Recycling EU ETS carbon revenues for further emissions reductions

Session 1: Emissions reductions, growth and investment

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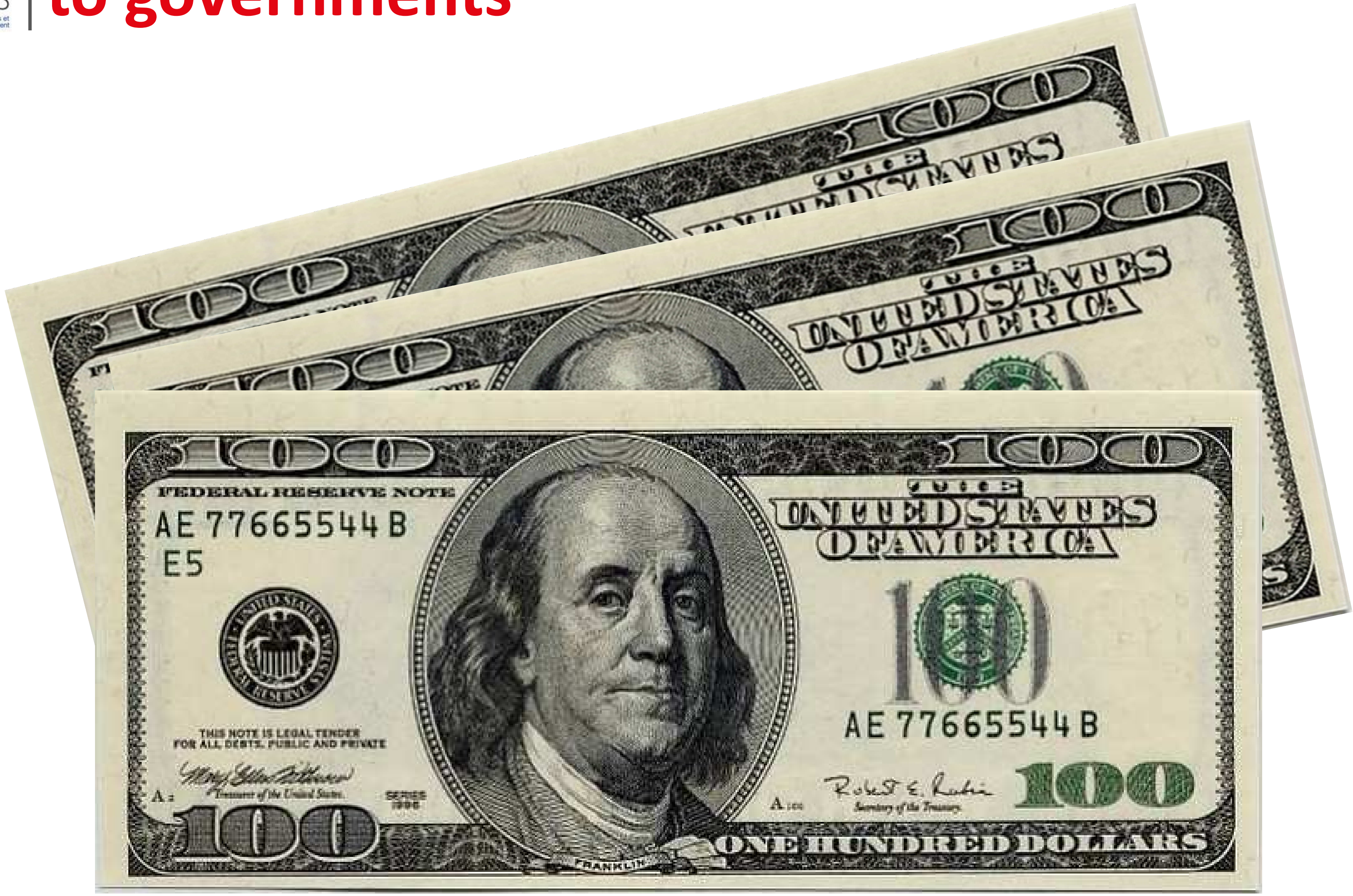
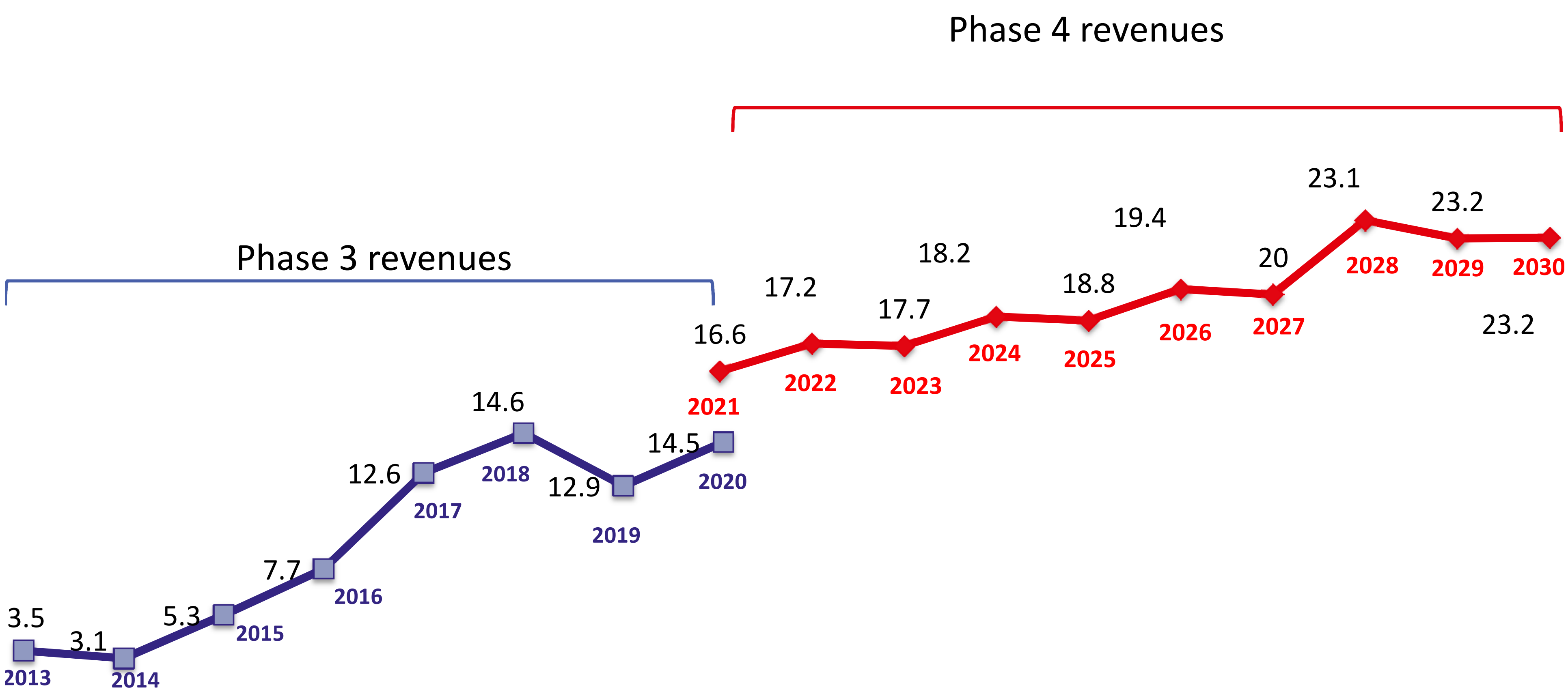
I4CE INSTITUTE FOR CLIMATE ECONOMICS

Carbon pricing offers new sources of revenue to governments



Large scale of future EU ETS revenues (in billion €)



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1. Large-scale funds at the EU level

The large-scale EU ETS funding instruments

Innovation Fund

Objective: targets innovation in large-scale and low-carbon industrial technologies like CCS and innovative RES and other non-mature technologies. Open to projects in all Member states

Budget: 450 million EUAs and 1.5 times as large than NER 300 – 400 million EUAs from free allocation budget + 50 million EUAs from unused in Phase III that will be put in MSR

Modernisation Fund

Objective: new fund to support modernisation of energy systems and energy efficient infrastructure, particular support to lower-income Member States

Budget : 310 million EUAs (2% of EUAs 2021-30)

2. Climate spending by Member States

Member States' encouraged to fund climate action

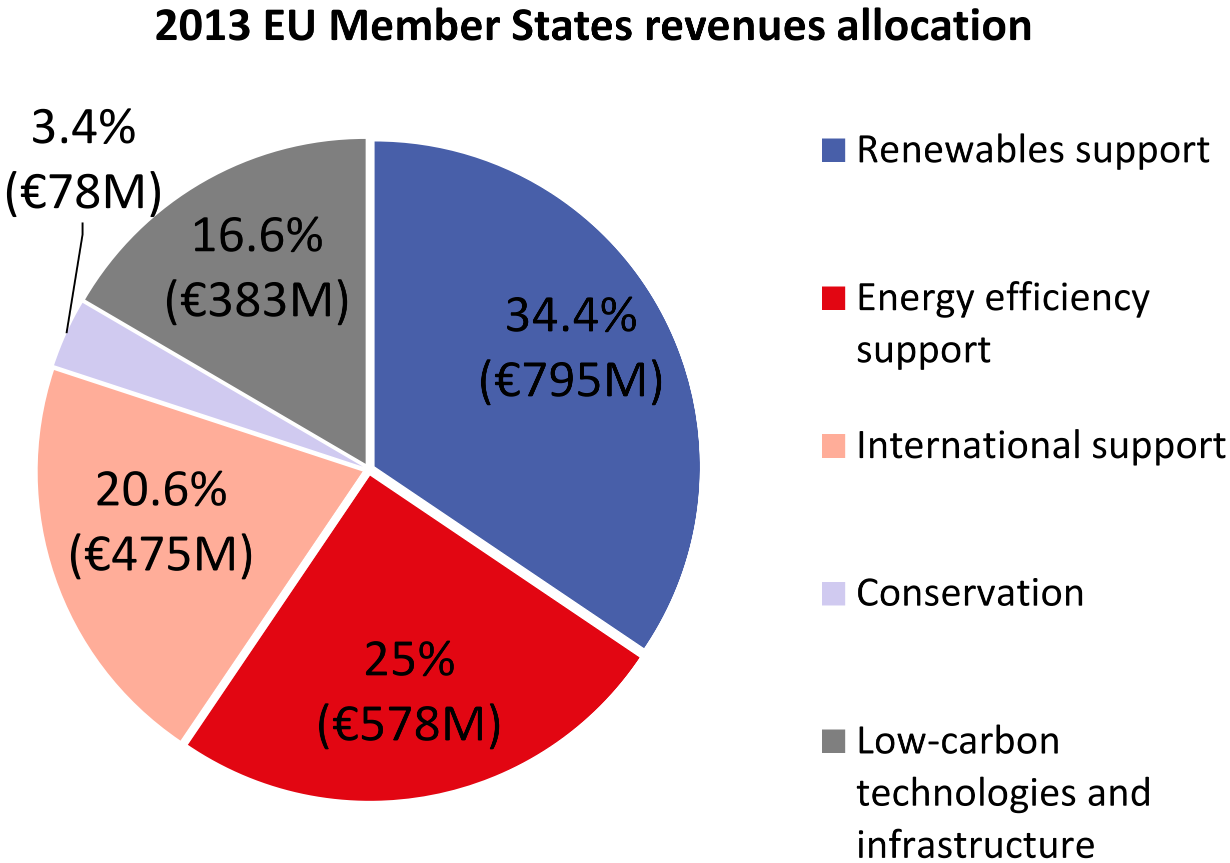
"…at least 50% to be used towards climate action"

Current guidelines:

- **Not legally binding** but mention an array of sectors related to GHG reduction from supporting energy efficiency to conservation
- Proposal for the revised ETS mentions adding:
  - Indirect cost compensation to industries
  - Supporting international climate
- **Ultimately up to the state's discretion** how much to spend and how

The majority of Member States fund primarily domestic mitigation

- Funds are principally dedicated to domestic mitigation.
- RES support receives the largest share of spending followed by Energy Efficiency



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Examples of the diversity of projects funded

- **Renewable energy:** Compensation to electricity distributors for including renewables in the energy mix (Spain)
- **Energy efficiency:** National Housing Agency, the *Habiter Mieux* or *Live Better* program (France)
- **International support:** Investment into Clean Investment Fund and Clean Technology Fund (UK)
- **Conservation:** Forest fire prevention, plant breeding (Cyprus)
- **Low-carbon technology and infrastructure:** the Electromobility program (Germany)

Key issues when dealing with carbon revenues

Variability

- Auction revenues are uncertain from year to year for two primary reasons:
  - Uncertainty in variation of carbon prices
  - Variation in budget allocations from year-to-year

Improving reporting and visibility

- Understanding public revenue flows, what sectors are benefiting

Some recommendations for the EU to enhance the carbon revenues' potential as a funding mechanism

Variability

- Providing a form of "variability insurance", particularly for large-scale projects. E.g. Multiannual planning, minimum guarantees

Improving reporting and visibility

- Better reporting standards to check efficiency of spending in reducing emissions

Communication

- Providing justification to the public on the rationale behind decision-making; increased awareness and use of public consultations processes can increase public support for such mechanisms

Leverage effect on private capital

- Public sources of revenue such as ETS proceeds could be recognised as an opportunity to leverage private capital from public funds for low-risk, climate investments

Conclusion

- The EU ETS revenues have **facilitated the financing of the low-carbon transition**:
  - by creating funds dedicated to investing in low-carbon energy technology innovation and modernisation
  - by encouraging Member States to further invest in climate action
- Some issued need to be considered to help **enhance the potential** of these revenues in meeting the EU climate and energy goals

Q&A

Thanks for listening!

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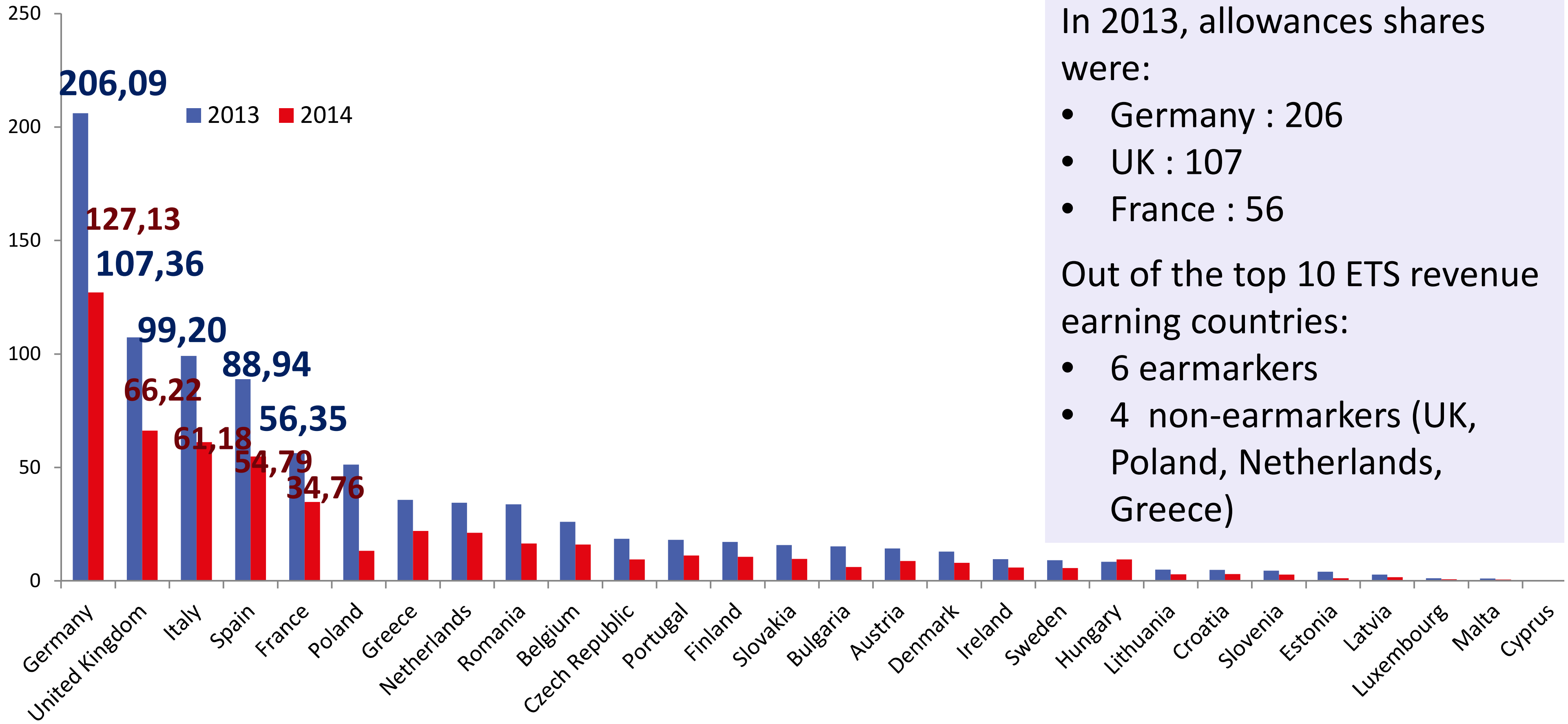
Annexes

EXECUTIVE SUMMARY

- EU ETS Auction revenues can be used by MS **as a financial instrument to develop solutions for a low-carbon transition,** in (non-ETS) sectors ; kind of projects and technologies that do not otherwise receive specific climate funding : small and medium projects, mature technologies, etc…
- **Variability of revenues** could be a key issue that prevents long-term planning of climate action
- Other key questions that we may need to address, **to improve the visibility of use of auction revenues, includes establishing reporting standards**, national communications on criteria for auction revenues allocation
- Using some tools that California and RGGI employ, such as **multi-annual planning of revenues, creating simple but standardized metrics, improves visbility for projects to assess benefits** of ETS revenues
- Using **private finance** can be a way to use auction revenues more efficiently to fund more small and medium scale or long-term projects that will play a key role in the low-carbon transition.

Auction allowances by country



(In million of allowances)

In 2013, allowances shares were:

- Germany : 206
- UK : 107
- France : 56

Out of the top 10 ETS revenue earning countries:

- 6 earmarkers
- 4 non-earmarkers (UK, Poland, Netherlands, Greece)

Country responses

I4CE Survey	Bulgaria, Belgium, Cyprus, Czech Republic, Germany, Hungary, Latvia, Lithuania, Norway, Slovakia, Spain, UK
Interviews	Belgium, Germany, Czech Republic, France, Slovakia , California Environmental Protection Agency and ANAH (Agence NAtional de l’Habitat)
Official EU reports	E: Hungary's share of reveneus in central budget awaiting allocation decision, Latvia has not spent on climate action, Luxembourg, and Slovakia have not allocated revenues, Italy has not reported on its spending and Spain's reported amount of spending exceeds auction revenues no unsure about these figure's accuracy (particularly renewable energy compensation), non-EU countries. N/E: Denmark's research and development efforts generalized, Greece and Netherlands no specific efforts mentioned, Poland's information, non-EU countries

The case for earmarking

Traceability and Transparency	Earmarking of specific revenues allows tracing expenditure flows from Fund to Projects This provides the possibility for regular reporting on such flows and better monitoring and verification of expenditures
Guaranteed revenues	When revenues are earmarked, usually through a dedicated Fund, ministries are able to receive some guarantees for funding projects to reach emission reductions goals Programs are also able to have some guarantees to ensure part of the source of their funds
Use of revenues	Earmarking of carbon (ETS) revenues buys public support for carbon pricing implementations as, depending on where the money is spent, can be used to directly provide the public some benefits while reducing GHGs. For e.g. Germany's electromobility program or France's spending on ANAH. These revenues, can also be used to reduce the economic burden of the low-carbon transition on low-income groups.
Provides positive investment signals	In climate policy uncertainty, government spending towards project acts as a stimulus for investors who are looking for low-risk portfolio investments Knowledge of preferred sectors of government spending gives some signals to investors; this investment can manifest as R&D for such sectors that are needed to stimulate low-carbon transitions

In planning funding for low-carbon transitions, earmarking auction revenues towards known and specific climate action can facilitate and mobilize the implementation of climate actions towards sustainable economic transition

Common trends in North America

- Spending guidelines focus on long-term growth as well as GHG reductions
  - Special attention to highest emitting sectors
- Guidelines for minimum investments towards certain actions
  - Focus especially on reserving funds for disadvantaged communities
- Focus on large-scale infrastructure growth e.g. low-carbon transport
- Public reporting on decision making motivations, governance and assessment of projects
- Use of standardized metrics to measure performance

1.2 The EU Parliament Proposal

In early October 2008, the Environment Committee (ENVICom) of the European Parliament put forward an amendment to the Commission ETS proposal, concerning the 'earmarking article' (Art. 10, §3). Whereas the original Commission language suggested at least 20% the revenues generated from the auctioning of allowances … should be used (i.e. earmarked) for climate change, the ENVICom amendment requires that the 100% of the revenue shall be

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used for climate change, with at least 50% for developing countries. Moreover, the range of issues to be funded by this amount differs significantly from the Commission proposal, in particular with respect to developing country funding:

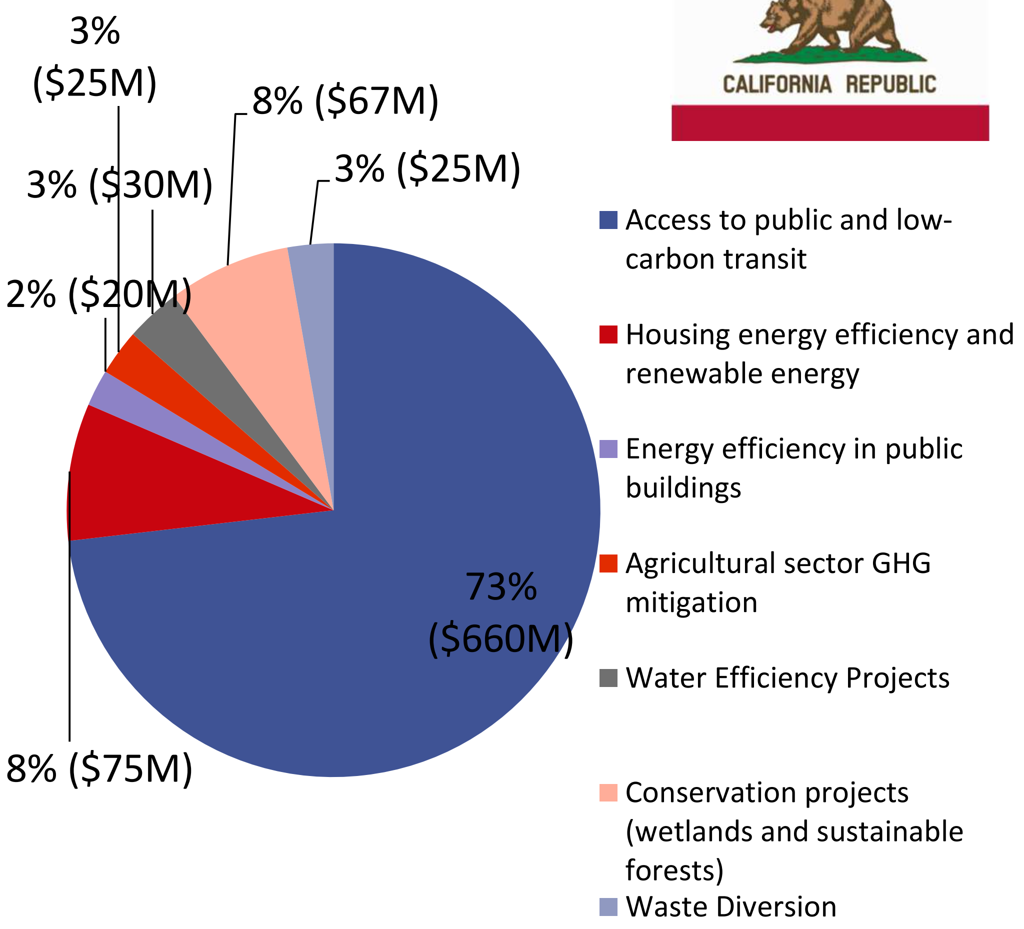
- one quarter for funds to avoid deforestation and increase afforestation and reforestation in developing countries that have ratified the future international agreement, taking into account: the rights and needs of indigenous people; the preservation of biodiversity; and the sustainable use of forest resources;
- one quarter to reduce emissions in developing countries that have ratified the future international agreement, and to transfer technology to those countries, e.g. through the Global Energy Efficiency and Renewable Energy Fund;
- one half to facilitate adaptation to the adverse effects of climate change in developing countries that have ratified the future international agreement on climate change.

This means, given the Commission estimates of auctioning revenue, that in 2020, €37 billion would be earmarked for developing countries (€ 19 billion for adaptation, and €19 billion for mitigation and LULUCF in equal shares).

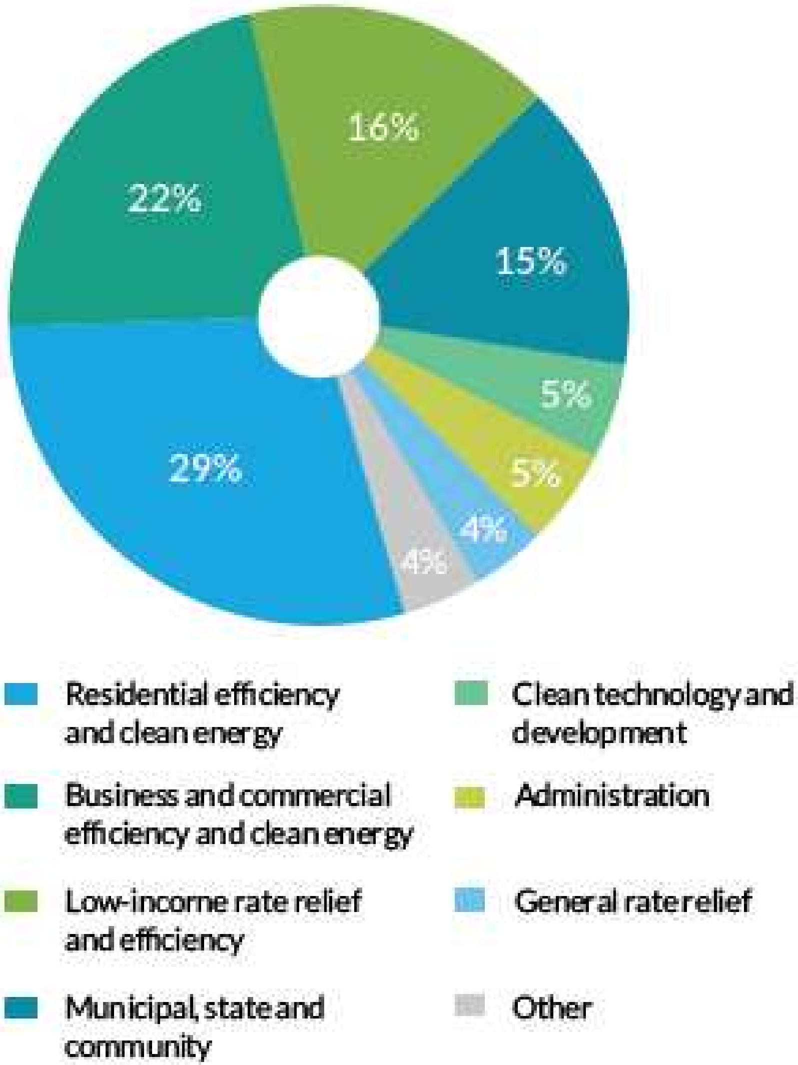
ENVICom also suggested an amendment to the Commission's effort sharing proposal, suggesting a floor of at least € 5 billion in 2013, raising to at least €10 billion in 2020, for assessed contributions for developing country adaptation, which could be financed through auctioning.

California: a revenues spending process based on a dedicated Fund + an Investment Plan

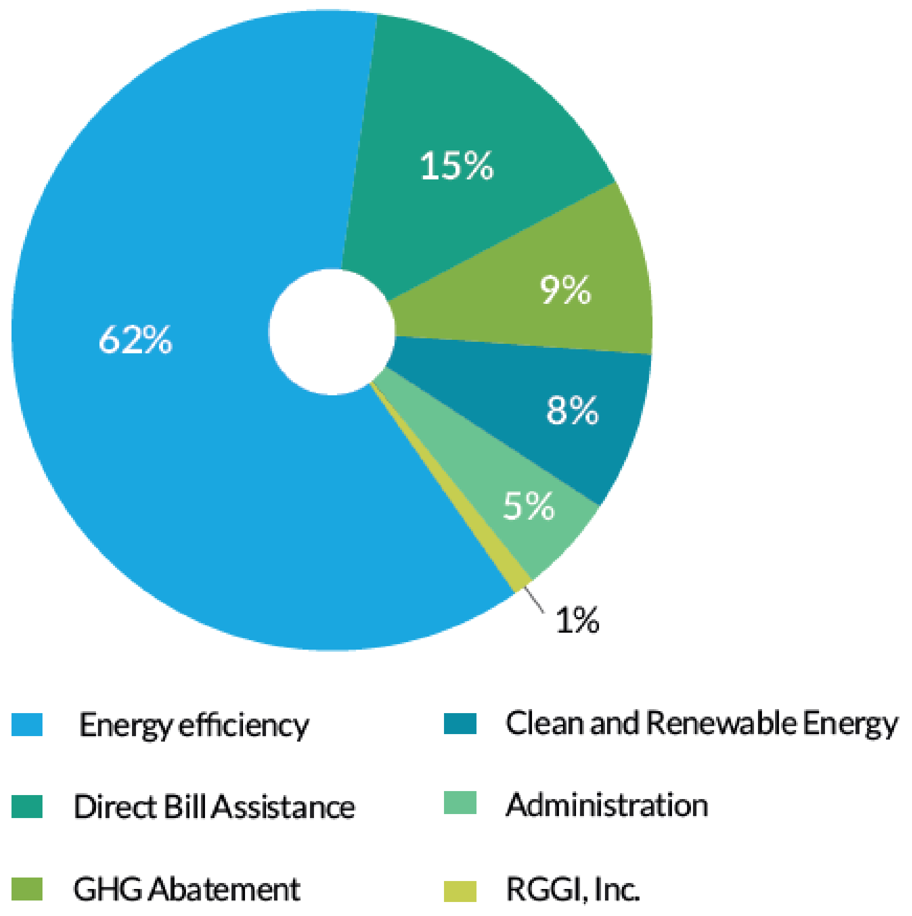
- California chooses projects that maximize GHG reductions in the highest emitting sectors.
- Proceeds are predominantly used for long-term infrastructure projects like building a High-Speed rail which is focused on providing access to disadvantaged communities, weatherization projects, conservation projects and waste management.



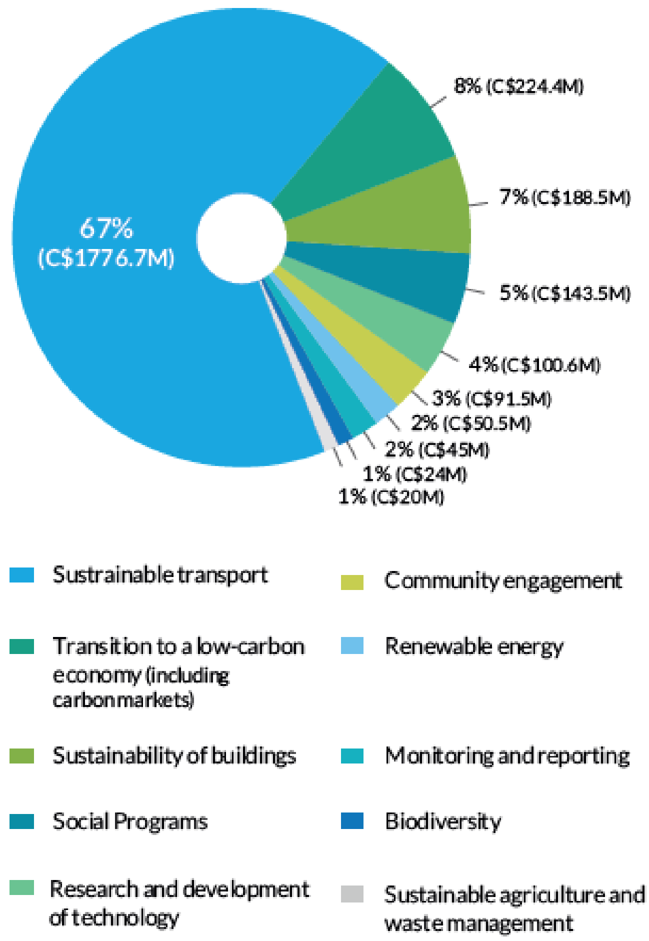
RGGI Investments by program type



RGGI Investmets by Category



Québec revenues spending plan



California: a funding process supported by strong project selection guidelines

Project selection guidelines:

- Basic metrics provides visible checks to measure performance of a project (e.g. reduction of miles travelled, kWh reduced). Investment is made and changed based on these metrics
- Established legal guideline that at least 25% of all revenues must serve disadvantaged communities during the long-term transition. Calculation tools also allow indentification of disadvtangaed communities.
- Innovative approach to award points to projects that are leveraging private capital

California: Managing the risk of variability of revenue

Robust options against variability in revenue:

- Multi-annual planning (every 3 years) provides some certainty on revenues
- Guaranteed revenue for projects:
  - revenue is estimated conservatively based on price floor calculations and
  - for long-term projects, first 60% of annual revenue is dedicated to long-term projects thereby guaranteeing their continuity

Improving the EU ETS revenue spending guidelines: 4 key suggestions

Variability insurance

Common metrics

Multiannual planning

Leveraging private investment

Ensuring stability to enable short-term and long-term planning

Improving transparency, trackability and visibility on public ETS revenues

Enhancing the role of auction revenues in the low-carbon transition

Suggestion for improving the EU ETS revenue spending guidelines: Variability insurance

Variability insurance	Common metrics	Multiannual planning	Leveraging private investment

- Currently, projects face uncertainty in how much revenues they can expect from ETS proceeds
- Providing revenue guarantees
  - public « variability insurance », a minimum % guarantee
  - providing guarantees for long-term projects
- Improving communications between EU and M.S. and M.S. and beneficiaries on expectations of revenue forecasts and carbon prices

Suggestion for improving the EU ETS revenue spending guidelines: common metrics

Variability insurance	**Common metrics**	Multiannual planning	Leveraging private investment

- Currently, there are no EC metrics to measure the spending of M.S. revenue against GHG reductions
- While evaluating projects' eligibility can be a long and complicated process, using a set of key standard metrics is able to ensure that countries are complying to basic GHG reduction goals
- By demanding simple metrics such as kWh reduced, tons of CO_2 avoided, comparing projects becomes easier and progress of a certain project is easily measured

Suggestion for improving the EU ETS revenue spending guidelines: Multiannual planning

Variability insurance	Common metrics	**Multiannual planning**	Leveraging private investment

- Currently auction revenue spending changes from year to year. This interferes with projects being able to use the revenue for medium- and long-term projects, thereby limiting the scope of projects it can be spent on
- By making multi-annual plans, projects can plan ahead in the medium-term and long-term
- Multi-annual planning can commit to some projects irrespective of risks in political changes

Suggestion for improving the EU ETS revenue spending guidelines: levarge effect on private finance

Variability insurance	Common metrics	Multiannual planning	Leveraging private investment

- Auction revenues are currently being spent on short-term, small-scale projects that benefit the housing sector
- In the future however, innovative programs could emerge that reduce GHGs in power consumption e.g. through smart meters, smart grid projects
- While public revenue such as ETS proceeds can be expected to be raised every year with some guarantee, they are not large enough to support much larger infrastructure projects
- The guarantee and low-risk factor of public revenues can be used to leverage private capital to further invest in mitigating GHG emissions and developing innovative technologies or projects
- Provide incentives to projects to diversify sources of funding; e.g. California: if the projects can show their ability or have proof of private capital investment, they are more likely to receive the grants (from auction proceeds)

Some other key questions…

- Is it more beneficial to earmark or avoid earmarking?
- How can we improve visibility of auction revenues spending?
- What criteria should decide how auction revenues are spent?
- Should vulnerable groups be added as a criteria?

Next steps… before the publication of the I4CE report on the EU ETS auction revenues use

- Examining the 2014 reports and analysing for differences in spending behaviours across different countries;

- Compiling the final report with the 2014 report analysis included