

Use of carbon revenues to stimulate energy efficiency

Pavel Zámyslický

Director, Energy and Climate Protection Department

Ministry of the Environment

pavel.zamyslicky@mzp.cz

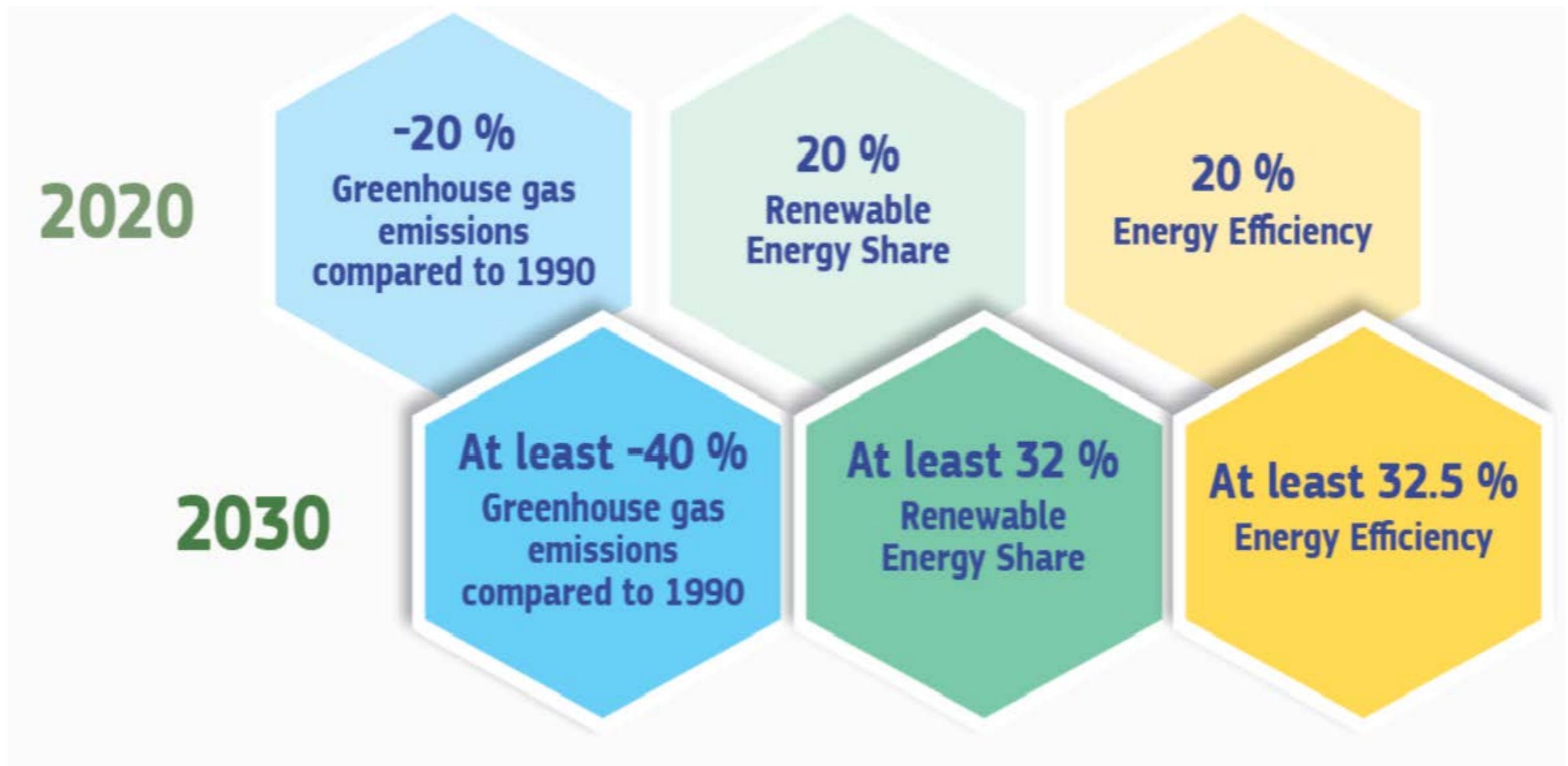
Ministerstvo životního prostředí

Ministerstvo životního prostředí
Vršovická 65, 100 10 Praha 10
Česká republika

www.mzp.cz



The 2020 and 2030 climate and energy targets



Implementation of EU's Paris commitments: At least 40% emissions reduction by 2030 (compared to 1990)

Emissions Trading System (ETS)

Power sector

Industry

-43% by 2030
(compared to 2005)

Effort Sharing Decision (ESD)

Buildings

Road Transport

Agriculture

Non-CO2 emissions
(cows!)

-30% by 2030
(compared to 2005)

Land use and forestry
(LULUCF)

No "back-sliding"
(compared to 2005)

8



EU ETS Revision Timetable

- Revised Directive formally adopted on 28 February 2018 (after almost 2,5 years of negotiations)
- 14 March 2018 Revised Directive officially published
- Now the phase of transposition into national legislation and the setting of implementing rules (IA and DA)
- Expected Timetable (next steps):
 - 30 June 2019 Deadline for applying for derogations to the European Commission;
 - 19 September 2019 Deadline for transposition of the Directive into MS legal order;
 - 1 January 2021 Beginning of the 4th trading period (the effectiveness of most major revision measures)



ETS auction revenues remain the main source of climate funding

Art 10/3. Member States shall determine the use of revenues generated from the auctioning of allowances. At least 50 % of the revenues generated from the auctioning of allowances referred to in paragraph 2, including all revenues from the auctioning referred to in paragraph 2, points (b) and (c), or the equivalent in financial value of these revenues, should be used for one or more of the following:

“inter alia”

- (b) to develop renewable energies to meet the commitment of the Community ..., as well as to develop other technologies contributing to the transition to a safe and sustainable low-carbon economy
- (f) to encourage a shift to low-emission and public forms of transport;
- (g) to finance research and development in energy efficiency and clean technologies in the sectors covered by this Directive;
- (h) measures intended to increase energy efficiency and insulation or to provide financial support in order to address social aspects in lower and middle income households;

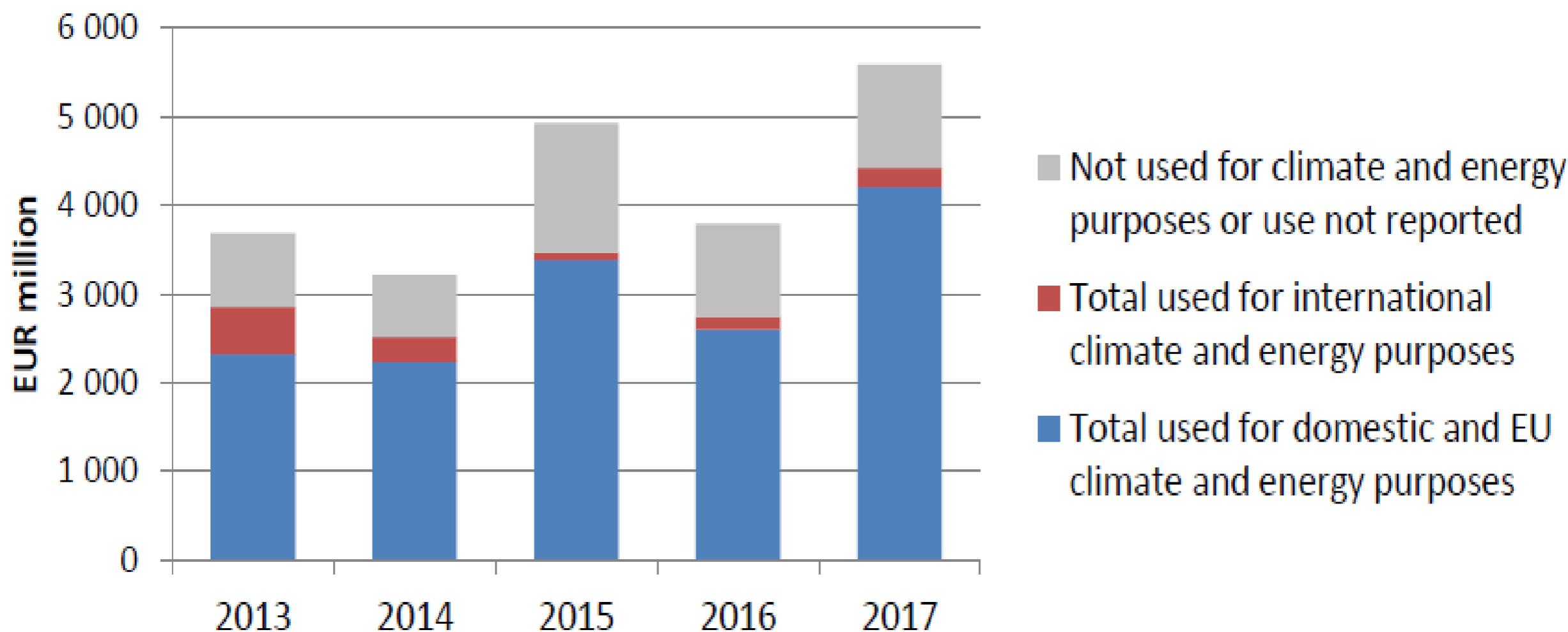


2017: Most recent information on revenues from the auctioning of EU ETS allowances

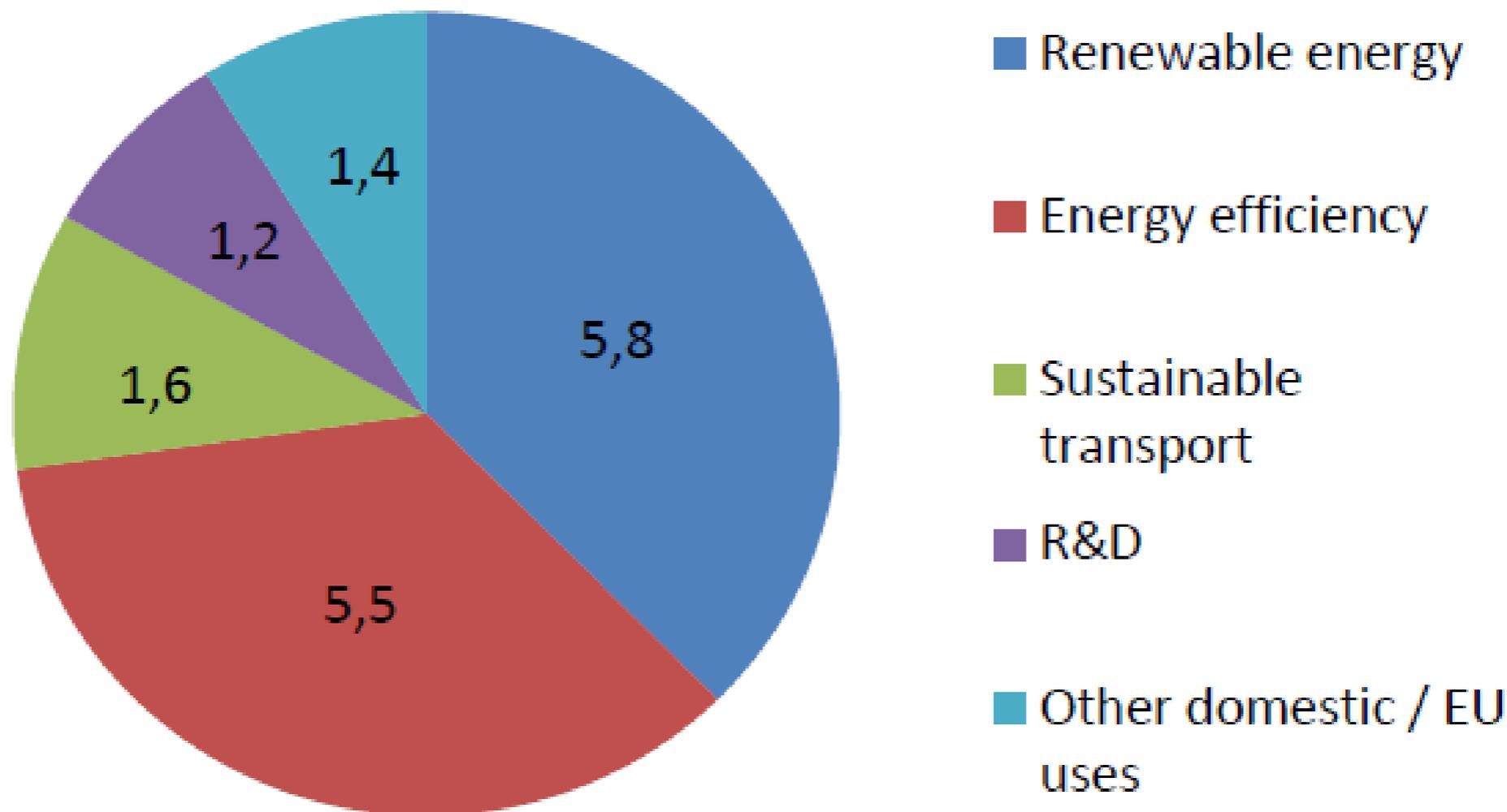
- In 2017, Member States earned **EUR 5.6 billion** from the auctioning of EU ETS allowances.
- This is about EUR 1.8 billion more than in 2016.
- About **80 %** of the revenues from 2013-2017 were used, or their use is planned, for climate and energy purposes.
- Again, Member States reported that most of the revenues will be used for domestic and EU purposes.



Use of revenues from auctioning of ETS allowances (2013-2017)



Domestic use of revenues from auctioning of ETS allowances (EUR million, 2013-2017)



2017: Use of revenues from auctioning of ETS allowances

Member State	Total revenues from the auctioning of allowances from EU ETS (EUR 1000)	Total revenues used (or planned to be used) for climate related purposes (EUR 1000)
Austria ¹⁵⁴	157 380	
Belgium	145 100	133 097
Bulgaria	130 418	138 240
Croatia	27 152	18 920
Cyprus	6 393	788
Czech Republic	199 775	199 775
Denmark	71 723	71 723
Estonia	39 354	15 905
Finland ¹⁵⁵	95 260	9 530
France	313 402	313 402
Germany	1 146 818	1 130 840
Greece	198 028	198 028
Hungary	85 129	0
Ireland	53 560	53 560
Italy	549 806	383 692
Latvia	15 391	3 790
Lithuania	31 513	31 513
Luxembourg	6 875	3 471
Malta	5 952	6 878
Netherlands	190 706	190 706
Poland	505 994	290 378
Portugal	100 350	95 096
Romania	260 752	0
Slovakia	87 064	40 873
Slovenia ¹⁵⁶	25 093	25 093
Spain	493 551	445 466
Sweden	52 572	28 808
United Kingdom	614 758	614 758
EU 28	5 609 868	4 444 330

Examples of contributions made by auction revenues to domestic programmes, projects and actions

Member State	Year	Purpose	Auction revenues (1000 EUR)	Total budget (1000 EUR)	% share of auctioning revenues of total	Auctioning revenues contribution /period /programme
Bulgaria	2014-2016	National Programme for Energy Efficiency of Residential Buildings	54,272	511,292	N/A	11%
	2015	National Trust Eco Fund	6,468	7,610	85%	85%
Czech Republic	2014	New Green Savings Programme	17,501	17,501	100%	100%
	2015	New Green Savings Programme	57,086	57,086	100%	100%
	2014	ENERG Programme	4,760	4,760	100%	100%
	2015	EFEKT 2015	440	720	61%	61%
France	2013	"Habiter Mieux" Programme	219,247	540,500	41%	41%
	2014	"Habiter Mieux" Programme	215,345	716,800	30%	30%
	2015	"Habiter Mieux" Programme	312,116	675,500	46%	46%
Slovakia	2014	Programme for Energy Efficiency in Public Buildings	14,953	N/A	95%	95%
	2015	Programme for Energy Efficiency in Public Buildings	15,000	N/A	95%	95%
Spain	2013-2015	Planes de Impulso al Medio Ambiente "PIMA" (crosscutting)	62,956	99,125	N/A	64%



The Czech Republic's Green Savings and New Green Savings

- These Programmes are governmental investment subsidy schemes focused on energy efficiency and renewable energy in housing sector, managed by Czech Enviro Fund
- They subsidize installations of heating system utilizing RES in new buildings and refurbished houses as well as energy savings in these houses.
- Supported measures include insulation of family houses and multiple-dwelling houses, replacement of old solid fuel-based heating with low emission biomass-fired boilers and efficient heat pumps, installation of solar-thermal collectors in new energy efficient buildings and construction of new houses to the passive energy standard.
- Green Savings Programme: funded about 73,000 projects in households achieved emission reduction of about 710 kt CO₂/year (around 60% originating from energy savings and 40% from renewable sources deployment)
- **Funding**

The Green Savings Programme (2009-2011) – proceeds from sale of tradeable units (AAUs) under KP

The New Green Savings Programme (2013-on going) – proceeds from auctioning of EU emission allowances (EUAs)

Ministerstvo životního prostředí

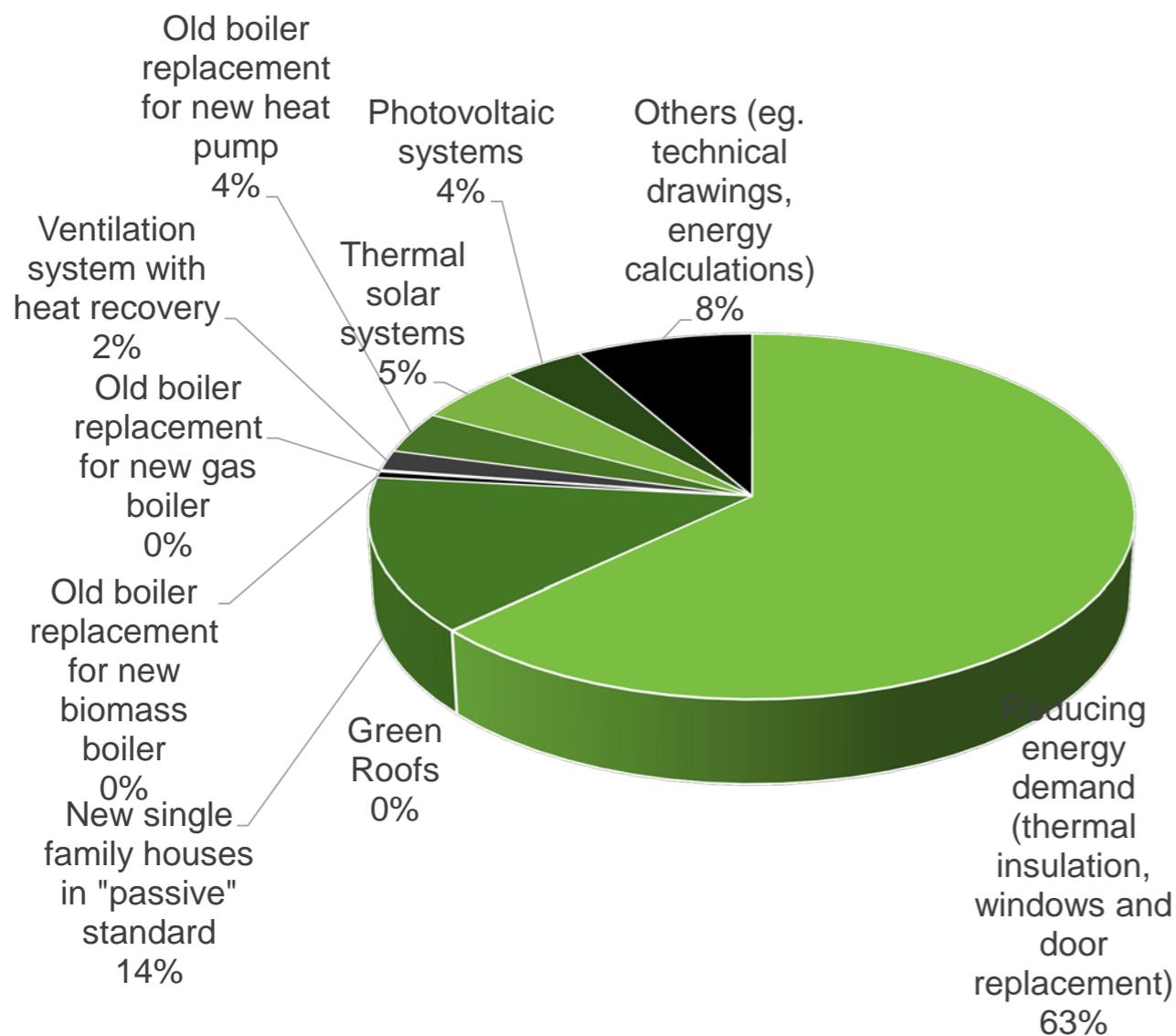
Ministerstvo životního prostředí
Vršovická 65, 100 10 Praha 10
Česká republika

www.mzp.cz

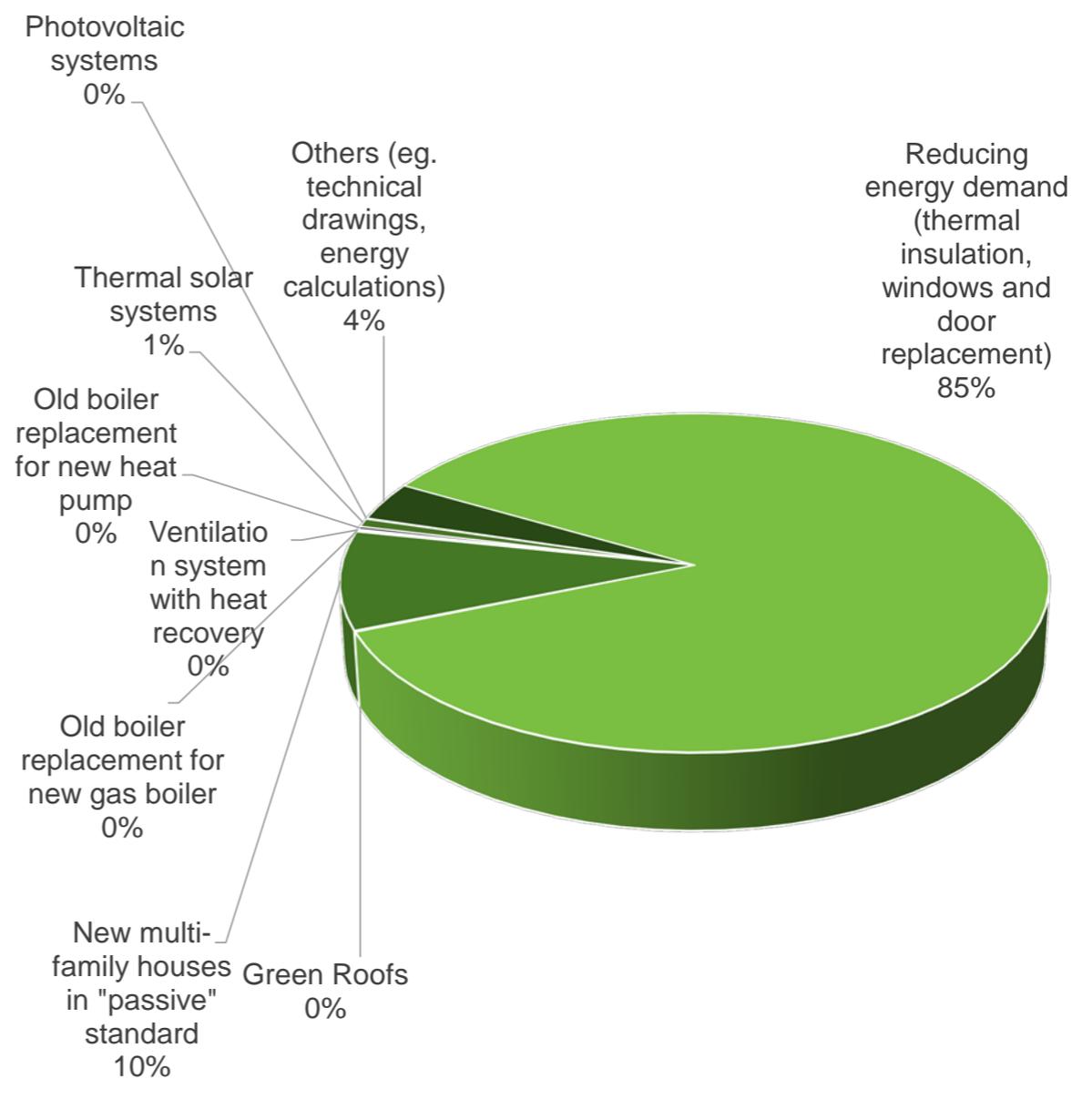


New Green Savings Programme

Single-family houses: Measure structure (subsidy demand)



Multi-family houses: Measure structure (subsidy demand)



Financial mechanisms of the revised EU ETS Directive (I/III)

1) Free allocation for energy sector (derogation, 10c)

- Available volume for individual MS: 40 % of their 90% part of auction share; (+ possible transfer between derogation and Modernisation Fund)
- Threshold for competitive bidding process = EUR 12,5 mil., more rounds/projects calls enabled
- Eligible projects:
 - diversification of energy mix and sources of supply,
 - necessary restructuring, environmental upgrading and retrofitting of the infrastructure,
 - clean technologies, such as renewable energy technologies,
 - modernisation of the energy production sector (i.e. efficient and sustainable district heating), and of the transmission and distrib. sector
 - ~~contribution to or improvement of the financial viability of highly emission-intensive electricity generation or increase of dependency on emission-intensive fossil fuels.~~
- Max. intensity of support: 70 % (min. 30 % from private sources)



Financial mechanisms of the revised EU ETS Directive (II/III)

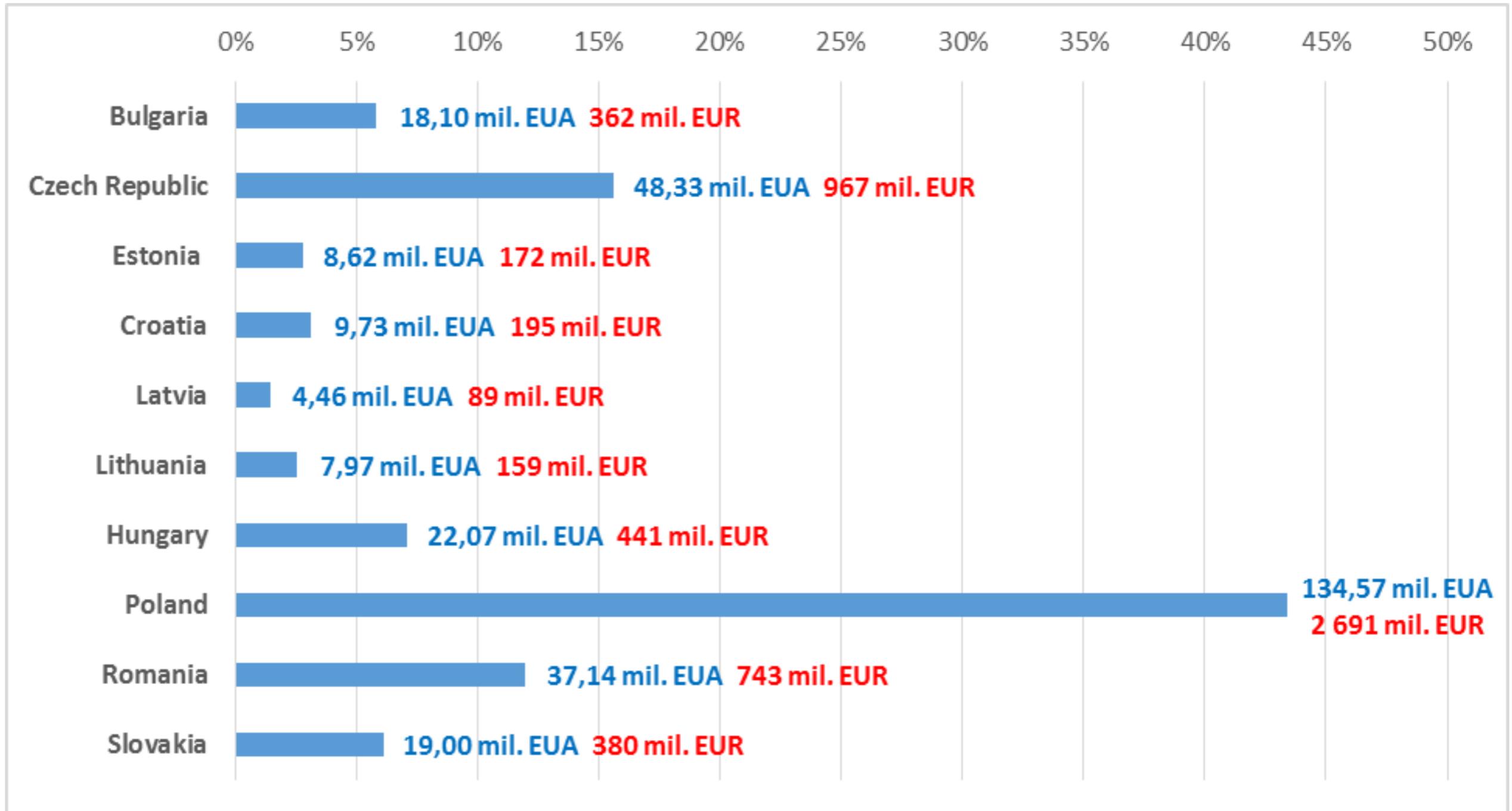
2) Modernisation Fund (MF, 10d)

- Available volume: 2 % of all EUAs = approx. **310 mil. EUAs**;
(**share of CZ** = 15,59 % = 48,3 mil. EUAs = **1 bn EUR expected**)
- Primary range of eligible projects (at least 70 % of available support):
 - generation and use of electricity from **renewable sources**,
 - the improvement of **energy efficiency**, except energy efficiency relating to energy generation using solid fossil fuels,
 - **energy storage** and the modernisation of **energy networks**, including district heating pipelines, grids for electricity transmission and the increase of **interconnections** between Member States,
 - **just transition** in carbon-dependent regions,
 - **energy efficiency in transport, buildings, agriculture and waste**
 - **~~support for energy generation facilities that use solid fossil fuels~~**
- Project evaluation by EIB: project within primary range = direct financing by MS **X**
project does not fall under primary range = evaluation of Investment comm. + max. 70 % intensity of support
- Share of EU MS: BG 5.84%, CZ 15.59%, EE 2.78%, HR 3.14%, LT 1.44%. LV 2.57%, HU 7.12%, PL 43.41%, RO 11.98%, SK 6.13%.



Modernization Fund

Total amount = 310 mil. EUA
EUA average price estimation = 20 EUR



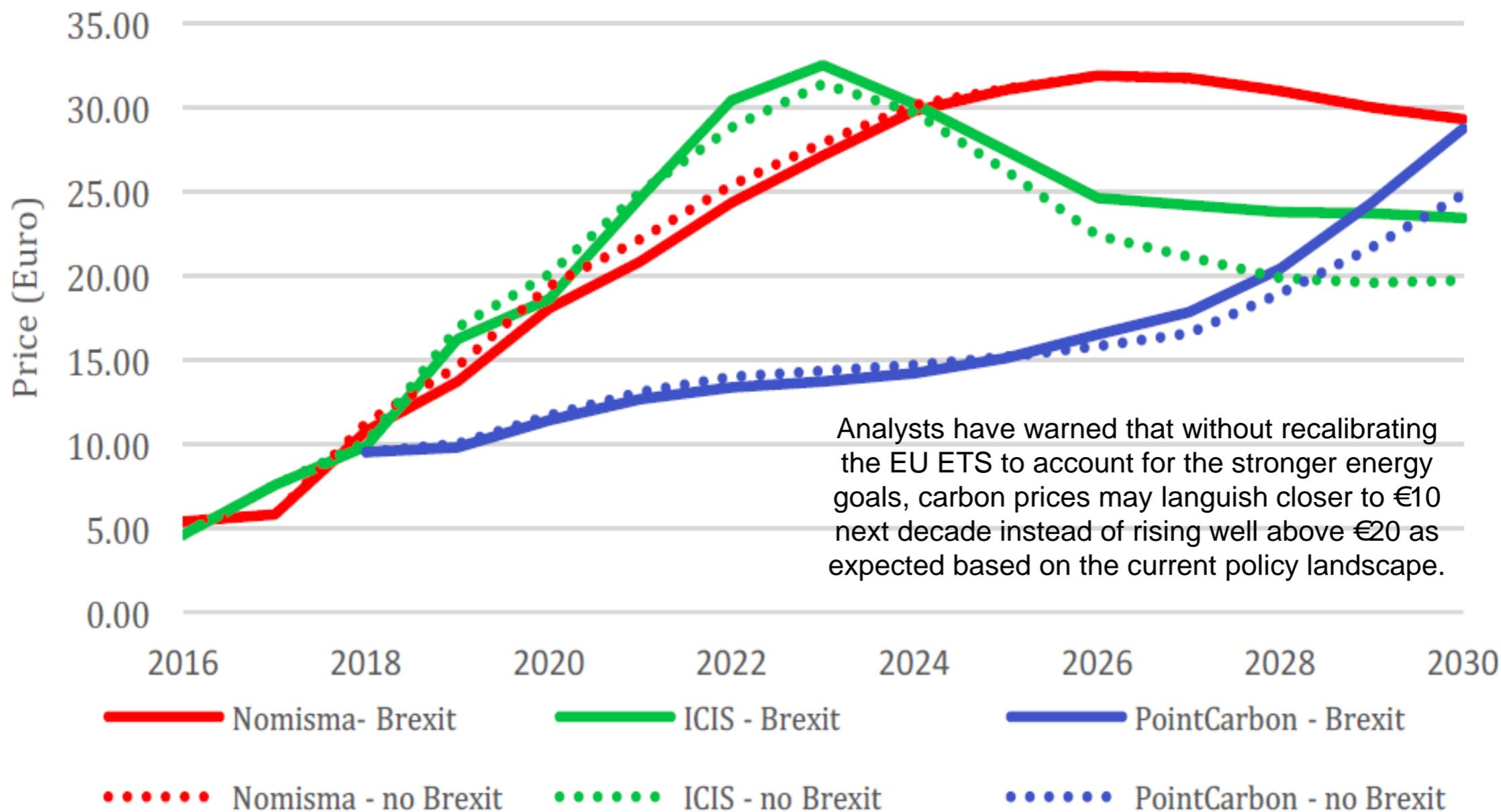
Financial mechanisms of the revised EU ETS Directive (III/III)

3) Innovation Fund (IF)

- Available volume: 400 mil. EUAs + 50 mil. EUAs from MSR (before 2021) + unused NER300 sources + 50 mil. EUA conditionally (no CSCF); no MS envelopes
- Eligible projects:
 - **innovation in low-carbon technologies and processes** in sectors listed in Annex I, including environmentally safe carbon capture and utilisation ("**CCU**")
 - **products substituting carbon intensive ones** produced in Annex I sectors
 - **environmentally safe capture and geological storage ("**CCS**") of CO₂**
 - **innovative renewable energy and energy storage technologies**;
- Main eligibility criteria:
 - emission reduction potential; potential for widespread application or lowering the costs of transitioning towards a low carbon economy in the sectors
 - **technologies receiving support shall not yet be commercially available**, but shall represent breakthrough solutions or be sufficiently mature to be ready for demonstration at pre-commercial scale.
- Support: geographically balanced locations, all size of projects; Intensity: 60 %



Expected price of EUA by 2030



Source: Nomisma Energia, ICIS and PointCarbon, 2018



Room for your questions and discussion...

Ministerstvo životního prostředí

Ministerstvo životního prostředí
Vršovická 65, 100 10 Praha 10
Česká republika

www.mzp.cz



