



Offsets or no Offsets?

NGO Strategy Workshop

Eva Filzmoser, Anja Kollmuss, Carbon Market Watch

info@carbonmarketwatch.org

Nature Code – Zentrum für Entwicklung und Umwelt

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Nature Code

‘Mother Ship’ for several projects related to carbon markets:



Carbon Market Watch: scrutinises carbon markets and advocates for fair and effective climate protection.



Network: Connects more than 800 NGOs and academics from the Global North and South to share information and concerns about carbon offset projects and policies.



People & Forests: active on issues related to forestry, especially where the rights of local communities and indigenous peoples are concerned.



Capacity-building initiatives: strengthening the voice of civil society in the Global South, with the aim of making local voices heard at the international policy level.

Workshop Content

Session 1:

An overview of carbon markets

Session 2:

Offset use in EU climate legislation

Session 3:

Turbulences ahead! Aviation Emissions ICAO

Session 1:

An overview of carbon markets

CONTENT:

- Carbon markets at a cross roads
- Carbon markets 101: cap-and-trade versus offsets mechanisms
- State of play:
 - Clean Development Mechanism
 - Joint Implementation
 - New markets, FVA and NMM

Carbon markets at a cross roads

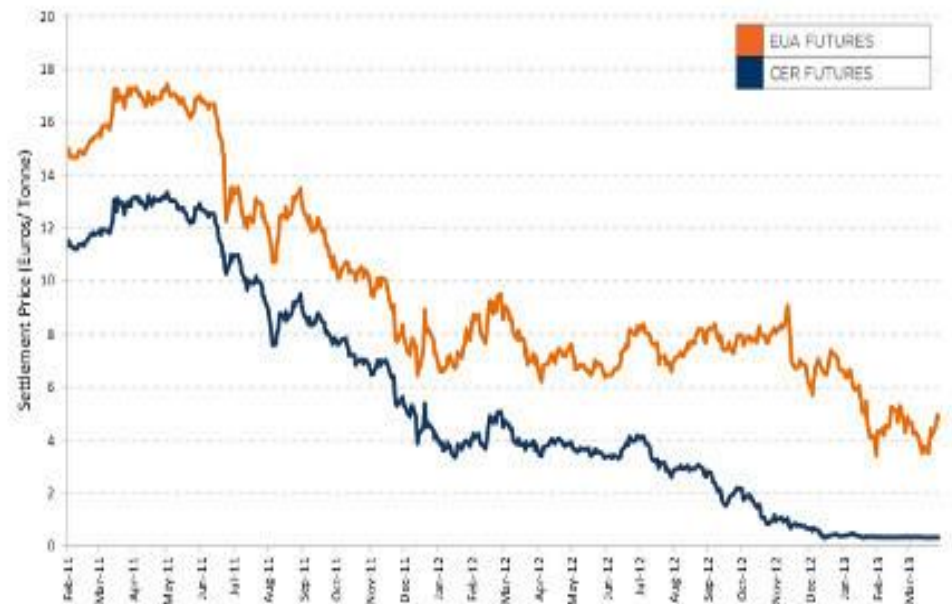
Established markets are in crisis

- In 2012, the markets for both the Clean Development Mechanism (CDM) and Joint Implementation (JI) prices well Euro 0.4
- EU-ETS allowances below Euro 5
- May not recover any time soon.

Reasons:

- Low demand due to the economic downturn and weak emission reduction targets.
- Significant over-supply of carbon offsets in large part due to lenient rules.

ICE EUA & CER FUTURES HISTORICAL FRONT-DEC PRICE



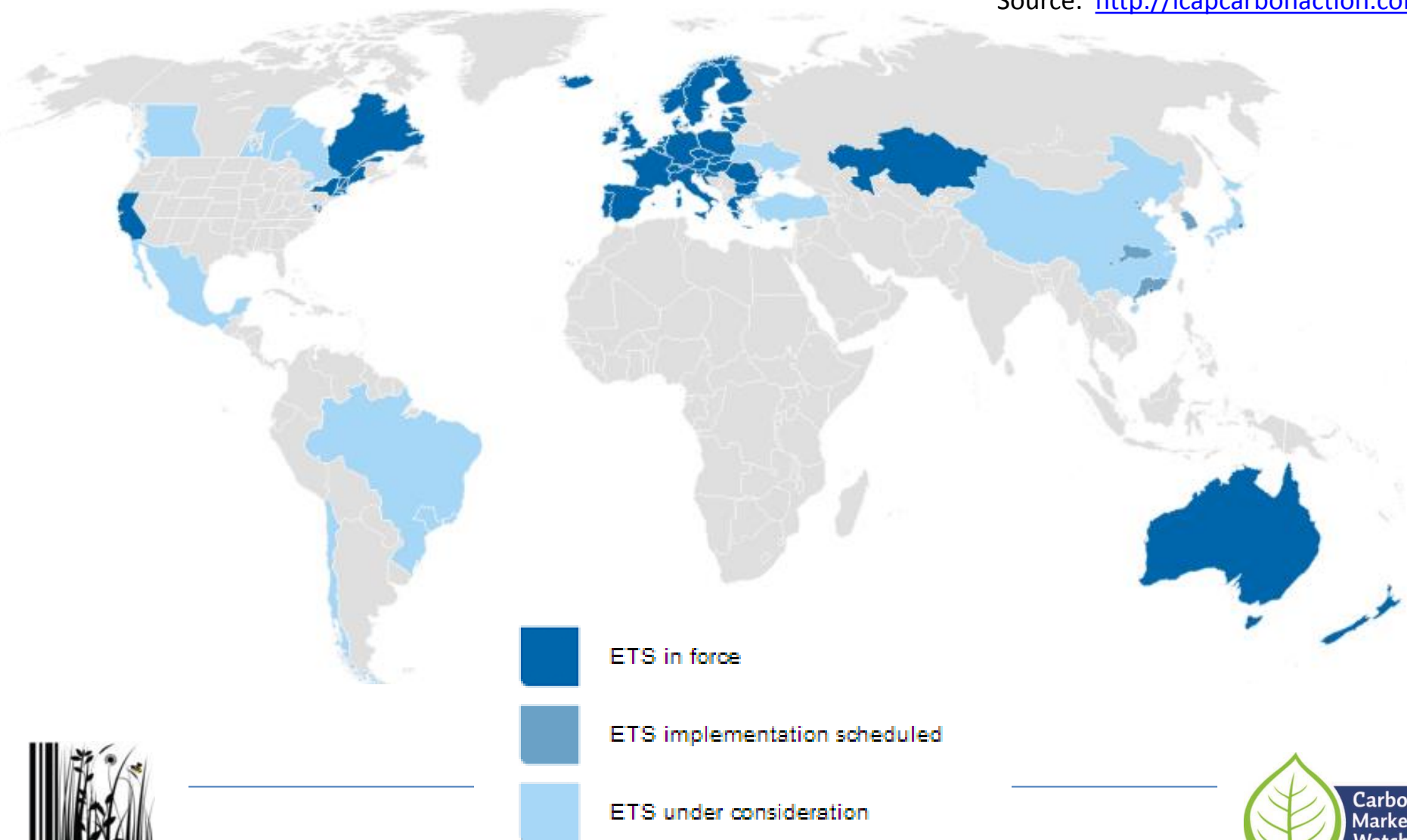
Carbon markets at a cross roads cont.

Nevertheless new markets emerging

- New market schemes emerging in China, California, Korea, Chile, Quebec, Japan etc.
- Some of them are offsetting schemes (e.g. Japan) most of them are ETS with offsetting component.
- The World Bank's Partnership for Market Readiness (PMR) is fostering the development of such new market schemes.

Existing and Emerging ETS

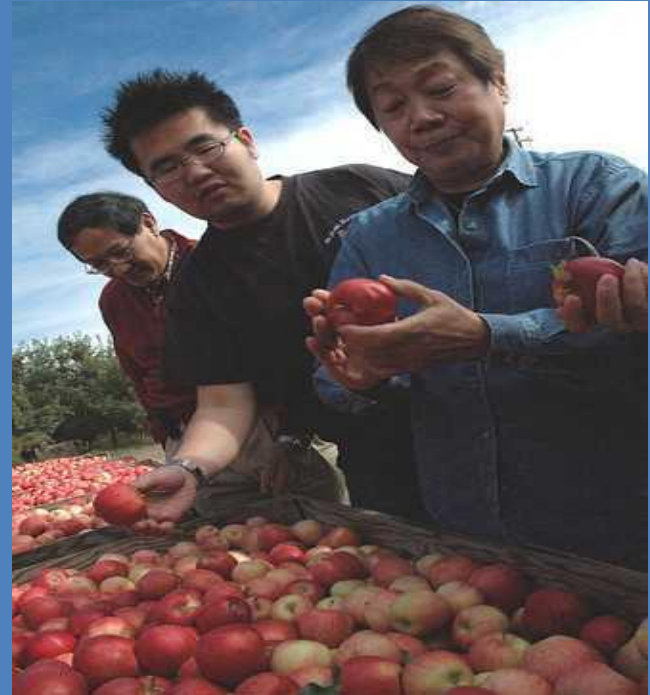
Source: <http://icapcarbonaction.com>



Carbon Markets 101: cap-and-trade versus offsets



Cap-and-trade



Offset mechanism

Carbon Markets



Cap and trade

- Kyoto Protocol's Emission trading (trading of AAUs)
- European Emissions Trading Scheme (EU ETS)
- California ETS

Offset mechanism

- Clean Development Mechanism (CDM)
- Joint Implementation (JI)
- Verified Carbon Standard (VCS)

Features of Cap-and-trade



Overall cap on allowable emissions

A finite supply of allowances, set by regulation and political negotiation.

Each of the participants within a cap-and-trade system is allocated a fixed number of allowances.

Finite supply of allowances creates scarcity and drives demand and price for allowances.

Allowances are neither created nor destroyed, but traded among participants.

Cap-and-trade: the challenges



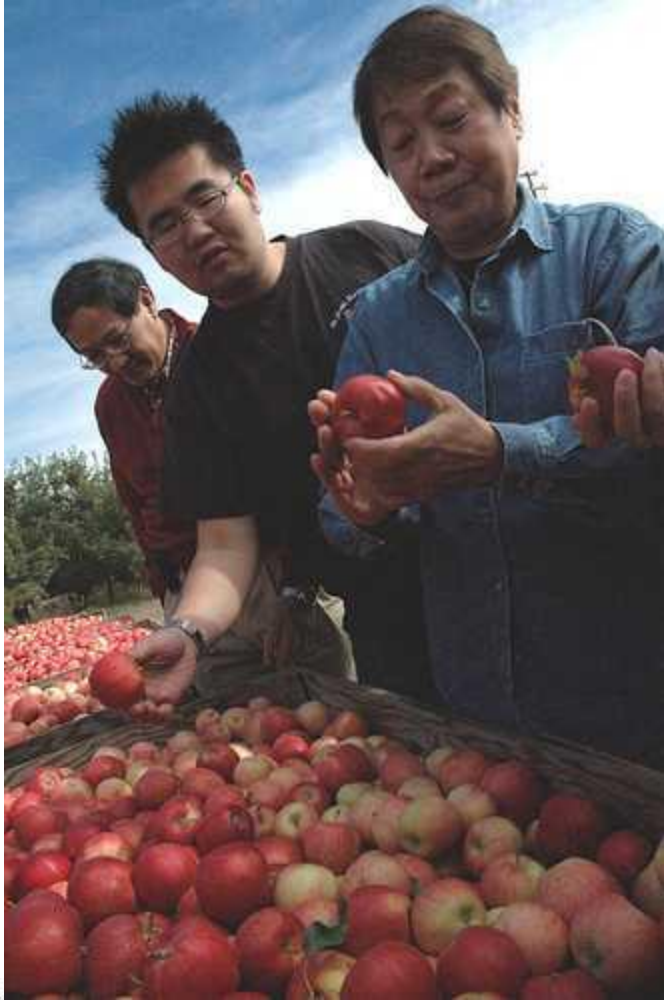
Setting the cap and baselines

- Stringent enough to induce necessary reductions
 - Otherwise ETS may undermine other policy tools and hamper climate mitigation
- But not too stringent
 - Risk of losing political support.
 - Risk of imposing high economic costs.

Auctioning

Allowances can be given out or auctioned off to covered entities. This does not affect the emissions reductions achieved, raises additional revenue.)

Features of Offset System



No overall cap on allowable emissions

Projects that are not covered under a cap-and-trade system (outside the cap).

New offset credits are generated with each offset project.

These are then sold to entities covered under an ETS.

→ Offset programs are used to make compliance with ETS caps less costly.

Offset programs: the challenges



Zero sum

- Offsets are a zero-sum game for the atmosphere. For every offset purchased, the buyer can increase its emissions by an equivalent amount.
- Offsetting only leads to the geographical or sectoral shift of the emission reductions to enhance cost-effectiveness of emissions reductions.

Offset programs: the challenges



Setting additionality rules

Additionality is the principle that only those projects that would not have happened anyway should receive carbon credits.

Setting Baselines

The hypothetical emissions of what would have most likely occurred if there was no offsetting mechanism.

If additionality and baselines are not conservative and realistic then offsets will lead to a global increase in emissions.

Offset programs by size

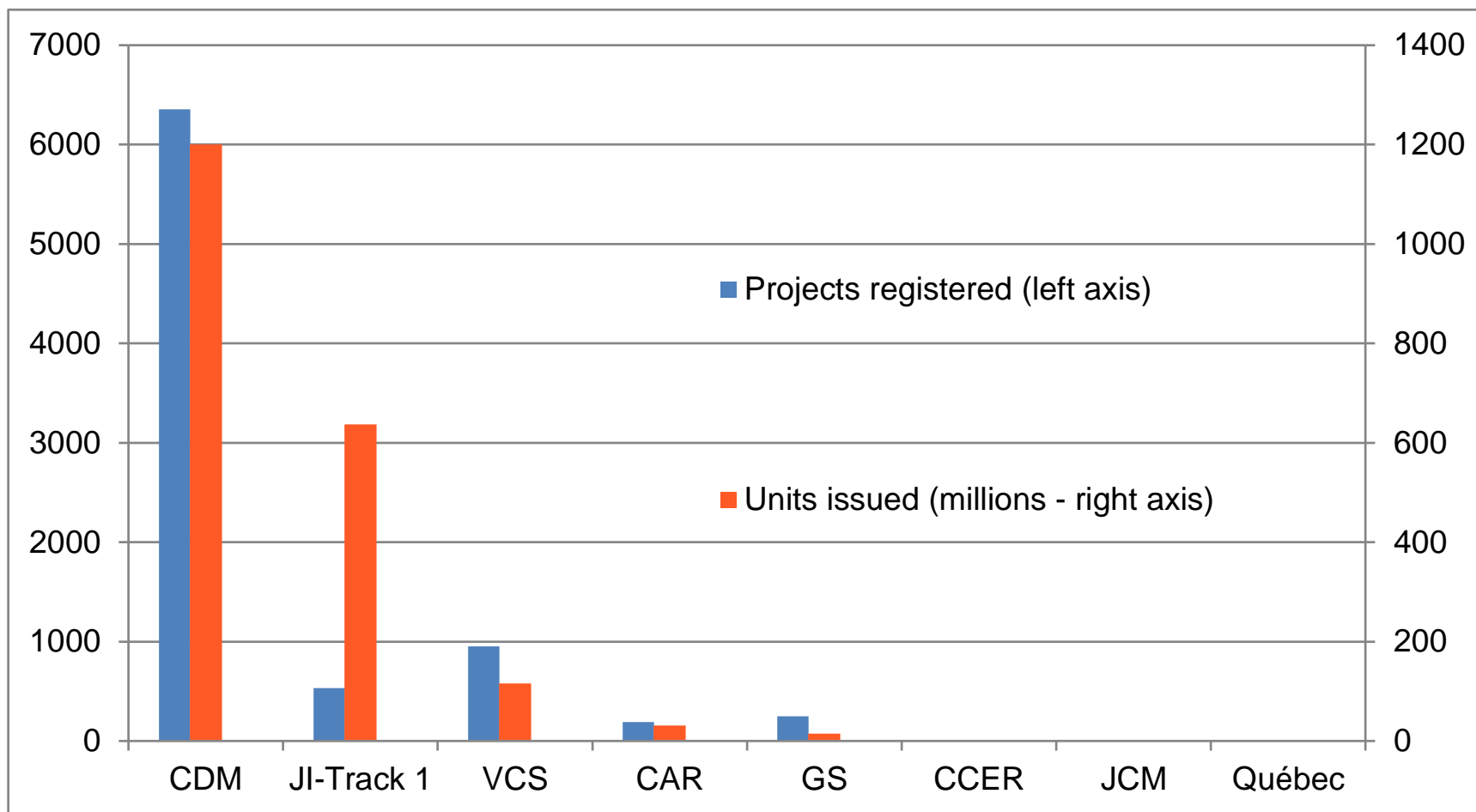


Figure Number of registered projects (orange – right axis) and units issued (blue – left axis) as of February 2013. CCER, JCM and the Québec program are in their start-up phase and have no registered projects yet.

Carbon Markets under the UNFCCC



Kyoto Protocol:

Emissions Trading (AAUs) (ETS)

Clean Development Mechanism (Offset mech)

Joint Implementation (Offset mech)

UNFCCC

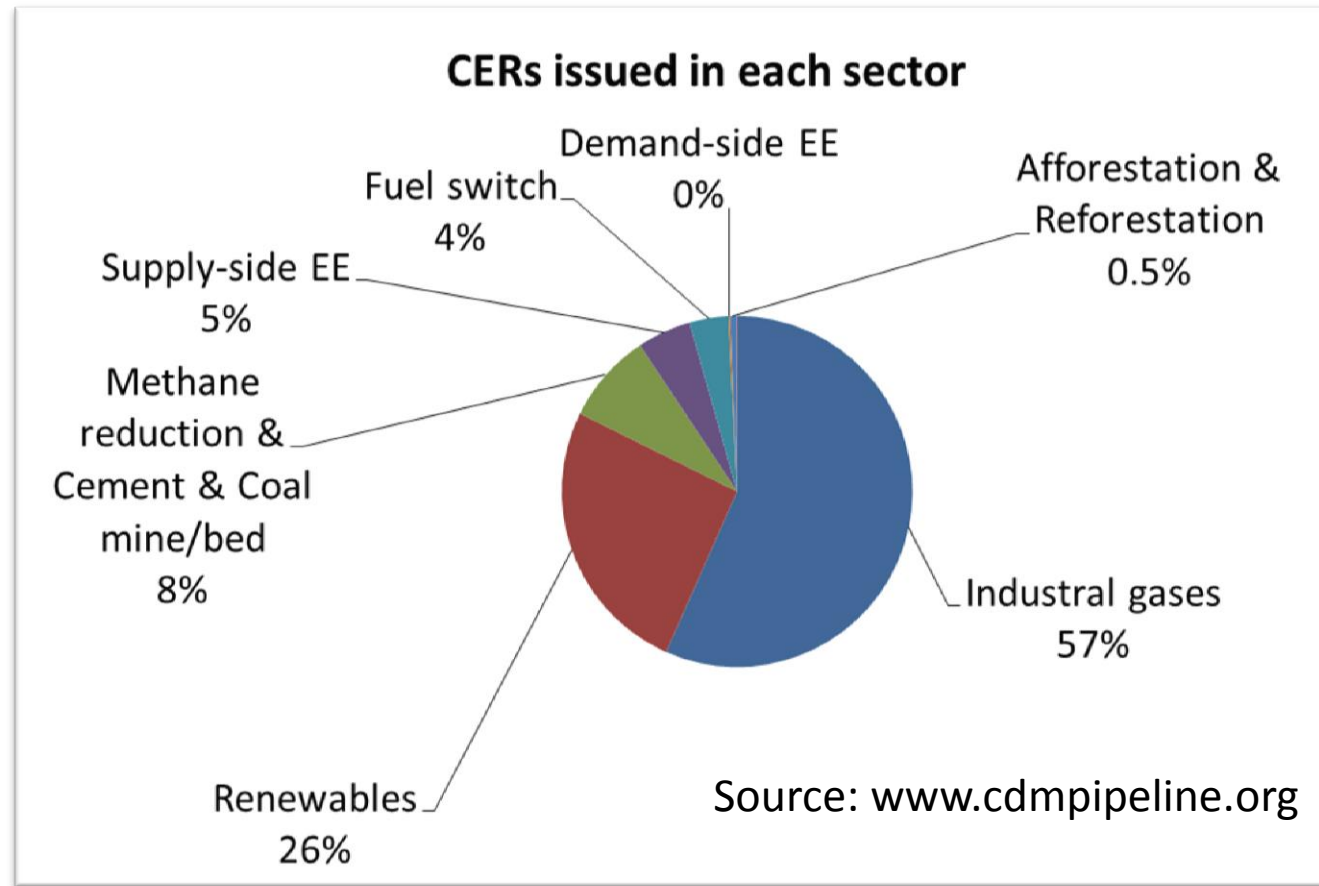
Framework for Various Approaches (Offset or ETSs)

New Market Mechanism (Offset or ETSs)

State of play:

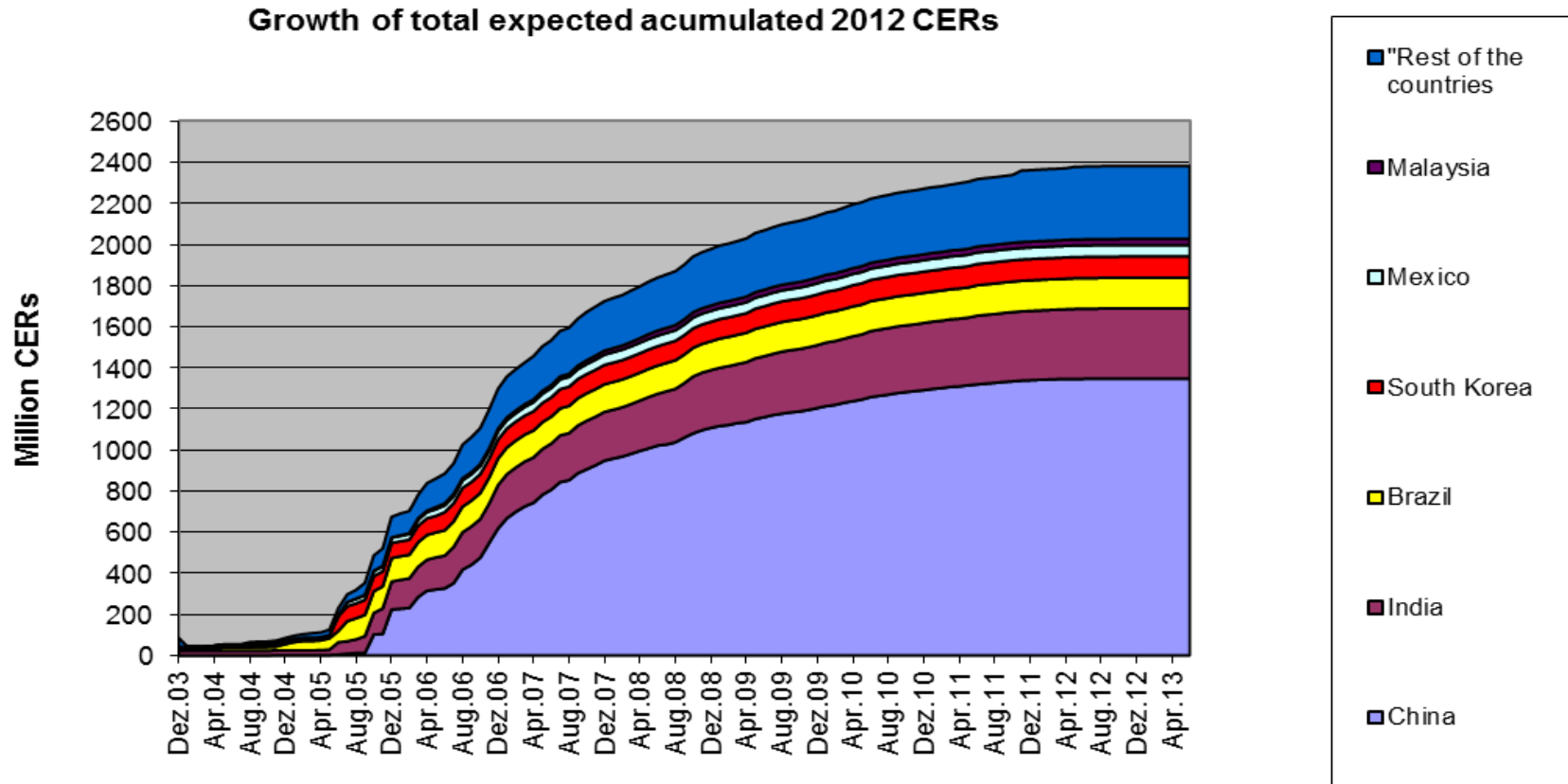
Clean Development Mechanism

- To date over 7000 projects registered
- Over 1.3 billion offset issued



State of play: Clean Development Mechanism

Source: www.cdmpipeline.org



CDM challenges

LACK OF ADDITIONALITY

- Additionality, the concept that only projects that are beyond business-as-usual receive offset credits is essential for ensuring that offsetting does not lead to a net global increase in emissions.
- Research conducted for the CDM Policy Dialogue estimates that the CDM may have **delivered less than half of the emissions reductions it sold**.
- The research also highlights that if such non-additional projects remain eligible in the CDM and the resulting offset credits are used for compliance, **they could increase cumulative global GHG emissions by up to 3.6 Giga tonnes CO₂e through 2020**.

CDM project types with low environmental integrity

		Estimate of million CERs
Industrial Gases		
HFC reduction / avoidance		
	Non-additional CERs	91
	Over/under crediting	-
	Subtotal	91
N2O decomposition		
	Non-additional CERs	46
	Over/under crediting	61
	Subtotal	107
Methane Recovery		
	Non-additional CERs	291
	Over/under crediting	-
	Subtotal	291
Renewable Energy		
Hydro power		
	Non-additional CERs	1,313
	Over/under crediting	-
	Subtotal	1,313

		Estimate of million CERs
Wind power		
	Non-additional CERs	1,271
	Over/under crediting	-
	Subtotal	1,271
Other Power Supply		
	Non-additional CERs	558
	Over/under crediting	1
	Subtotal	559
Total of above		
	Non-additional CERs	3,571
	Over/under crediting	62
	Total	3,633
	Total forecast CERs (IGES 2012a)	5,885
	"Actual" abatement as ratio of CERs	0.38

Taken from CDM Policy Dialogue research [Impact Report](#)

CDM challenges

SERIOUS RISKS OF DOUBLE-COUNTING

- Double counting leads to an increase of global GHG emissions.
- Technically and politically difficult to address when both the host and buyer countries have reduction targets.
- Double counting is already a reality of emissions reductions sold under the CDM that originate in Non-annex 1 countries with a reduction pledge for 2020.
- Research shows that double counting of international offsets could reduce the ambition of international climate pledges (developed and developing countries) **by up to 1.6 billion tons CO₂e in 2020, equivalent to roughly 10 percent of the total abatement required in 2020 to stay on a 2°C pathway.**

CDM pre-2020

- CDM rules are to be reformed this year by Parties under the UNFCCC SBI.
- Eliminating problematic project types, shortening crediting periods and improving sustainable development requirements would be necessary to significantly improve the quality of the CDM
- It is unlikely that Parties will be willing to make such changes.
- Demand for CDM offsets will likely remain well below supply.

CDM post 2020

- Although Parties have not made any decisions on how and if the CDM will continue post-2020, it is implicitly assumed that it will continue in some form or another.
- CDM projects can continue to register for crediting periods of up to 21 years (three times 7 years). If they register in 2013, this means they could earn offset credits until 2034.
- It is unclear if the EU will allow for CDM credits under its 2030 Climate Framework.
- Aviation sector may be using CDM offsets (see later presentation).

What would we ideally like to happen to the CDM?

State of play:

Joint Implementation

- Offsetting mechanism for projects in Annex 1 countries

There are two JI tracks:

- Track 1 projects are approved and the credits are issued by host countries themselves
- Track 2 projects are approved by the Joint Implementation Supervisory Committee (JISC), an international body, much like the CDM Executive Board.

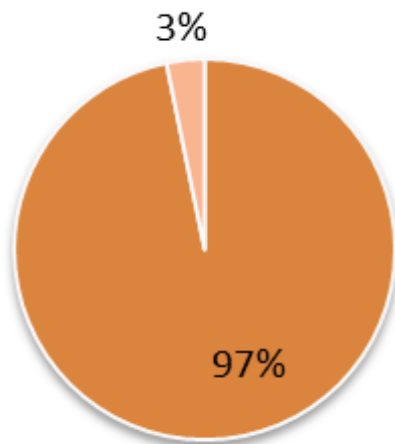
State of play:

Joint Implementation

Jl credit issuance

(as of May 2013)

■ Track 1 ■ Track 2

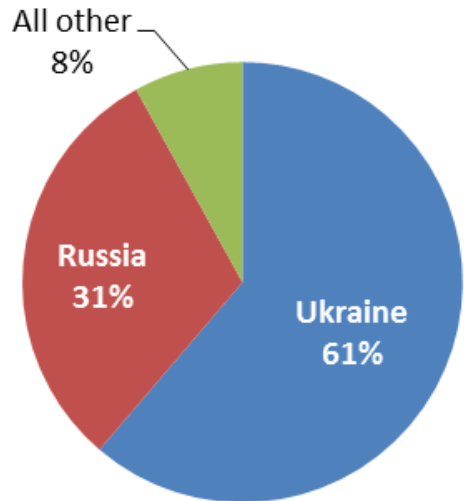


- Close to **800 million** JI credits have been issued to date
- Close to 800 projects registered.
- Almost all of credits issued under track 1 with very limited international oversight and transparency

→ Little international oversight does lead to maximization of credit issuance but cannot assure quality.

JI: a few bad apples spoil the bunch

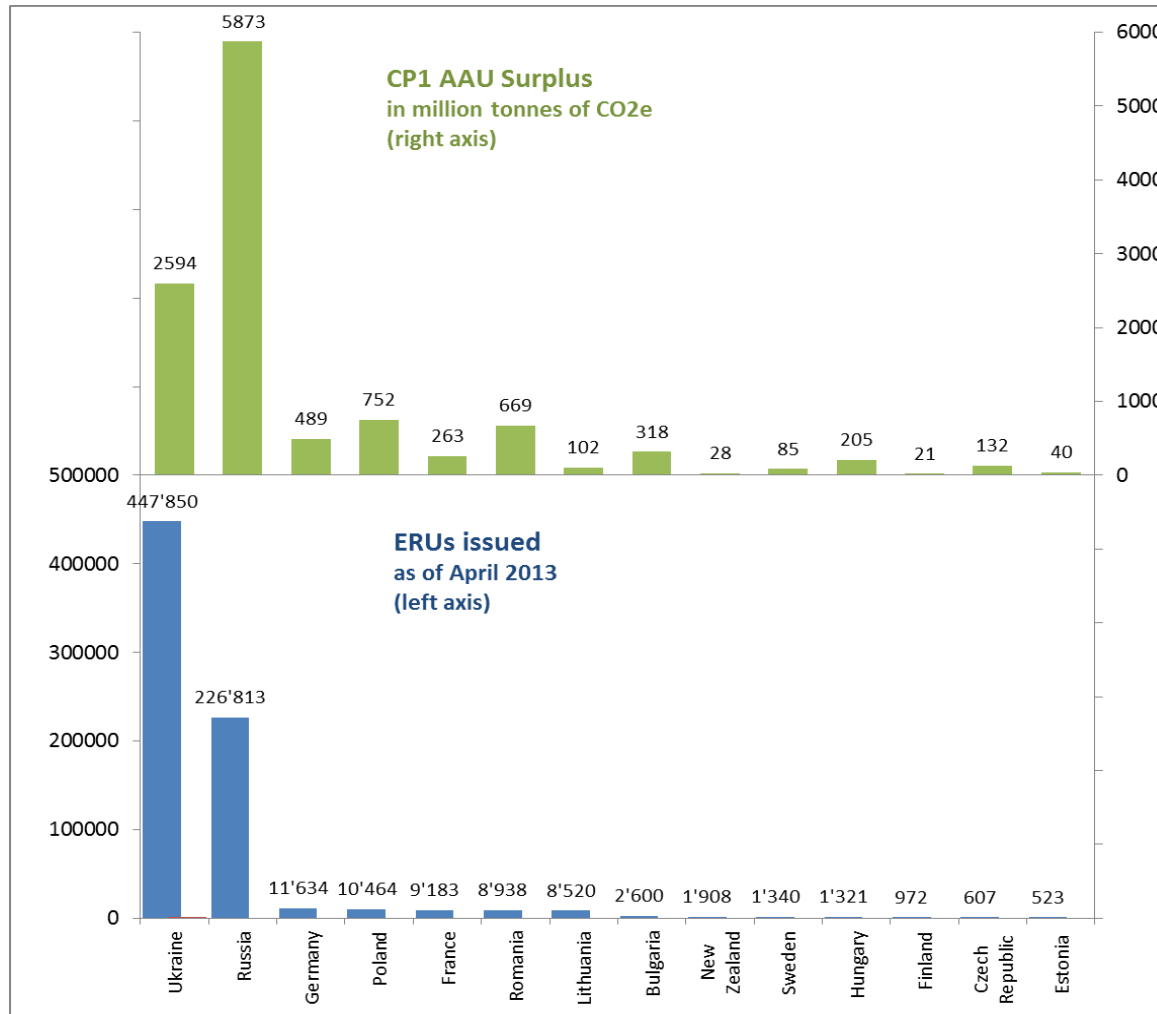
JI credit issuance by country (as of May 2013)



- Even if most countries have good rules, a few countries that don't and maximize issuance:
- Can completely undermine integrity
 - Undermine economic efficiency because such credits artificially inflate supply

Russia and Ukraine account for 92% of JI credits issued to date.

JI: Hot Air → high issuance



For each JI credit a country issues, it has to convert an AAU. Countries with a lot of hot air have little incentive to limit the number of JI credits they issue.

→ Without strict rules and international governance countries will likely maximize credit issuance and not quality.

JI pre-2020

- JI rules are to be reformed this year by Parties under the UNFCCC SBI.
- Parties decided to join the two tracks.
- The new track will likely be less stringent than current track 2 and more stringent than current track 1.
- Despite the reform of rules, JI will likely remain a mechanism with limited environmental integrity.
- Currently no JI credits can be issued for emission reductions achieved after 2012, because countries have not received their AAUs for the 2nd KP period.
- We can learn lessons from JI for new mechanism under FVA (we will cover this a bit later).

JI post 2020

- For each JI credit a country issues, it has to convert an AAU. AAUs are the allowances of the Kyoto Protocol. The new agreement will likely not have such AAUs.
- The Environmental Integrity of JI is so low that we'd be better off without it.
- Yet some Parties are pushing for having a JI without AAUs.
- This would in many ways be similar to what some Parties would like to see under the FVA.

State of play:

New markets, FVA and NMM

Framework for Various Approaches (FVA)

Countries are negotiating under SBSTA if and how new carbon markets should be governed internationally and how traded units should be accounted for so that their units can be counted for compliance of targets under the Kyoto Protocol and the Convention.

New Market Mechanism (NMM)

Countries also decided to establish a new market mechanism which will be governed through the UNFCCC.

- Countries that want very few UN rules and little to no oversight are especially interested in the FVA. (e.g. UMBRELLA)
- Countries that want a «scaled up CDM», sectoral mechanism and more oversight are advocating for the NMM (e.g. EU)

State of play:

New markets, FVA and NMM

Pilot phase for FVA?

- The Poles and some others are advocating to establish a pilot phase.
 - Unclear what the EU position is.
- Pilot phase is risky because countries will then want “early action recognition” meaning they want to have their credits count either for their pledge in 2020 or, even worse, bring those credits into the post-2020 agreement.
- This could set a dangerous precedent since we are unlikely to get stringent rules for FVA for pre 2020.

UNFCCC: carbon markets after 2020

CDM and JI rules («modalities and procedures») are currently being revised under the UNFCCC SBI.

- **Political willingness for extensive reforms is very low.**
- **It is unclear in what form these mechs will exist after 2020.**

FVA and NMM

Rules and procedures currently under negotiation. This discussion is held under SBSTA.

- **Weak rules for FVA/NMM will endanger an effective post-2020 agreement.**
- **It is unclear if any rules that will be decided will apply to pre-2020 or post-2020 or both.**

Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP):

Parties aim to develop a new more comprehensive climate agreement by 2015 for the period starting in 2020.

- **After 2020: It is still completely unclear what the role of carbon markets in general and international offsets in particular will be.**

Carbon Markets Post-2020

What should happen to the CDM after 2020?

→ What would we ideally like to happen to the CDM? Should it cease to exist? (unlikely). Should it be limited to countries w/o a pledge/LDCs? Should it be limited to sectors that are not in the pledge and that have high likelihood of additionality?

What should happen to JI after 2020?

→ The environmental integrity of JI is so low that we'd be better off without it. But if this is not feasible, what is the alternative?

FVA and NMM

Rules for FVA and NMM are currently discussed under SBSTA. But it is unclear if these rules will apply just pre 2020 or also post 2020.

→ What do we want to see for the FVA and NMM post 2020?

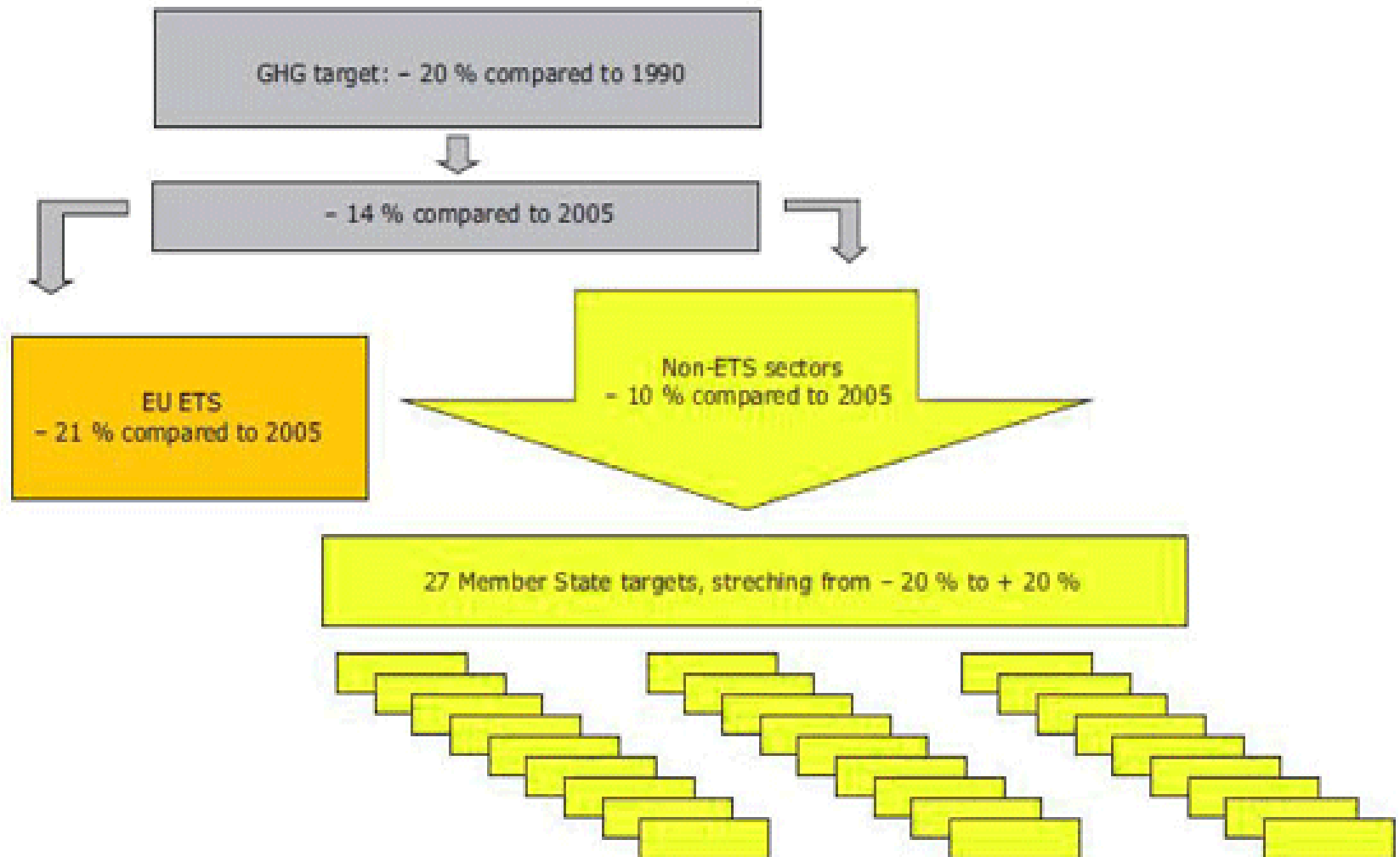
Session 2:

Offset use in EU climate legislation

CONTENT:

- Offset use in the EU-ETS
- A closer look at the Effort Sharing Decision (ESD) and the use of offsets
- Discussion: Impact of quality restrictions in ESD and EU ETS pre-2020
- Discussion: No more offsets in a 2030 framework?

EU Climate Policy



Offsets in the EU-ETS: Quantity Restrictions

A total ~ 1.6 billion CDM and JI offsets can be used in the EU-ETS.

The EU-ETS is expected to deliver ~ 2.8 billion tonnes of GHG reductions over 2008-2020

→ Close to 60% of the reductions can be achieved through the use of offsets.

During phase 2 of the EU ETS (2008 to 2012) operators used 1.06 billion CDM and JI offsets for compliance.

(figured from [Sandbag report](#))

Offsets in the EU-ETS:

Quantity Restrictions: the details

New draft regulation on offset entitlement passed by EU Climate Change Committee in July 2013

Under the proposed rules, EU ETS participants operating stationary installations will be entitled to use international credits during the 2008-2020 period up to the higher of two limits:

- The international credit entitlement specified in the national allocation plan for the phase 2; or
- 11% of the free allocation of EU allowances granted to them in that period
- Aircraft operators are entitled to use international credits beyond those allowed in 2012, up to a maximum of 1.5% of their verified emissions in phase 3.

Offset in the EU-ETS: quality restrictions

CDM:

- No CDM credits from forestry projects.
- Additional requirements for hydro projects over 20MW.
- From 2013 onwards, credits from HFC-23 and adipic acid projects banned.
- CDM projects registered after 2012 can only sell their offsets into the EU-ETS if they are located in a Least-Developed-Country.

Offset in the EU-ETS: quality restrictions

Joint Implementation:

Credits based on emission reductions from after 2012 are banned if:

- the host country is not in the second Kyoto period, emissions reductions must have occurred before 2013.
- Track 1 emissions reductions havign occured after 2012.

Rules and information on the eligibility of international offsets in the EU-ETS can be found here:

<http://ec.europa.eu/clima/policies/ets/linking/documentation/en.htm>

Why offsets undermine EU-ETS

The use of offsets in the EU ETS was originally meant to be a cost containment tool.

Emissions have been substantially lower than the cap
→ the quantity limit of offsets is too generous.

According to the recent European Commission report [The state of the European carbon market](#):

→ the use of international offsets in the EU ETS **has almost doubled the oversupply in the period 2008-2012**
→ is estimated to **amount to three quarters of the oversupply by 2020.**

EU-ETS linking with other ETS

- The EU promoted a bottom-up linking of global ETSs
- EC and Australia announced an agreement in August 2012 on [a pathway for linking the EU ETS and the Australian emissions trading scheme.](#)
- A full two-way link between the two cap-and-trade systems will start no later than 1 July 2018. Under this arrangement, businesses will be able to use carbon units from the Australian ETS or the EU ETS for compliance under either system.
- An interim link will be established from 1 July 2015 enabling Australian businesses to use EU allowances.
- The EC is also negotiating with Switzerland on linking the EU ETS with the Swiss ETS.

Rules and information on linking of the EU-ETS can be found here:
http://ec.europa.eu/clima/policies/ets/linking/documentation_en.htm

EU-ETS linking with other ETS: the challenges

- Linking can lead to a watering down of rules: e.g. AU abolished its price floor in order to enable linking with EU-ETS
- Linking can water down targets if one ETS is oversupplied like it is currently the case in the EU-ETS. AU companies buying surplus EU allowances does not lead to emissions reductions.
- If one system allows the use of low quality offsets, they will water down both caps, even if they cannot be used directly in the other ETS.

A closer look at the ESD and the use of offsets

Overall ESD target: 10% emission reduction in 2020 compared to 2005 levels.

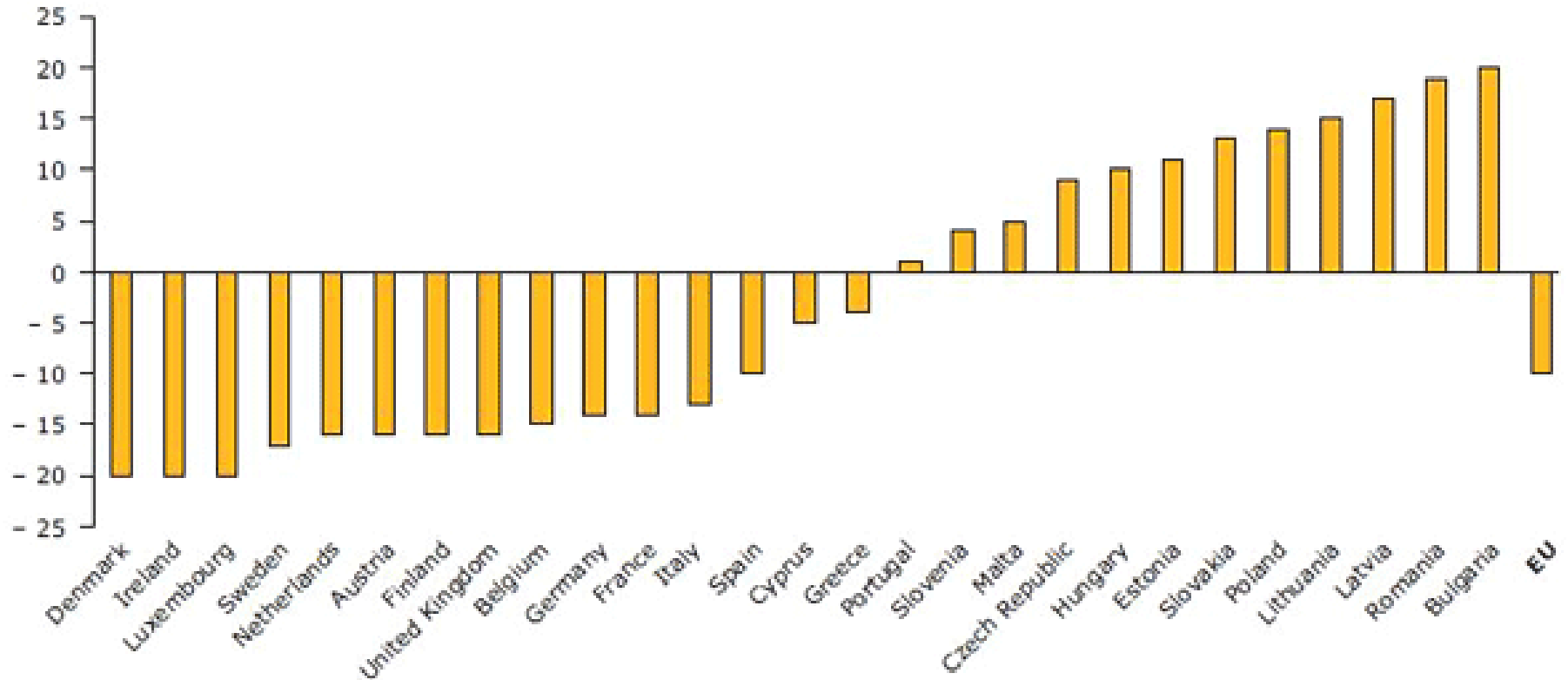
Each Member State has an individual ESD target determined according to its economic capacity.

Targets range from a 20 % reduction for the richest Member States to a 20 % increase for poorer ones in 2020 compared with 2005 levels.

These targets are currently too weak – a combination of low ambition further compounded by the economic crisis.

ESD Tragets by Member State

2020 emissions compared to 2005 in %



ESD Compliance and Reporting

Compliance starts this year.

The Annual Emission Allocations (AEAs) in [Commission Decision](#)

If a Member State exceeds its annual emission allocation:

- a deduction to its following year's allowance is made equal to its excess emissions multiplied by 1.08
- Must submit a corrective action plan
- Suspension from trading

Reporting

Annual emissions inventory reports – economy wide emissions and projections

First submission of national ESD specific reporting every 2 years, first due 2015
(Measures taken to comply with ESD, including use of international credits)

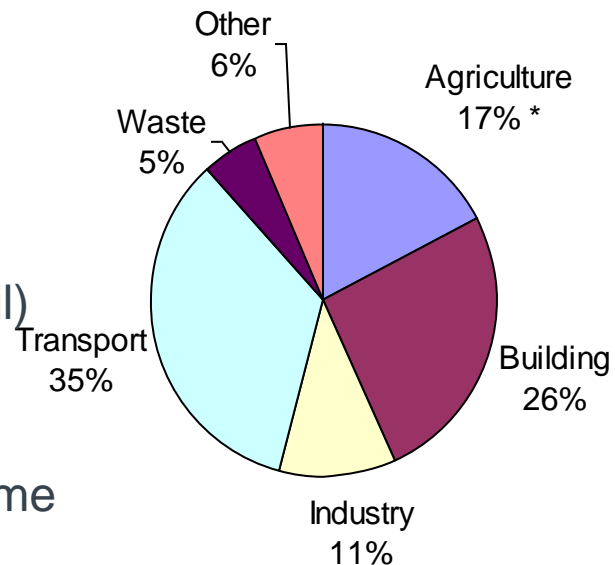
Commission ESD evaluation reports will follow in 2016

Scope: sectors and gases

Non-ETS > 50% of EU's GHG emissions

- All 6 Kyoto greenhouse gas emissions in following sectors:
 - Energy Supply
 - Industrial Energy Use and Processes
 - Energy Use in Built Environment (in particular heating)
 - Energy Use in Transport (road and rail)
 - Waste
 - Agriculture
- Does **not** include LULUCF and maritime emissions

ESD Sectors' Contribution (2005)



* = 48% of non-ETS CH₄ emissions

Offset use in the ESD (quantity)

- ESD 2020 targets can be partially met with CDM and JI credits.
- The use of international credits in the ESD is limited to 3% of each Member State's allowances in 2005.
- Up to 750 Mt JI/CDM credits could be used during the period from 2013 to 2020.
- **This means that 2/3 of the overall emission reductions required by 2020 under the ESD can be met through the use of international credits.**

Offset use in the ESD (quality)

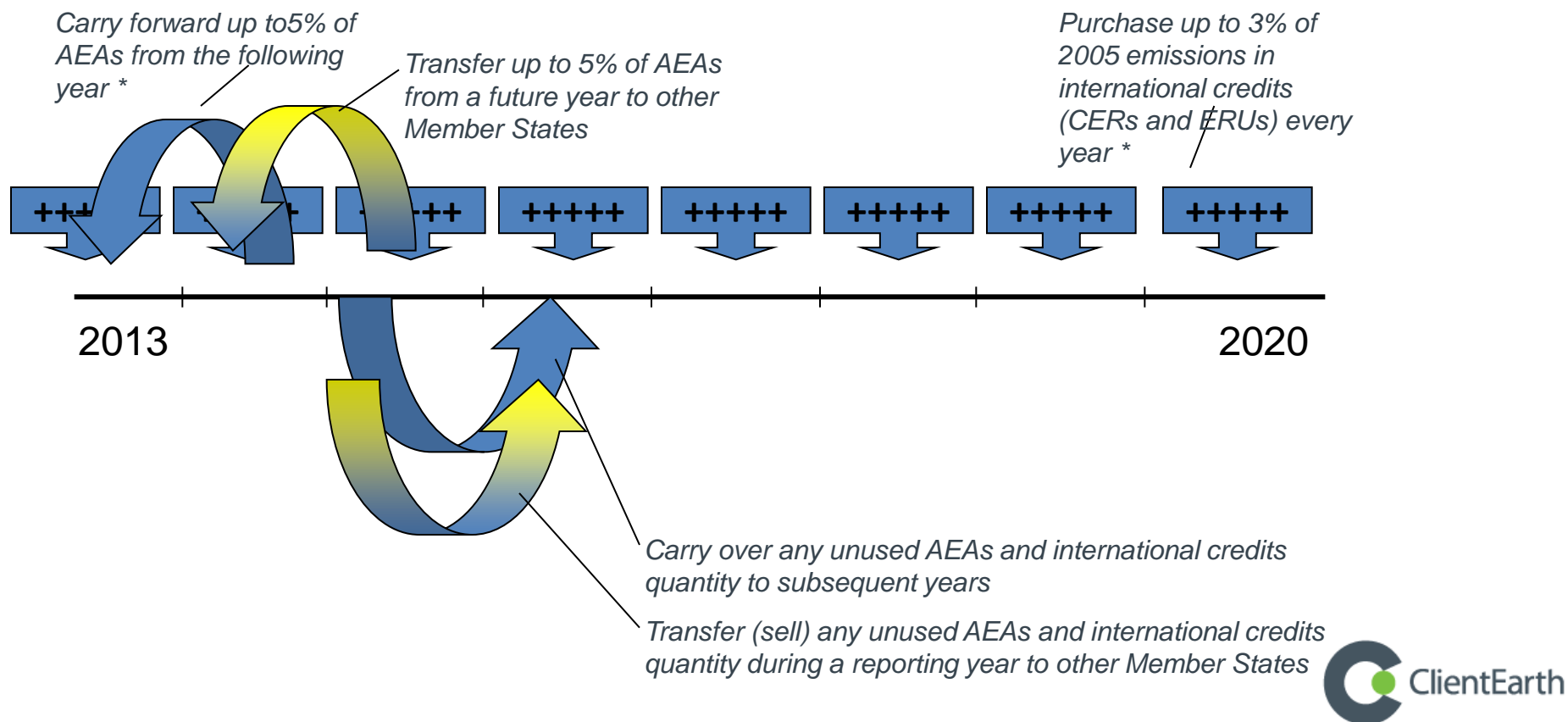
- Member states can decide unilaterally on the offset types they want to use
 - Some EU Member States agreed to apply the same quality restrictions to offsets as are mandated under the EU-ETS but others have not.
 - Carbon Market Watch advocated for a ban of these offsets in all MS and wrote several open letters:
 - 15 May 2012: [Open Letter to EU Member States Regarding the use of Offsets in the EU ETS](#)
 - 23 Nov 2011: [Open Letter to EU Member States to halt artificial CDM carbon credits from coal power project](#)
 - 10 Mar 2011: [Open Letter to EU Ministers regarding the use of banned offsets by EU Member States](#)
- **22 Member States have either formally or informally committed to extend the ban of industrial gas credits to their non-ETS sectors.**
- **Norway recently announced that it will not purchase any CDM offsets from coal, wind and hydro projects**

Flexibilities in the ESD

- ESD allows an EU Member State to transfer part of its unused offset entitlement to another Member State. In other words, the buyer country can use these entitlements to purchase further offsets above the 3% limit.
- The ESD also allows Member States to carry over surplus allowances in a given year to subsequent years.
- Member States can also sell their allowances to other Member States during 2013-2019.

ESD– Flexibilities

“As a means to *enhance overall cost effectiveness* of the total EU commitment, Member States are permitted to”:



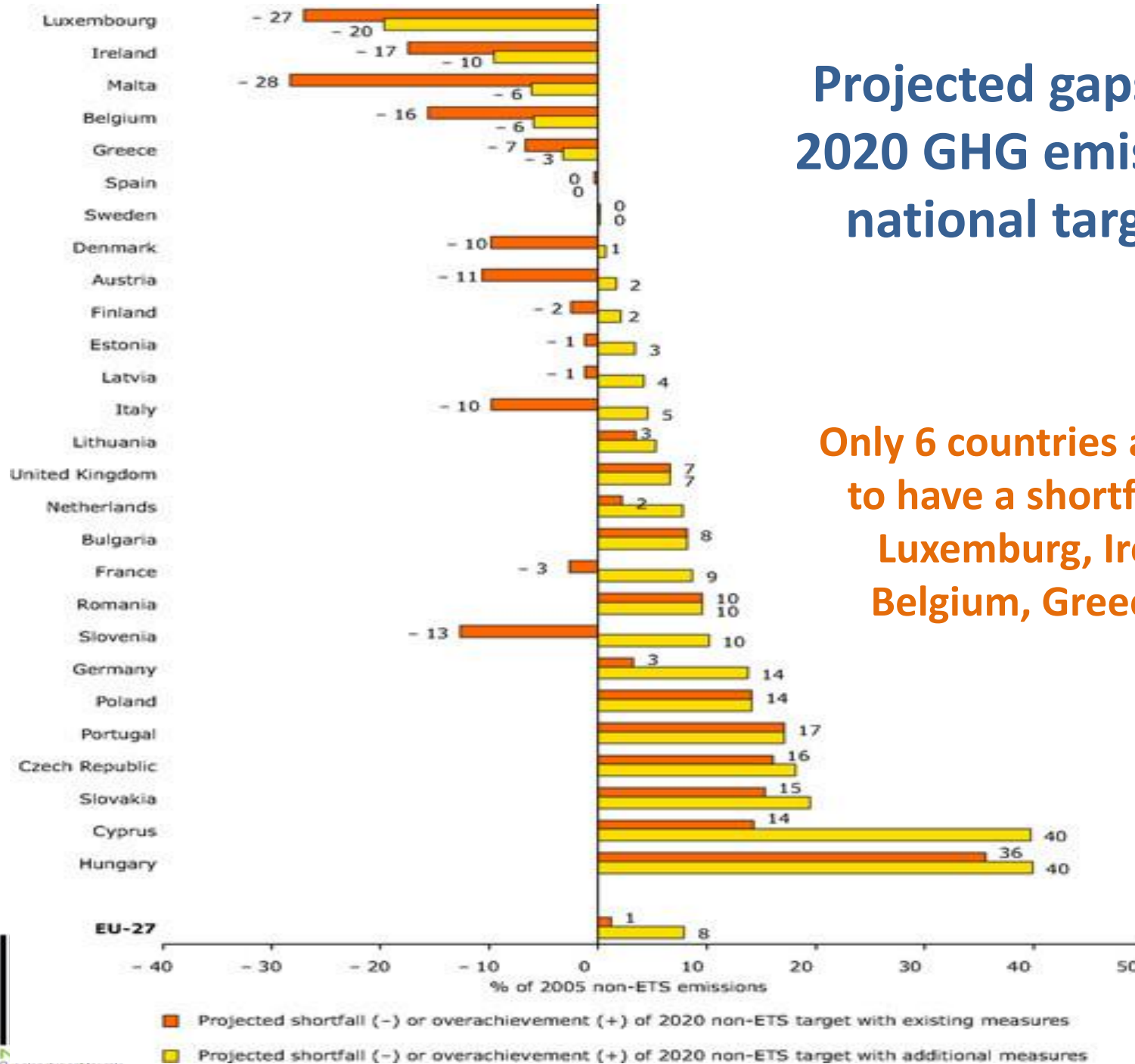
Impact of flexibilities in the ESD

- The ESD flexibilities further weaken the already lenient ESD cap.
- Combined with the low ESD targets for most Member States, these offset and carry over rules mean that little or no additional domestic action will have to be taken by EU Member States to meet their ESD 2020 goals.
- MS are projected to accumulate a significant oversupply of ESD allowances and international offsets.

Projected gaps between 2020 GHG emissions and national targets in ESD sectors

(Source: [here](#))

Only 6 countries are projected
to have a shortfall of credits:
Luxemburg, Ireland, Malta,
Belgium, Greece and Spain.



Upcoming (non-)legislative initiatives

- July: EP scrutiny on offset entitlement regulation
- Sept: EP own-initiative report on 2030 package
- Nov: EC White Paper on 2030 package
- March 2014: Council on 2030 target

Discussion

State of play:

- Default legislative situation: no offsets allowed post-2020. But some type of international units will very likely be allowed.
- Current EU position is that future “units” (allowances or offsets from new market mechanisms) will have to have net-benefits

Discussion Questions pre-2020:

- Do we need quality restrictions pre-2020 in the EU ETS?
- Can we engage the EP to veto the offset entitlement regulation?
- How will we continue pressure on MS for offset quality in the ESD?
- Which role will the various flexibilities provided for in the ESD play pre-2020?
- What are the opportunities for NGOs in the implementation of the ESD?

Discussion

Discussion Questions post-2020:

- What should be the minimum requirements for ambition do to allow access to international market units?
- Do we agree that no more offsets should be used post-2020?
- If offsets are used, under what conditions: What role shall units (allowances/offsets from NMM) play in the March 2014 Council meeting on the 2030 target?
- If at all, units from which sectors should be eligible in a future post-2020?
- Should all units have net benefits? What does that mean?
- How do we ensure offset quality when linking between various ETS?