



Policy instruments for CO₂ valorisation support

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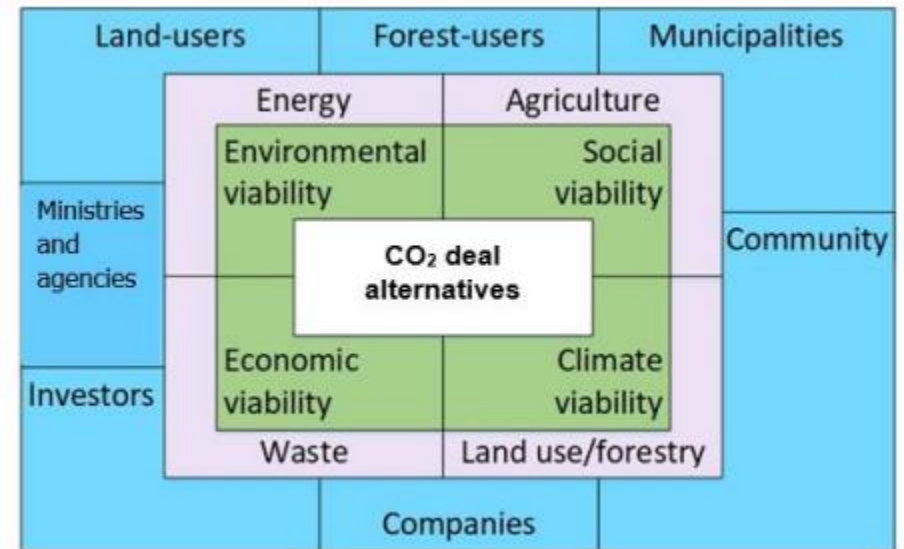


CO₂ DEAL

Project objective:

develop a roadmap for decision makers on effective valorisation of CO₂ in regions of Latvia in an environmentally sound, resilient and businessbased manner in connection with low-carbon circular economy principles.

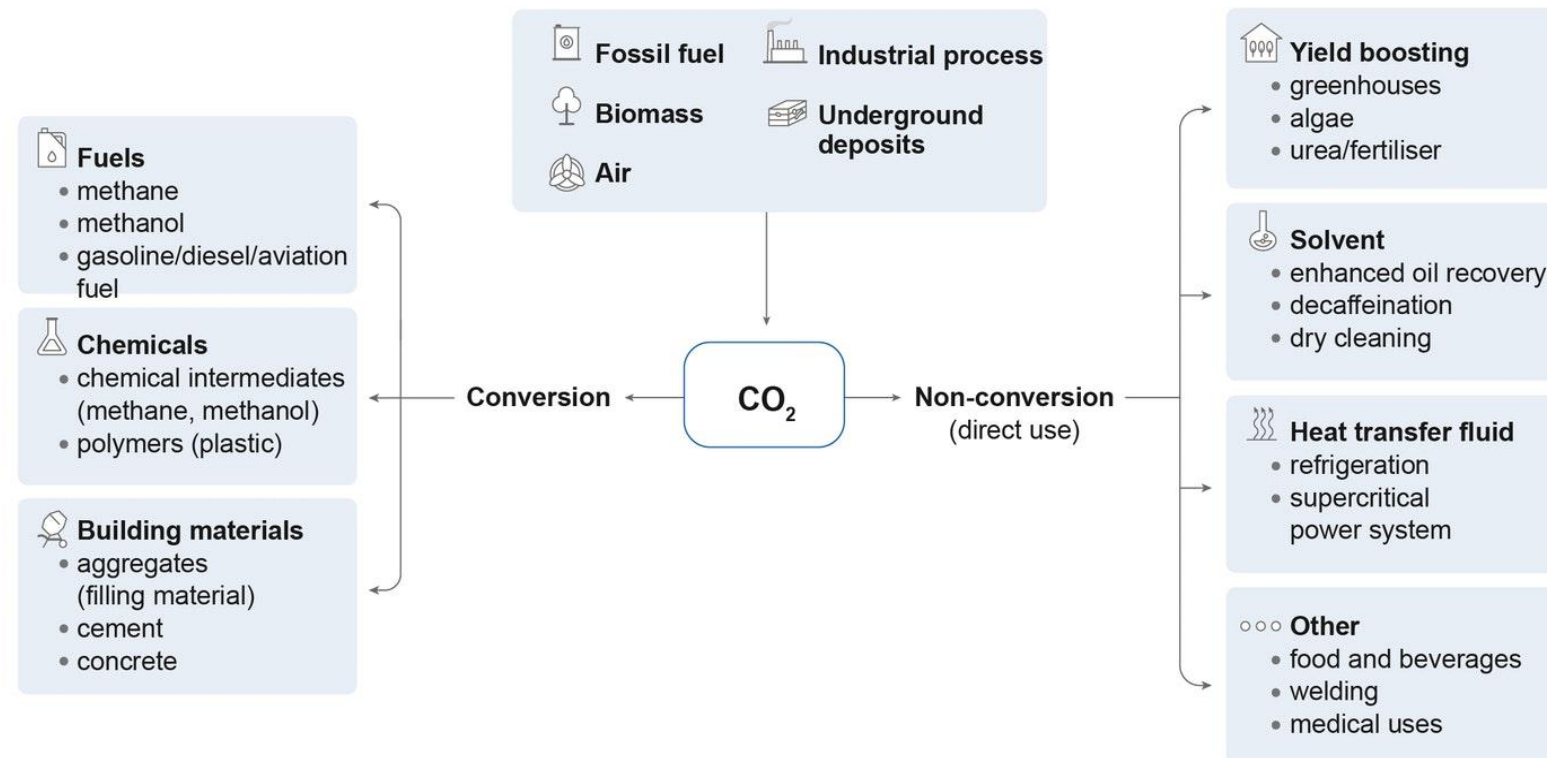
Latvia's shrinking regions will have a positive effect on mitigation of climate change, environmental pollution prevention, regional economic growth potential, social welfare and technological acceleration from implementation of CO₂ valorisation technologies.



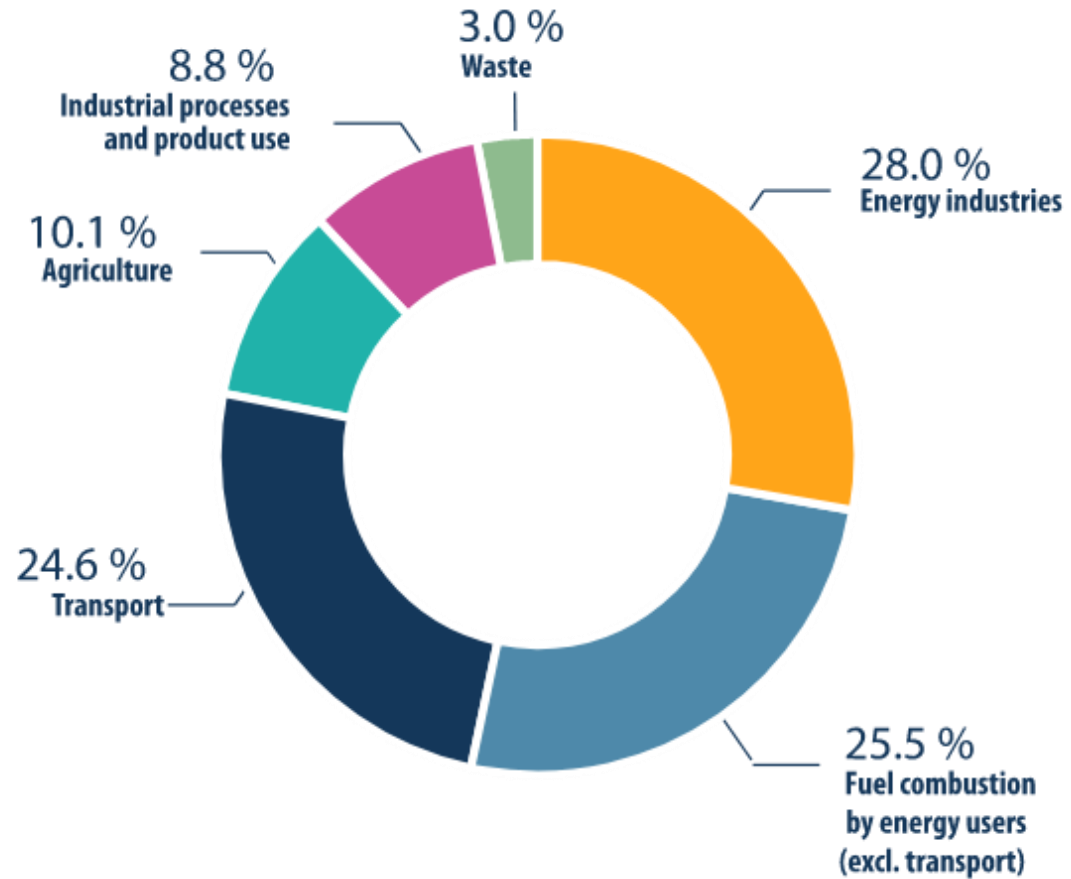
CO₂ VALORISATION

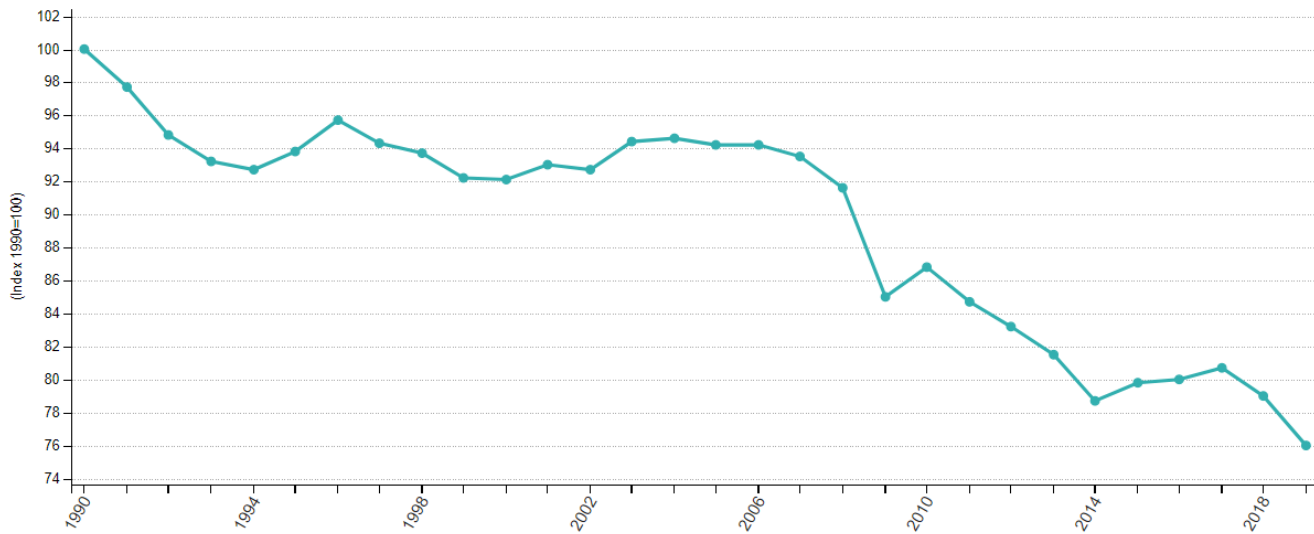
any process providing a positive effect to reduction of CO₂ emission level in atmosphere:

- direct CO₂ capture and utilisation using carbon dioxide as a feedstock for industrial processes;
- transformed CO₂ utilisation;
- pre-process CO₂ utilisation, reduction of potential emissions prior its generation.



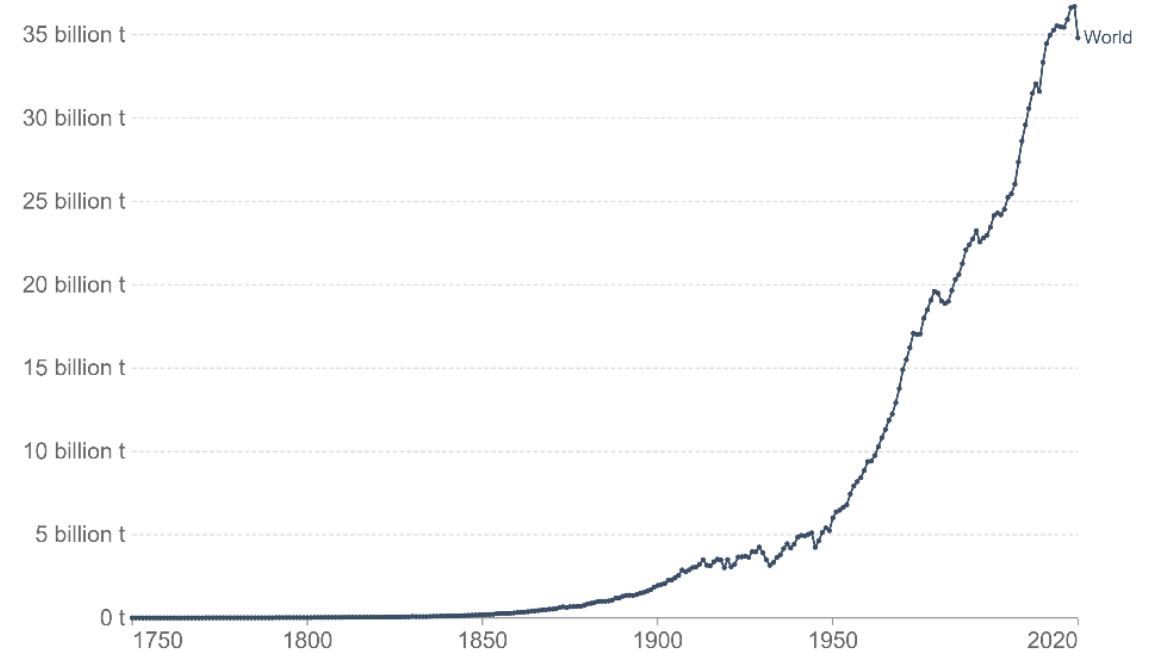
GREENHOUSE GAS EMITTERS IN THE EUROPEAN UNION





Total GHG emissions in the European Union, excluding land use, land use change and forestry, but including international aviation

Annual CO₂ emissions in the world from fossil fuel burning and cement production (excluding land use)



Source: Global Carbon Project

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/ • CC BY

SYSTEMATIC LITERATURE ANALYSIS

Direct keywords

CO₂ / carbon dioxide utilisation /

CCU

CO₂ / carbon dioxide utilisation

Indirect keywords

CO₂ / carbon dioxide capture

CO₂ / carbon dioxide storage

CO₂ / carbon dioxide storage / CCS

CO₂ / carbon dioxide binding

CCS



METHODOLOGY

The information gathered by the EEA on the climate policies of the EU Member States:

1. step: which countries have the largest climate policies, encompassing both policies and policy instruments

2. step: these policies and policy instruments were categorized by their impact and type

3. step: the most important categories for the topicality of the work were selected:

P1 – country uses the EU ETS;

P2 – GHG emissions mark-ups in the country are taxed;

P3 – the country has tax rebates to meet climate targets;

P4 – the country is increasing the amount of renewable energy resources in the field of energy;

P5 – energy efficiency works are being carried out in the country;

P6 – the country has restrictions or prohibitions on GHG emissions;

P7 – the country uses the LULUCF sector to reduce emissions;

P8 – the state provides funding for research into GHG emission reduction technologies;

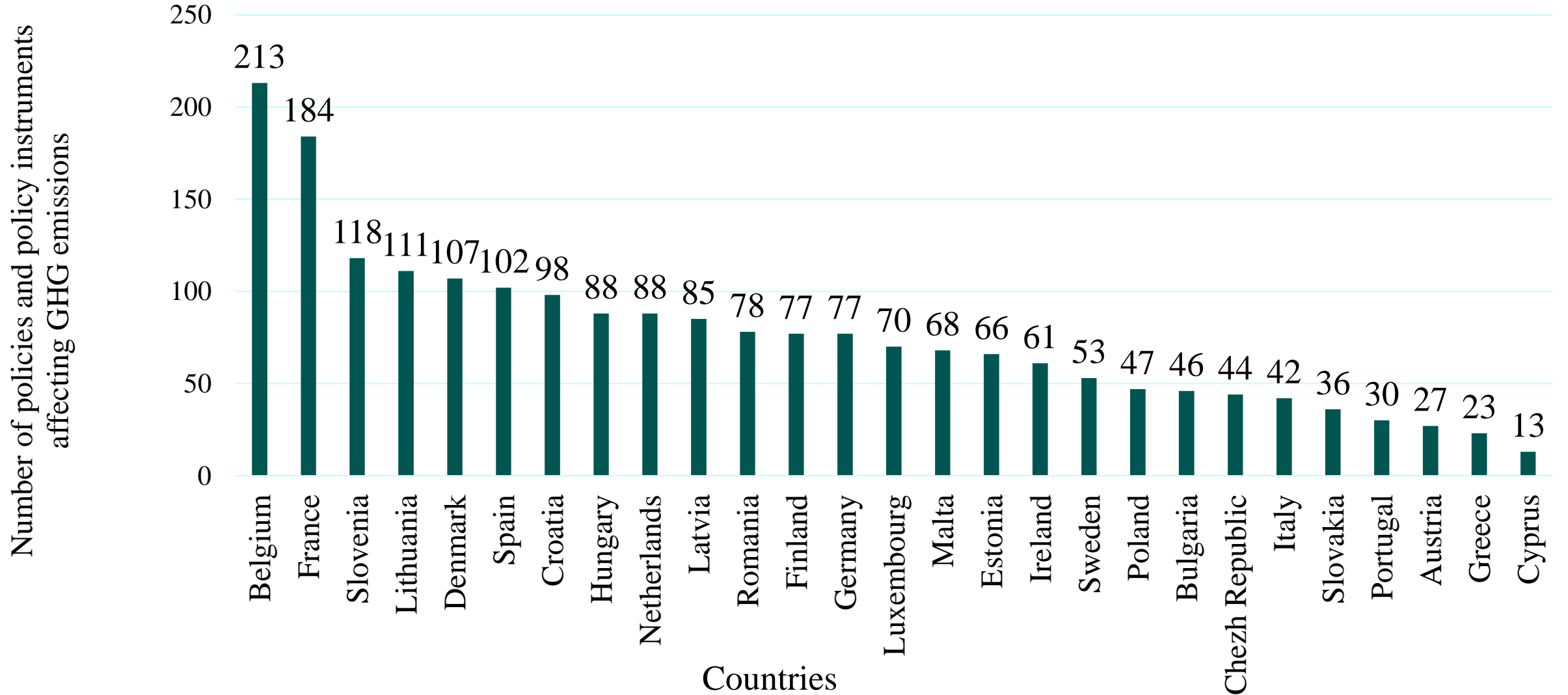
P9 – GHG capture is taking place in the country;

P10 – the use of CCS technologies is taking place or is planned in the country;

P11 – the use of CCU technology is taking place or is planned in the country.



NUMBER OF POLICIES AFFECTING GHG EMISSIONS IN EU MEMBER STATES



CATEGORIZATION OF POLICIES AND INSTRUMENTS AFFECTING GHG EMISSIONS

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	Total
Austria	1	-	-	2	1	2	2	3	3	-	-	14
Belgium	1	1	1	2	1	2	2	3		3	-	16
Bulgaria	1	-	-	2	1	2	2	-	3	-	-	11
Czech Republic	1	1	-	2	1	2	2	-	-	-	-	9
Denmark	1	1	1	2	1	2	2	-	-	-	-	10
France	1	1	1	2	1	2	2	-	-	-	-	10
Greece	1	-	-	2	1	2	2	-	-	-	-	8
Croatia	1	1		2	1	2	2	3	3	3	-	18
Estonia	1	1	-	2	1	2	2	-	-	-	-	9
Italy	1	-	1	2	1	2	-	-	-	3	-	10
Ireland	1	1	-	2	1	2	-	-	-	-	-	7
Cyprus	1	-	-	2	1	2	2	-	-	-	-	8
Latvia	1	1	-	2	1	2	2	-	3	-	-	12
Lithuania	1	1	1	2	1	2	2	3	3	-	-	16
Luxembourg	1	1	-	2	1	2	2	-	-	-	-	9
Malta	1	1	-	2	1	2	2	-	3	-	-	12
Nederland	1	1	1	2	1	2	2	3	-	-	-	13
Poland	-	1	-	2	1	2	2	3	3	-	-	14
Portugal	1	1	-	2	1	2	2	3	-	-	-	12
Romania	1	1	1	2	1	2	2	-	-	3	-	13
Slovakia	1	1	-	2	1	2	2	-	-	-	-	9
Slovenia	1	1	-	2	1	2	2	3	-	-	-	12
Finland	1	1	-	2	1	2	2	-	-	-	-	9
Spain	1	1	-	2	1	2	2	-	-	-	-	9
Hungary	1	-	1	2	1	2	2	-	-	-	-	9
Germany	1	1	1	2	1	2	2	-	-	-	-	10
Sweden	1	1	1	2	1	2	2	3	3	3	-	19
Total	27	20	11	27	27	27	25	9	9	4	0	

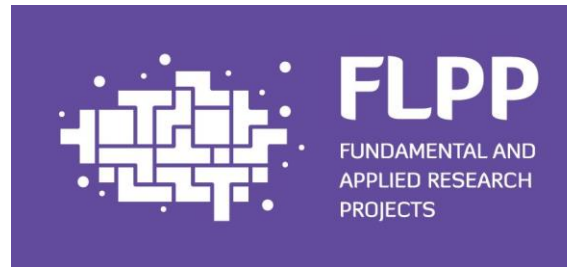


CONCLUSION

- The most extensive legislative framework is represented in Belgium, Croatia, Lithuania and Sweden, the least – Ireland, Cyprus and Greece.
- Sweden's most extensive issue of CO₂ emissions, its storage and utilisation, the country can rightfully be called a leader in innovative CCUS technologies.
- The sooner we start reducing this number, the fewer emissions should be reduced annually – we will have more time to act.
- Quick and timely actions of both entrepreneurs and, first of all, legislators are necessary for the successful implementation of the tasks set to reduce CO₂ emissions.



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