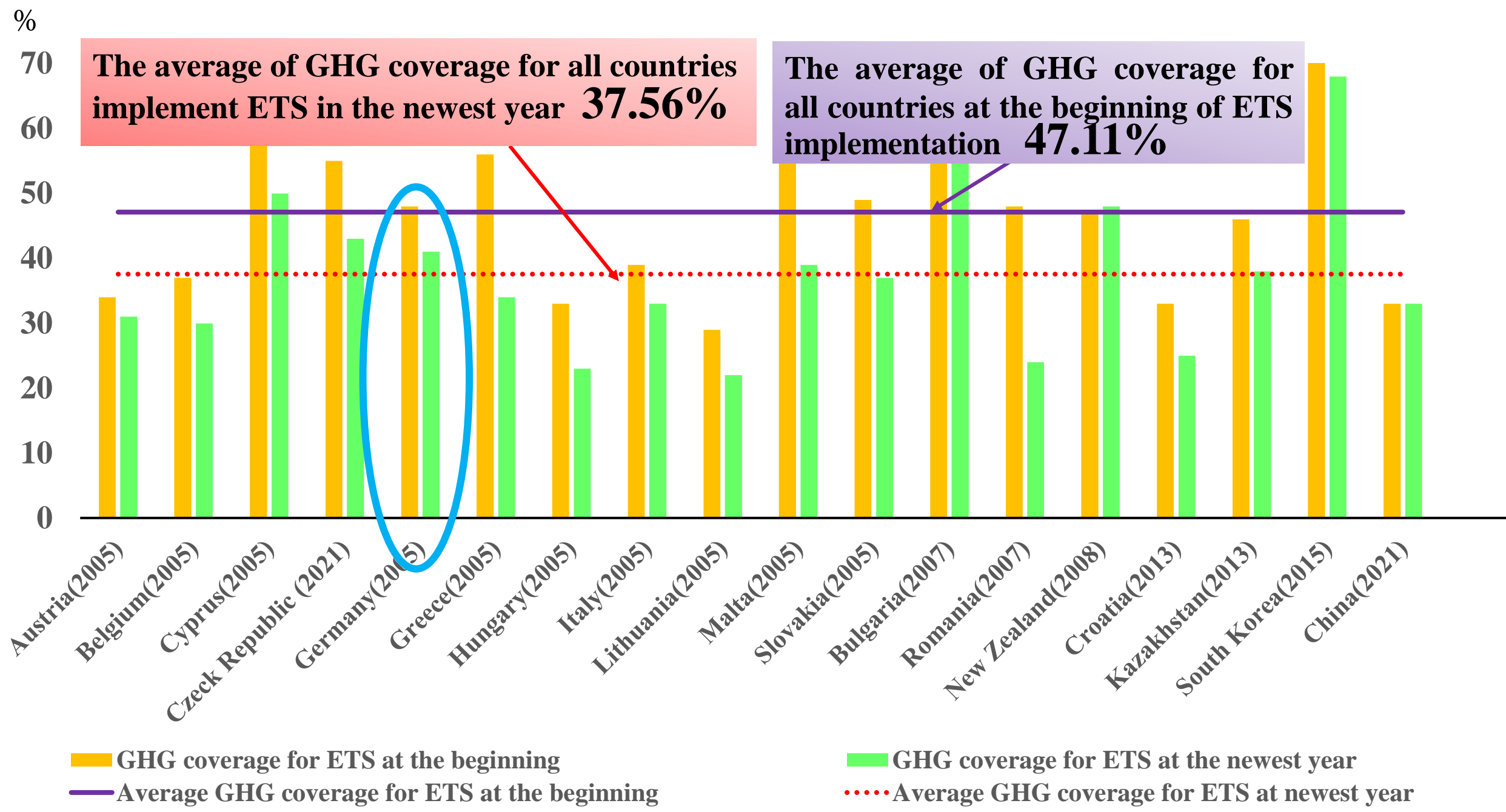
★ The GHG emissions do not seem to have significant reduction since the implementation of the EU ETS in 2005 till 2022. The emissions seem to have more reductions from 1990 to 2005, before joining EU ETS, **what is the exact function and meaning of joining EU ETS?**

★ Will Germany have confidence to reduce GHG emissions by 65% less than that in 1990 in 2030?

★ How many GHG emissions coverage will be increased for the whole country and how many GHG emission will be reduced by ETS enforced for building and road transport sector?

★ How can Germany be sure that GHG **the coverage for building and road transport ETS** is not overlapped with EU ETS?

The GHG Coverage of Individual Country and Their Average with ETS Implementation



- ★ What do you think of offset itself?
- ★ What do you think of offset with the enforcement of ETS?
- ★ What do you think of offset with the enforcement of carbon tax?

What do you think of this?



Who might be benefit or damaged from such mechanism?

★ The flexible voluntary mechanism, offset, is completely not allowed in Germany. Similarly, no offset mechanism is allowed in Switzerland, New Zealand, Austria, UK, and EU either.

★ What kind of bad experiences did Germany ever have or Germany just doesn't trust such mechanism from the beginning?

Thank you for listening