

Documentation of the Workshop

Domestic Carbon Initiatives in Europe: Experiences and Opportunities

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Kurzbeschreibung

Nationale Kompensationsprojekte bergen großes Potenzial – nicht nur für Emissionsreduktionen in Sektoren und durch Organisationen, die außerhalb des Rahmens des EU-Emissionshandels (EU ETS) liegen. Vielmehr fördern sie Innovationen, liefern Co-Benefits für die Projektregion und begünstigen auch die Verwendung freiwilliger Methoden als Vorlage für den Verpflichtungsmarkt. Daher sind sie wichtige Instrumente, um innerhalb der EU ehrgeizige Klimaziele voranzubringen und den Übergang zu einer emissionsarmen Wirtschaft zu unterstützen. Zur bestmöglichen Nutzung dieses Potenzials ist es wichtig zu untersuchen, welche gemeinsame Anstrengungen unternommen werden können und wie eine höhere Wirkkraft nationaler THG-Kompensation in Europa erzielt werden kann.

Vor diesem Hintergrund haben die Gold Standard Foundation und das Umweltbundesamt mit Unterstützung von adelphi am 19. Juni 2015 einen Expertenworkshop zu nationalen Kompensationsmechanismen in Europa organisiert. Der Workshop bot VertreterInnen inländischer Kompensationsinitiativen aus Österreich, Belgien, Frankreich, Deutschland, den Niederlanden, der Schweiz und Großbritannien Gelegenheit zum Dialog.

Er diente zudem als entscheidender erster Schritt in den Bemühungen, gemeinsame Lernprozesse zu institutionalisieren und ein Koordinationsforum zu etablieren. Folgende wesentliche Erkenntnisse und Empfehlungen lassen sich aus der Konferenz ableiten:

Von nationalen Kompensationsinitiativen lernen: Inländische Mechanismen bieten nicht nur wesentliche Anreize für Klimaschutzmaßnahmen, die über die verpflichtenden Maßnahmen hinausgehen. Der freiwillige Markt dient darüber hinaus als "Spielwiese" für den Verpflichtungsmarkt.

Es besteht weiterhin Bedarf an einer Dialogplattform und einer Institutionalisierung der Kooperation, insbesondere da die Initiativen sehr heterogen sind und sich in Reichweite, Interessen, Problemwahrnehmung und Akteuren unterschieden: Vielversprechende Aktivitäten umfassen die Weiterverbreitung und Diskussion von Ideen und Erfahrungen, die Entwicklung gemeinsamer Konzepte und Sprachregelungen sowie eines gemeinsamen Ansatzes und Verständnisses für regulatorische Fragen, einschließlich Doppelzählung und Post-2020 Klimaregime.

Angemessene Finanzierung bereitstellen: Die vorgeschlagenen Aktivitäten ermöglichen die Erarbeitung eines klaren Handlungsrahmens für die zukünftige Entwicklung. Der Wunsch nach gemeinsamen Aktivitäten besteht, erfordert jedoch auch ausreichend finanzielle Ressourcen.

Abstract

Domestic offset projects not only have the potential to achieve emission reductions in sectors and by entities not addressed by the EU ETS, but can also foster innovation, deliver co-benefits for the region and bring forward voluntary methods as blueprints for the compliance markets. It is therefore paramount to explore how to join efforts and scale up the impact of domestic carbon offsetting across Europe in order to contribute to ambitious climate action and to support the transformation towards low-carbon economies.

For this reason, the Gold Standard Foundation and the German Federal Environment Agency (UBA) organised an expert workshop on domestic carbon initiatives in Europe on 19 June 2015, supported by adelphi. It facilitated the dialogue among domestic offset initiatives in Austria, Belgium, France, Germany, the Netherlands, Switzerland, and the United Kingdom. The conference provided a vital, productive first step in an effort to institutionalize mutual learning and to establish a forum for coordination. More specifically, the following key lessons and recommendations emerged from the conference:

Learn from domestic offset initiatives: They are important not only in that they incentivize addi-tional efforts to protect the climate beyond mandatory measures. The voluntary carbon market fur-thermore fulfils an important "sandbox" function.

There is a continued need for a dialogue platform and to institutionalize deeper cooperation against the backdrop of heterogeneous initiatives with diverse scopes, interests, problem perceptions and actors: Promising activities include disseminating and discussing ideas and experiences with further stakeholders, developing joint concepts and language, resolving and suggesting joint approaches and understanding for regulatory questions including double counting and the post-2020 framework.

Provide adequate finance: These activities will allow developing a clear framing for the way for-ward. There is a desire to join efforts in this regard; however, this will require tapping adequate resources.

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Abbreviations

AAQ	Annual Agreed Quantity
AAU	Assigned Amount Unit
AEA	Annual Emissions Allocation
ARB	Air Resources Board
CCBS	Climate, Community & Biodiversity Standard
CDM	Clean Development Mechanism
CFS	CarbonFix Standard
CER	Certified Emission Reduction
DEHSt	German Emissions Trading Office
DOP	Domestic Offseting Project
EPM	European Project Mechanism
ESD	Effort Sharing Decision
ETS	Emission Trading System
GHG	Greenhouse Gas
GS	Gold Standard
JI	Joint Implementation
КРС	Kommunalkredit Public Consulting
ΜοΕ	Ministry of Environment
MtCO ₂ e	Million tonnes carbon dioxide equivalent
NIR	National Inventory Report
PIU	Pending Issuance Unit
RMU	Removal Unit
SDG	Sustainable Development Goal
UBA	German Federal Environmental Agency
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VER	Verified Emission Reduction
WCC	Woodland Carbon Code
WCU	Woodland Carbon Unit

1 Introduction: Why we need a European offset dialogue

Corinna Gather (German Emissions Trading Authority) and Pieter van Midwoud (Gold Standard)

2015 is an important year for climate policy with an international agreement on climate change for post-2020 to be concluded in Paris as well as with an expected agreement on the Sustainable Development Goals (SDGs), which are set to include action on climate change. In the context of the on-going international climate negotiations, countries communicate their climate policy ambitions through Intended Nationally Determined Contributions (INDCs).

However, an increasing number of companies, organisations and governments want to take action beyond the UNFCCC negotiations and instruments. One option is the voluntary compensation of greenhouse gas emissions. These are traditionally based on offset projects in countries that do not have Kyoto protocol reduction commitments. A newer, less explored approach is based on domestic offset projects. Within Europe, several initiatives are already developing domestic offset systems. But while many companies and institutions would prefer to offset in their own region, there are important obstacles to such an approach, and therefore domestic offsetting in Europe is taking place only to a very limited degree: The Kyoto Protocol commitments reduce the range of national projects not at risk from double counting and double claiming to close to zero. In Germany, for example, almost half of all buyers on the voluntary market would favour domestic projects – a demand that can currently not be met by the market. Until the end of 2012 the only sector not at risk from double-counting was peatland, because it was not part of the obligations under the Kyoto Protocol. Now Germany has voluntarily chosen to account for grassland



manage-ment and cropland management, and most of the emissions from drained peatlands are typically classified as cropland or grassland emissions.

Domestic offset projects not only have the potential to achieve emission reductions in sectors and by entities not addressed by the EU ETS, but can also foster innovation, deliver co-benefits for the region and bring forward voluntary methods as blueprints for the compliance markets. It this therefore paramount to explore how to join efforts and scale up the impact domestic carbon offsetting across Europe in order to contribute to ambitious climate action and to support the transformation towards low-carbon economies.

For this reason, the Gold Standard Foundation and the German Federal Environment Agency (UBA) organised an expert workshop on domestic carbon initiatives in Europe on 19 June 2015, supported by adelphi. It facilitated the dialogue among domestic offset initiatives in Austria, Belgium, France, Germany, the Netherlands, Switzerland, and the United Kingdom. One representative from each initiative presented goals, visions, progress and challenges, thus providing a clear picture on current carbon offset activities within Europe. Market analysts gave insights on consumer preferences and supply patterns and provide a rationale for domestic offset initiatives. Five working groups discussed the relevance of and options for flexibility mechanisms under the effort sharing decision for post 2020, and positive impacts beyond just carbon reduction. Moreover, experiences from the Californian carbon market were presented and participants discussed on how to account project credits in the national inventory, with particular regard to the double counting issue. Another working group discussed what kind of platform is desired to enhance dialogue and cooperation on carbon offsets in Europe.

2 Different Initiatives, Shared Insights: Snapshots from across Europe

2.1 France

Jean-Claude Gazeau (Ministry of Ecology, Sustainable Development and Energy of France)

In France, the idea of domestic offsetting projects (DOPs) was first introduced in 2005 with a feasibility report by the Caisse des Dépôts et Consignations. The initiative was officially launched in 2006, and a regulatory framework and methodologies developed. The first projects emerged from 2008 onwards. Starting with projects amounting to 1 Mt CO_2e , the plan was to increase domestic offsetting to 5 Mt CO_2e within five years. However, after 2012, many industrial projects were included in the EU ETS and were thus not eligible as DOPs anymore.

The objectives of the French government for the introduction of DOPs were threefold:

- Lower the global cost of GHG reduction;
- Target the large part of French GHG emissions that are outside EU ETS and electricity consump-tion due to the peculiarity of the French energy mix with a large part of nuclear electricity;
- Enlarge market liquidity of EU ETS by adding emissions reduction units coming from DOPs.



Jean-Claude Gazeau highlighted the difference between two kinds of domestic offset projects that were developed between 2008 and 2012: On the one hand, there were large industrial projects that will be integrated into the EU ETS in the coming years. For these industrial projects, domestic offsetting functioned as an "ante room" before being transferred to the European level.

On the other hand, there were smaller projects, which were more innovative but generated fewer GHG reductions. These projects were often characterised by slow investigation and instruction procedures as well as high transaction cost relative to their size. Five of these projects could continue after 2012, as they were not integrated into EU ETS.

By the end of 2012, 8.6 Mt CO₂e had effectively been

reduced throughout 19 projects and covering a wide range of different greenhouse gases, with 60 percent of the volume coming from only one project. However, the period until 2020 will be a time of uncertainty for DOPs and should be used for elaborating adequate methodologies. As non EU ETS sectors account for more than half of emissions within the EU, it is critical to develop policy tools for post-2020 to ensure that all member states work towards reducing their emissions in these sectors.

Overall, the role of DOPs in France is primarily seen as an innovation tool 'between' other existing tools, which are the CCE (contribution climat énergie – French carbon tax) and the EU ETS. In order to promote innovation, DOPs need to be integrated into other mitigation tools. According to Mr. Gazaeu, the success of DOPs can partially be attributed to the fact that, in contrast to EU ETS, measures with a volume of less than 1 Mt CO_2e can be included.

Despite double-counting challenges, DOPs are still an attractive tool, as particularly small projects are often not primarily concerned with the amount of Assigned Amount Units (AAUs) but with the actual reduction of GHG emissions, making it an innovative approach. In the future, one possibility could be the co-existence of two methods: one that guarantees securing Annual Agreed Quantities (AAQs) and another one under a French national label, with verification of additionality carried out by public administration. This would help to ensure that the same methodology is used in voluntary and mandatory emissions reductions.

Pointing towards the challenges of individual projects, both size and sector characteristics are crucial. A major difficulty is the elaboration of clear methodologies until 2020. In this context, specifically small project methodologies need to be made compatible with national standards and should be included in national inventories to avoid double counting.

As far as sectors are concerned, the most difficult projects from the French perspective are in agriculture and forestry. While agriculture, for instance, is a big emitter (18.2 percent in 2012, see Figure 1) and thus offers a huge reduction potential, the uncertainty of emission reductions in this sector is a big barrier. Methodologies for calculating emission reductions from soil decarbonisation are particularly complex. Other sector-related challenges include harmonizing various existing tools in the building sector, as well as demonstrating the additionality of DOPs in the transport sector, as consumer behaviour changes very quickly. At the same time, particularly the transport sector is a major target for reduction efforts in contrast to the relatively low emissions in the nuclear dominated energy industry. DOPs could coexist with other new tools such as introducing a cap on car emissions, promoting green technologies or new fuels like hydrogen.



Figure 1: Distribution by sources of GHG emissions in France in 2012 (490 Mt CO₂e excluding LULUCF¹)

An innovative path with regards to DOPs could be the development of a French label to confirm the quality of emissions reduction for small projects. Such a label could be the outcome of cross-national exchanges. However, labels should have a national focus in order to reflect the country-specific circumstances of DOPs. This process could eventually result in the future coexistence of two tools – one for the EU and the other one for national delivery.

2.2 Germany

Stephan Wolters (adelphi)

Stephan Wolters highlighted insights for domestic offset initiatives that follow from a comprehensive market analysis on voluntary carbon offsets in Germany. In 2013-14, *adelphi* and *sustainable* carried out this analysis of the German market for voluntary compensation of greenhouse gas emissions on behalf of the German Emissions Trading Office (DEHSt) at the Federal Environmental Agency (UBA). The analysis aimed to provide a clearer picture of what the German offset market looks like, whether or not consumers prefer domestic offsets, and if so, with which features.

For this purpose, a comprehensive but not representative survey was conducted among both suppliers of carbon offsets, collecting data for 2012/13 that covered 80 percent of the market volume, and buyers (individuals,

¹ Land Use, Land Use Change and Forestry



NGOs, companies, foundations, churches, think tanks), with a particular focus on businesses. The survey focused on questions of market volume and revenue, consumption patterns and consumer preferences, as well as quality standards and project criteria.

The study showed that the volume of the voluntary market in Germany is increasing. Comparing the data for Germany in 2012 and 2013, retired volume increased from 3.3 to 4.4 million tCO_2e , while traded volume grew from 5 to 5.7 million tCO_2e . About 80 percent of the demand was generated by companies. Total traded volume reached almost 30 million tCO_2e in 2013.

The survey revealed that there is a high preference among consumers for domestic projects, a positive signal and an opportunity for domestic carbon offset projects. Almost 50 percent of respondents

indicated their preference for certificates from Germany, followed by Africa and Middle East, Asia and Pacific, and Latin America with 10 to 18 percent. However, this is not yet reflected on the supply side due to an undersupply of projects in Germany: only 10 percent of retired certificates are from there. Certificates from Asia and Pacific account for the largest share (40 percent), followed by Europe (without Germany, but including Turkey) with a share of 21 percent.

An example of one of the few German domestic carbon initiatives is the MoorFutures standard, which offers emission reductions from peatland rewetting. As peatland was not counted towards Kyoto in Germany's national greenhouse gas (GHG) inventory, double counting was not an issue until 2013. Now the rewetting of peatlands that are used as crop- or grasslands faces the same challenge as any other national climate protection project. Peatlands are responsible for 5-6 percent of carbon emissions worldwide and their use and conversion account for about one third of agricultural GHG emissions in Germany. In some federal states they represent the largest single source of GHG emissions. The standard was initiated by the federal State of Mecklenburg-Vorpommern in 2011. Since then, 11,000 tCO₂e have been issued by the Ministries of Environment of three federal states. The certificates rely on in-house verification by University of Greifswald, Eberswalde University for Sustainable Development or TÜV Rheinland based on the VCS PRC (Peatland Rewetting and Conservation) methodology. MoorFutures are sold up-front, i.e. before the actual emission reductions take place.

Most buyers of MoorFutures are locally based companies, institutions, individuals or NGOs interested in offsets with regional benefits. MoorFutures do not only generate a regional impact through emission reductions within the federal state, but also by the co-benefits related to peatland re-wetting. Ecosystem services include biodiversity conservation, improvements in water quality and nutrient retention, and a regulation of local climate and landscape water budget. However, compared to other standards, MoorFutures certificates are expensive, with prices ranging from $30-50 \notin/tCO_2e$. Costs of validation, verification, and certification for a standard of this small size are also very high and cost effectiveness remains a major issue. In general, prices on the German market range from $2.11 \notin/tCO_2e$ or less (CERs) to $17.25 \notin/tCO_2e$ (CFS combined with CCBS), making MoorFutures three times more expensive than the most costly standard on the voluntary market.

While consumer preferences for national standards can be considered good news to domestic initiatives, the survey also revealed that the country of origin is not the key decision factor for consumers choosing their offset projects. For 36 percent of the buyers, environmental and climate impacts are the key features that determine their preference for a specific carbon offset project. Only 3 percent of all buying decisions are primarily guided by the certificate's country of origin. More decisive factors are co-benefits, quality standards, and the price.

When it comes to barriers on the demand side, the main reason for consumers not to offset is financial, followed by the perception that their own emissions contribution is 'insignificant'. The confusing complexity of the market is often times an important (but secondary) reason.

The market analysis revealed that consumers are largely unaware of the differences in quality between the standards, although a tendency towards a better rating of standards with co-benefits and strong sustainability criteria could be seen. While the Gold Standard CERs and VERs were rated best, there were only marginal rating

differences between most other standards. This indicates a lack of awareness and/or transparency with regard to differences in quality criteria. VCS or VCS in combination with Social Carbon or CCBS has the highest market share (59 percent), followed by Gold Standard VERs (19 percent).

Transparency is thus a key challenge for the market. Together with DEHSt, adelphi has therefore developed a consolidated comparison of different quality standards in order to better inform potential buyers (to be published soon). Increasing transparency of is a prerequisite for establishing the voluntary market as a complement to the compliance market and for ensuring that it opens up further potentials for global climate protection, sustainability and innovation.



In sum, 'carbon consciousness' on the German voluntary offset market is growing. However, the confusing and intransparent market is a key challenge for bringing across advantages of domestic offsets. Exchange and cooperation at European level can help to overcome this challenge by fostering mutual learning and creating a more transparent market.

2.3 Austria

Dorian Frieden (Joanneum Research Forschungsgesellschaft mbH, Graz)

As Austria is a relatively small country, the government has relatively little capacity and does not perceive itself as a regulator in the emissions market aside from governmental trade and EU ETS related work. This means that developing voluntary domestic projects as well as ensuring additionality and avoiding double counting are left to the market. However, the Federal Ministry of Agriculture, Forestry, Environment and Water Management highlights the importance of voluntary projects and claims that they must be additional to the government's climate target compliance and must not divert state aid. In addition, a shift of credits from the government to private entities is not desired, which excludes approaches such as domestic JI.

Insights from research: the VCM-AT project

From March 2013 to January 2015, JOANNEUM RESEARCH *Forschungsgesellschaft mbH Graz*, the *Inter-University Research Centre for Technology, Work and Culture (IFZ) Graz* and the *denkstatt GmbH Wien* carried out the project "VCM-AT – Strengthening voluntary climate initiatives in Austria". It aimed at identifying opportunities for expanding the voluntary carbon market in Austria by analysing suppliers, customers and their structure in comparison with the EU market, in order to foster voluntary engagement for climate mitigation. The analysis of the survey about customer perceptions and preferences found that individual customers have a clear preference for national projects (Figure 2), a finding that coincides with the analysis of the voluntary market in Germany.

With regards to companies' preferences, a link between the geographic scope of businesses and their preferred location of projects was found. Nationally oriented businesses preferred Austrian projects, while international companies had a preference for projects located in the countries they work with.

As far as customers are concerned, information and transparency about the project type, use of the payment and the offset provider were found to be key conditions for a higher acceptance of voluntary offsetting (Figure 3).



Source: Frieden, 2015

Figure 2: Wishes for location of projects (VCM-AT survey) in %

The study further suggested that there was a high level of unawareness regarding technical details, in particular among individual customers, including the issue of double counting. According to Dorian Frieden, the current lack of information about or interest in the voluntary market among the general public was confirmed by the difficulty of finding private individuals willing to participate in the research project.



Source: Frieden, 2015



Domestic Initiatives in Austria

Two of five Austrian suppliers currently use domestic projects for carbon offsetting, namely Climate Austria and the *Ökoregion Kaindorf*.

1. Climate Austria is an initiative managed by Kommunalkredit Public Consulting (KPC) in cooperation with the Ministry of Environment (MoE) since 2008. The criteria for assessing Austrian climate protection projects correspond to those of the Ministry's environmental support schemes. The initiative offers ex-post support following a quality check by its steering committee (consisting of MoE, KPC, Austrian Airlines, Airport Vienna). The customers of Climate Austria are both individuals and corporations (50/50), and offsetting of

flights on the Austrian Airlines website by individual customers constitutes most of the volume. The price of both international certificates as well as (non-tradable) ones from domestic projects issued by Climate Austria is currently at 25€/tCO₂. The projects undertaken are primarily in the fields of renewable energy (including biomass) and energy efficiency. While the projects are exclusively in non-EU ETS sectors, emissions reductions might still appear in national accounting. Additionality is justified on the project level in terms of complementation rather than the replacement of publicly supported projects, as well as in terms of providing financial additionality. This means that these projects would not have been developed under national compliance mechanisms. Mandatory measures are not supported under these domestic projects. The case of Climate Austria leads us to ask the controversial question: "Is the exclusion of double counting required to guarantee environmental integrity?"

2. The Ökoregion Kaindorf is a (non-profit) association of citizens in seven eastern Styrian communities and was founded in 2007. It aims to set an example of an ecological circular economy and renewable energy use, working towards"CO₂ neutrality". The initiative's "Humus certificates" have a very high price of 45€/ton CO₂e. It also underlines the importance of transparency and project characteristics for customer decisions: Despite the high price, there is a high demand for humus certificates, as most buyers are corporate customers, for which visibility of the offset project on a regional scale is highly relevant. Price sensitivity of some cus-tomer groups hence appears to be low.

Mr. Frieden pointed out that while there is no external verification of the Kaindorf initiative, it still corresponds to customers' needs. Thus, an internally sound initiative that is perceived as credible might not require external verification from a market point of view. This applies equally to the question of permanence in agricultural projects, a known challenge for all such projects in the long-run. As soil carbon is not yet part of national accounting under the Kyoto Protocol, double counting is not a problem for the initiative. It could seek certification of international standards, e.g. the Gold Standard smart agriculture protocol, but in light of a well-functioning



local market and the unclear benefits and significant additional costs, this is currently rather unlikely. With this and the success of the initiative in mind, another question may be raised: "What is the value added for national/ regional initiatives with domestic customers to be recognized on international level?" This also raises the question how exactly to ensure that local initiatives with a regional market demand build sufficient customer trust and transparency to substitute for external verification.

Outlook and Q&A

Concluding, Mr. Frieden reiterated that the high demand for domestic projects offers opportunities for domestic initiatives. At the same time, customer diversity and their respective level of information was an important challenge. While customers need to be aware of what they obtain, according to Mr. Frieden, complex technical issues of the market such as double-counting are difficult to be transferred to the customer level. The complexity of these issues and the heterogeneity of the market on both the supply and demand side brings about the risk of losing customer trust, be it individuals or companies if the right level of information and transparency is not met.

2.4 Belgium

Arnaud Brohé (CO2logic) and Luc Wittebolle (SuMa Consulting)

Arnaud Brohé from CO2logic, an offset provider based in Brussels, and Luc Wittebolle from SuMa Consulting in Antwerp, presented the framework for domestic carbon offsetting projects in Belgium, highlighting different approaches in Wallonia and Flanders. The situation in Belgium is specific, as each region as well as the federal level has its own Minister of the Environment and is responsible for designing its climate policy to achieve the national and EU targets for non EU ETS sectors. Domestic offsetting mechanisms, which are perceived as a cost-effective way to decrease CO₂ emissions, are therefore discussed at the regional level.

Wallonia (Arnaud Brohé)

In 2012, CO2logic together with Centers for Disease Control and Prevention and Pricewaterhouse-Coopers conducted an exploratory study on opportunities for the voluntary carbon market in Wal-lonia. This happened against the backdrop of the commitment to reduce CO_2 emissions in non EU ETS sectors, which account for roughly 50 percent of total emissions. To achieve this, the government showed interest in introducing market-based instruments into the regional climate change strategy. By establishing market mechanisms, the government intends to send a price signal as a reduction incentive to those sectors in which GHG emissions are growing the fastest (e.g. transport, housing or cooling). The study aimed at identifying potential projects for the voluntary carbon markets as well as methodologies for calculating emission reductions in these projects.

The study started with a screening of measures in different sectors, using the four assessment criteria (1) reduction potential (in terms of tCO_2e reduced per year), (2) additionality, (3) methodology, paying particular attention to already existing methodologies and the degree of complexity of developing new methods, and (4) carbon finance. Applying these four criteria, 6 of 35 measures were selected. These include the introduction of efficient shower heads, eco-driving for professional fleets, biomethanation of porcine and bovine farms' effluents, myscanthus plantation, short rotation coppice plantation and HFC gas destruction. The first three



measures were further explored and proved to offer both great reduction potential and easy implementation, mostly directed at direct purchase by the government.

In its study, CO2logic calculated that these three measures taken together could generate 500,000 t CO₂e of yearly savings, 1 percent of Wallonia's emissions, for a limited initial investment of \notin 9 million. As for efficient shower heads, \notin 3 million would need to be invested by the government in order to equip 90,000 social homes in Wallonia. In addition to the emission reductions of more than 20,000 t CO₂e per year, a substantial socio-economic co-benefit for tenants could be achieved, with annual energy savings amounting to \notin 110 to \notin 220. The eco-driving measure envisages training programmes for professional drivers on

how to drive most energy-efficiently. While an initial investment by the state would be needed to initiate the programme, in view of the high potential savings on fuel that could be achieved, the measure has a very high potential of being adopted by the market.

To implement these measures, different options for emission crediting were explored, ranging from fixed prices to government regulation and voluntary offset frameworks. While crediting under Article 24 (a) of the EU ETS (see text box), i.e. generating emission reductions for the compliance market through domestic projects, turned out to be unsuitable at the moment, both government purchases and voluntary frameworks could be viable options for creating rapid demand. The federal government could also use its AAUs, as it does not make use all of credits. Cancelling these AAUs would also help to avoid double counting and thus ensuring additionality of emission reductions.

Advantages of the latter system are that voluntary frameworks would be easy to implement and could make use of existing methodologies like CDM, Gold Standard or VCS. Government purchases could, on the other hand, be financed through annual emission allocations (AEA) sales and would guarantee that the most desirable sectors for emission reduction in Wallonia are targeted.

Article 24a (EU ETS Directive 2009/29/EC): 'Harmonised rules for projects that reduce emissions'

With the revision of the EU ETS Directive and the addition of Article 24a in 2009, a new instrument of domestic offsets was introduced to European emissions trading. As only about 45 percent of all GHG emissions are covered by the EU ETS, the non-EU ETS sectors' large reduction potential needs to be unlocked in order to comply with the EU economy-wide emission reduction target.

To facilitate this, Article 24a allows EU Member States to generate emission reductions through domestic offset schemes that can subsequently be translated into carbon credits. The regulation comprises "measures for issuing allowances or credits in respect of projects administered by Member States that reduce greenhouse gas emissions not covered by the Community scheme". Credits resulting from Article 24a projects may be used for compliance purposes under the EU ETS.

In contrast to CDM and JI credits the new mechanism under Article 24a is independent from the Kyoto Protocol. However, any measures taken under Article 24a need to eliminate the risk of double-counting, nor should they impede other policy measures targeted at reducing non-EU ETS emissions. Depending on the outcome of the post-Kyoto negotiations, domestic offset mechanisms could gain more importance on the European carbon market, as their potential of reducing a Member State's quota under the Effort Sharing Decision (ESD) is substantial.

Flanders (Luc Wittebolle)

Against the backdrop of the revision of the EU ETS directive, in particular Article 24a (see text box above), the region of Flanders also conducted an exploratory study on domestic carbon projects in 2011. The study notably explored the questions as to what kind of volume would be necessary for authorities to finance the set-up of a framework for offsetting, which share should be paid by industry, and which volume would be needed to make the offsets financially viable. To answer these questions, the study looked at risks and risk response options, conducted a cost-benefit analysis from a public authority perspective, and took a closer look at the offsetting options through biomethane for heating and transport as well as electric vehicles infrastructure. The result of the study was a recommendation to implement a pilot infrastructure for Domestic Offset Projects (DOP) that is financially self-sufficient in order to assess DOP potential in practice.

More than half of the 308 Flemish cities have developed local climate action plans in the context of the Covenant of Mayors. While these plans proposed an impressive number of measures, there was initially no strategy on how to finance them. In 2015 a project was initiated in Flanders to find a solution for the financing of local climate action plans. The proposed financing model includes revenues from domestic offset projects as an additional financing option.

In order to capture the DOPs financing potential in support of (local) climate plans, a three-staged approach is currently being investigated by a group of frontrunners. This approach provides for a staged implementation of a comprehensive DOP framework taking into account the short, medium and long term:

- 1. the implementation of a DOP framework for **voluntary compensation** in the short term,
- 2. the use of DOPs as an **alternative compliance instrument** in the context of local/regional obli-gations for both public and private actors in the medium term. For example in relation to the en-ergy covenants with the industry, DOPs could offer an alternative compliance option if a signa-tory company cannot achieve its energy efficiency investment target. Another example is the possibility to use DOPs to compensate for the local authorities' remainder of carbon emissions in the context of the climate-neutral initiative of the Province of Antwerp.
- 3. in the longer term, the framework could encompass the use of DOPs in the context of **art. 24a EU ETS Directive** when this article becomes operational.

The revenues DOPs could bring to local climate plan funding are expected to increase at every stage: from a relatively small amount in the voluntary market to a significant contribution in the case of 24a EU ETS DOPs.

The three stages have many features in common: they all require baseline methodologies, monitoring and reporting rules, verification processes, etc. When designing each stage, the other stage(s) need to be taken into account so as to allow for re-using many of the aspects of the preceding stages, thereby ensuring a kick start of the next stage of the DOP framework.

2.5 Netherlands

René Korenromp (Ministry of Infrastructure and Environment of the Netherlands) Jos Cozijnsen (Consulting Attorney on Emissions Trading)

The Government Perspective

In 2012, the Dutch government was requested by the Parliament to study and assess the costs, benefits and effectiveness of domestic offsetting projects within the Netherlands. This was initiated by project developers and green companies. While the government does not need to pursue domestic offsets to meet the 2020 climate



target, it decided to commission the study to assess the potential that could be unlocked from sectors not covered by the EU ETS (see below). The study found that the potential for domestic offsetting policy was small, and not cost-effective, as initial transaction costs for GHG accounting (validation, verification, certification) are higher than reve-nues from carbon credits. However, since the support for domestic carbon initiatives was high and given the existence of various initiatives and support by citizens, the government agreed to start a discussion with all interested parties. As in cities the local project characteristics vary, the need was seen to develop a governance body for independent oversight rather than new regulations. In this respect, the government's main interest was to explore the potential and to encourage local initiatives to harmonise their approaches and/or definitions of carbon offsetting. Accordingly,

the Dutch government brought together various stakeholders – project developers, institutes, NGOs, local funds, bank, power companies – on voluntary action. In order to develop a common language and to learn how domestic offset markets work, the "Green Deal" was launched. One of the main challenges is to create a voluntary market that is robust and cost-effective, has growth potential, and meets environmental integrity demands. The 'Green Deal' could function as an enabling system for a national CO_2 market ('gentlemen's agreement').

The objectives of the experimental 'Green Deal' are to:

- 1. Establish a robust national CO₂ credit system and market
- 2. Consider the available "space" for crediting projects (e.g. several heating and cooling projects, off-grid PV with electric vehicles) go beyond the concept of additionality
- 3. Facilitate local projects, local support, enhance demand, increase consistent communication about what offsets are and what the link is to the national GHG Inventory
- 4. Facilitate sectoral projects of various sizes, test market instruments, identify reduction potential

Market Perspective

A bit of history: The Netherlands were one of the first movers on the global carbon market, using CDM and JI, buying AAUs, and receiving World Bank climate funds. There was also substantial initial interest in the market for domestic JI. However, it was only when Article 24 (a) was added to the EU ETS that the interest in domestic offset schemes was renewed, encouraging the Parliament to task the above mentioned study. To date, Dutch organisations can realise domestic greenhouse gas emission reductions, but issues regarding double counting and overlapping policies are not solved. Therefore, there is no possibility to monetise these reductions on the international voluntary market through VER issuance yet. Based on the interest in DO, the government offered to help address these issues so that the voluntary market can be used. This will be tested within the framework of the upcoming Green Deal between the government and various stakeholders; the Gold Standard is also involved in this process to help safeguard environmental integrity and to make use of international experience.

To what extent could the voluntary market be used to bridge this gap? The various local initiatives that existed used different kinds of markets: before 2008, VERs were used with a variety of standards. But after 2008, with the Kyoto regime, factoring out credits from national emission targets represented a major challenge for additionality. Other questions that arose include how to sell credits on the market and which label to use. One important step towards using the voluntary market is to communicate that the fairly popular local or regional

projects have an important impact for climate mitigation despite ETS. The Green Deal was implemented as a result of these discussions. The initiative helps citizens, companies, local councils and stakeholders to get their initiatives for climate mitigation off the ground, by assisting them in overcoming obstacles such as confusion around licences, lack of collaborative partners, or ambiguous regulations.

With regard to the national **potential** for reducing CO_2 in non-ETS sectors, estimates vary between 1 and 4 Mt CO_2e , depending on how additionality is accounted for. This is equal to or exceeds the current Dutch CO_2 offset demand of 1 MtCO₂e. It is important to note, however, that because of low carbon prices, the CO_2 value is increasingly becoming a co-benefit rather than a key driver of emission reductions. There is a tendency toward a more holistic approach that also looks at co-benefits such as savings, social benefits,



labour market effects, and ecosystem services. Given the large potential of GHG reductions in non-ETS sectors, there is a need to create room for a market instrument. The diverse **domestic areas of project interest** for GHG reduction demonstrate the importance of developing a domestic carbon market. These include projects that deliver heat from waste to buildings, use mine water to cool/warm buildings, or geothermal energy for horticulture, install manure digesters, peatland projects, afforestation and forest management as well as organic farming and carbon storage.

Local perspective

Support and demand for local projects is increasing, particularly in the field of energy efficiency and solar energy. Important from the perspective of local projects is that additional administrative burden and unnecessary costs are not inflicted. Further, there is no price competition with larger projects. A question to be clearly communicated is also in what way local projects are related to the national inventory and what role they play for municipal targets. A draft blueprint for the cooperation between local funds is already in development. The first local Climate Fund in The Hague, financed by local authorities, is an example for the successful development of a local carbon market initiative.

Tasks ahead

Double counting remains a challenge to be addressed. One example of how to avoid double counting is to check whether the baseline emissions are part of the national inventory report (NIR). As peat is, for example, not accounted for in national inventories, any reduction in this sector is automatically additional. In the case of electric vehicles, baseline emissions from transport are part of the NIR. That means that the CO₂ avoided would also be additional (as long as it exceeds the extra power needed to produce these energy-efficient vehicles), unless the measure has received subsidies by a governmental body. In order to avoid double claiming, it is important to ensure that there is absolute transparency in the project chain as to which target the emission reduction is counted towards. Double monetisation can be avoided by only allowing domestic sale of emission reductions or by forcing retirement of AEA allowances.

Conclusions

The Dutch voluntary carbon market is still small, but there is demonstrated interest in national projects. In this context, the 'Green Deal' seems a worthwhile undertaking. According to Mr. Cozijnsen, clear communication is very important in order to keep transparency in the domestic carbon market high. The positive message could also be increased by referring to domestic projects as local reductions instead of carbon offsets. It is clear that in the future more non-ETS CO₂ reductions will be needed and linked to innovative financial instrument. The particular benefit of local projects is that they enhance visibility, local ownership and awareness for carbon emissions reduction. Still, progress needs to be achieved to increase transparency and credibility of local offsets and to work towards a 'lean and mean' system.

2.6 Switzerland

Aric Gliesche (Federal Office for the Environment - FOEN / BAFU, Switzerland)

Using the 1990 greenhouse gas (GHG) emissions of 50 million tCO_2e as a baseline, Switzerland has committed to reducing its GHG emissions by 20 percent to 40 million tCO_2e by 2020. In order to achieve this target, a multi-level approach will be taken, including different mechanisms for carbon emission reductions. First, an equivalent of 7 million tCO_2 will be reduced through the market based Swiss ETS and a CO_2 levy on fossil fuels that will be partly reinvested in energy-efficient housing programmes, such as energetic restoration or the use of renewable energies. For the CO_2 levy, buyers pay a fee on each litre of fossil fuel, the amount of which is flexible and calculated by the government according to how well the yearly national reduction target has been met. This way, the negative externalities (i.e. carbon emissions) are priced into the market, setting incentives for reducing emissions. Another 1.5 million tCO_2e each are to be reduced by energy efficiency requirements for cars and by a domestic offset scheme.



Switzerland's domestic offset scheme is hence not voluntary but forms a compliance market for specific carbon credits, called Swiss attestations, or CHA. Emission reductions must show up in the national GHG inventory in order to be able to achieve the 20 percent reduction target for 2020. Importers of fossil motor fuels are legally obliged to offset traffic-related emissions with an accumulated volume of 6 million tCO₂e for the period of 2013 to 2020. The mechanism ensures that car drivers do not have to compensate their emissions caused by transportation themselves, but the importer of motor fuels are responsible for offsetting a share of traffic-related emissions. A maximum of 5 cents may be added to the fuel price per litre to compensate the emissions, while actual costs for compensation are estimated to range between 1.5 and 2 cents per litre. Fossil fuel importers must compensate using domestic Swiss projects,

i.e. CHAs. If fuel importers do not comply, they are obliged to pay a penalty of 160 CHF per tCO_2 and have to surrender a CER, or ERU. The compliance market is completely closed for these companies.

Within this offset scheme, 700 million Euros are projected to be paid by car owners between 2013 and 2020. These will be invested in climate protection projects in order to reduce emissions from traffic equivalent to 6 million tCO_2 . By 2020, motor fuel importers are obliged to compensate 10 percent of all carbon emissions from transport through domestic projects – either through in-house projects or buying CHAs on the domestic market. Prices for one ton of CO_2 e vary between 60 and 150 CHF. When the offset mechanism started in 2014, a volume of 0.3 MtCO₂e was compensated (equalling 2 percent of carbon emissions from transport). This volume will be levelled up over the years so that in 2020, revenues of 150 million Euros are expected, allowing for emission reductions of 1.5 million tCO_2 e (equalling 10 percent). Projects that are supported under this offset mechanism have to be approved by the Federal Office for the Environment and need to go through the validation and verification procedures similar to CDM projects.



Source: Gliesche, 2015

Figure 4: Offset mechanisms (volumes) in Switzerland

Taking the current reduction targets as a reference point, reductions from the existing 54 projects (focusing on district heating, biofuels, biogas,...) would be enough to achieve the intended volume until the year 2019. For 2020 there is still a lack of project volume that needs to be addressed: In the years until 2019, fuel importers can use banked allowances from the 2008 to 2012 compliance period to comply with the annual target, as well as CHA from different years. As 2020 is the first year where these reserves and CHAs from other years than 2020 may not be used (banking limit), the project volume needs to be scaled up substantially by then.

The methodologies used for validating the offset projects are close to CDM methodologies but usually adapted to the specific context. Official methodologies for transport, landfill gas and biogas already exist. Though there is no obligation to mix fossil fuels with biofuels, there is a trend towards "greener" fuels in Switzerland: the use of renewable fuels has doubled since domestic offset projects are on their way.

Within this framework, double counting is not a problem with regard to AAUs, as the credits are issued in and stay in Switzerland. However, among the different actors involved in this market scheme, competing claims may still occur. A scenario may occur in which a public entity (e.g. federal state/canton) provides subsidies to a project outside the framework of the Swiss market mechanisms (feed-in tariffs, building programmes, ...), while also claiming these reductions for itself. In order to address this challenge, it needs to be ensured that no more than the real reduction is claimed. Project owners therefore have to be able to demonstrate how they avoid double claiming. The best option to tackle this problem would be voluntary agreements between a public entity and the project owner, only accepting projects that assure no double counting. Another option would be to calculate the volume of issued tons of CO_2e by deducting the amount of subsidies from emissions reductions, whereby every actor involved would pay the same price for the actual amount of emission certificates that they receive.

One of the key challenges of this Swiss offset scheme is the monopoly of information and of prices that fossil motor fuel importers have. This is due to the fact that these importers, covering 99 percent of all emissions that have to be compensated under the CO_2 compensation law, have grouped in a single legal entity, which is responsible for their compensation obligations. It is only this one entity that appears on the market. As a consequence the price is fixed by one player, and it does not reflect offer and demand. Moreover, transaction costs are still comparably high and the long processing time of project approval, validation and verification is a major issue.

Another difficulty lies in the small scale of projects in Switzerland: Swiss projects have an average volume of $4,500 \text{ tCO}_2\text{e}$ only – in contrast, the UNFCCC defines small scale as projects with a volume lower than 60,000 tCO_2e . This significantly increases transaction and administrative costs for project validation, verification and certification. Scaling up will be an important issue post 2020 in order to reduce costs and scale up the volume.

2.7 United Kingdom

Vicky West, Forestry Commission (Woodland Carbon Code)

Background

The UK Woodland Carbon Code (WCC) is a voluntary standard for national woodland creation pro-jects introduced in 2011. When the WCC was first launched, forward sale (ex-ante) was commonly used in forestry projects, however bearing a higher risk of non-permanence. Given that carbon sink projects generate emission reductions only in the long term – a single project can be up to 100 years long – the WCC only generates 'Pending Issuance Units' (PIUs), representing promises to deliver 'Woodland Carbon Units' (WCUs) in the future. The PIUs are converted into final WCUs that are only useable 'ex-post' when the trees have grown and carbon sequestration has been verified. While PIUs cannot be used and retired, they allow companies to make long-



term plans for emission reductions and offsetting. The first verified 'Woodland Carbon Units' will be available in 2016. The requirements of the WCC are similar to the Gold Standard, including additionality, permanence, and monitoring of carbon sequestration, and a rigorous external certification based on validation and a regular verification, thereby increasing transparency and market confidence. Verification of additional benefits is not yet mandatory but it is done on a voluntary basis. Participating in the Code requires a certain level of knowledge of carbon standards and MRV processes.. Individual small landowners tend to get assistance through local authorities, charities and other project developers; The WCC will soon be introducing a 'small woods' process to reduce costs for small projects.

With regards to leakage from indirect land use change, strict UK legislation impedes land use intensification and thus precludes deforestation which could nullify the reduction achieved through WCC projects. An important characteristic of the WCC is a buffer (15-40 percent of the project carbon) that remains unsold to ensure that any verified carbon unit (WCU) complies with the permanence requirement. This buffer functions as 'insurance' against the possibility that woodland is lost, for instance, to fire or windfall.

The decision for carbon credits and against a donor-type model for the WCC was linked to the nature of the initiative. It started with many projects with several small buyers, which would have made a donor relationship difficult. In addition, the fact that credits are clearly accessible in the registry increases the necessary transparency and reduces the chances of double-selling.

Governance

The WCC is governed by a variety of stakeholders. The Executive Board includes the English and Scottish Forestry Commission as well as the Welsh Government. The Advisory Board is constituted by research institutions, governmental departments as well as companies.

Impact

As of March 2015, the WCC counted 199 registered projects covering 15,400 ha woodland which will sequester 5.7 MtCO_2 e over their lifetime, of which 100 projects are validated, covering 3,320 ha woodland amounting to 1.6 MtCO_2 e over lifetime. If the WCC could create 15,000 ha of woodland planting per year over the next 20 years, the standard could save almost 4 million tCO₂e annually through sequestration by 2060 (see figure 5).



Source: West, 2015

Figure 5: Annual sequestration by WCC project type in the United Kingdom

Buyers

The WCC buyers are mainly UK-based corporations in various sectors (e.g. retail, transport, paper) which compensate for their UK-based emissions. The current price of a Woodland Carbon Units ranges between $\pm 7-15/tCO_2e$ ($\pm 9-19/tCO_2e$). About half of all units available from current projects have already been sold up-front.

Framework and linkages

All UK woodland creation projects contribute to the UK's emissions reduction target (Kyoto Protocol & Domestic Carbon Budget). In addition, GHG emissions reporting is mandatory for companies listed on the stock exchange. Verified WCC Units can be used within the UK to compensate for an organisation's emissions and for claims of carbon neutrality of an organization, product or event following government guidance. However, verified WCC Units cannot be traded internationally, used in EU-ETS or in the CRC Energy Efficiency Scheme.

Double-counting

Double-counting is circumvented to the largest extent possible in the WCC. On the project level, double-selling is avoided by the Markit Registry, a high standard and publicly available registry where credits with serial numbers can only be processed in one account. The problem of double-issuance and double-certification is currently precluded by the absence of another standard that issues credits for UK woodland projects, and by the use of only one register provider. In addition, projects are obliged to declare that they have not registered elsewhere and administrative checks are carried out.

On the **national level**, double-monetisation (i.e. selling credits once to a company and again as AAU to another country) is precluded by the fact that the UK's national reduction target is stricter than the Kyoto GHG reduction target. The current legislation states that any AAUs/RMUs beyond the domestic carbon budgets will be cancelled and not sold to another country. Double-claiming on the other hand – the possibility that two entities 'claim' the same unit of GHG reduction in the national GHG account – is not an actual problem for the WCC. As a strictly UK-based standard, WCC credits are only accounted for in the UK national inventory, leaving the environmental integrity intact.

The issue of double-claiming might therefore not be of real importance if it occurs in two parallel reporting systems and if the physical/natural unit is sound.

Options for improvement and outlook

For the WCC, as for other domestic initiatives, visibility of the projects is highly relevant for compa-nies. The fact that visiting the plantations and forests in the region is possible adds to the credibility and acceptance of the standard. However, many companies are still reluctant to buy WCC credits as their status within the national GHG account is still unclear. In order to address this problem, WCUs could be 'formally' integrated into the UK's carbon account and it should be made more explicit where carbon credits come from. A possible way forward could be to count carbon woodland credits in terms of credits rather than removals in the net UK carbon account calculation (See Figure 6).



Figure 6: Calculating the net carbon account, United Kingdom

3 Debating challenges and opportunities for domestic offset initiatives

3.1 Working Group 1: Flexibility Mechanism under the ESD (Effort Sharing Decision) post 2020

Part 1: Presentation

To kick-start the discussion, Nils Meyer-Ohlendorf from Ecologic Institute explained the reform of flexibility instruments under the Effort Sharing Decision (ESD) post 2020. He addressed the issues as to how the ESD can be reformed, how flexibility can be designed after 2020, and what is enhancing flexibility.

The ESD establishes binding annual, national GHG emission targets within the European Union, according to which some EU Member States need to reduce, while others may increase their emissions for the period 2013 to 2020. The underlying scenario allows the EU to reach the target of 10 percent emission reductions in non-EU ETS sectors (accounting for 60 percent of the EU's total GHG emissions).

Percentage change compared to 2005 base-year emissions



Source: Meyer-Ohlendorf, 2015

Figure 7: National GHG emission limits under the ESD, 2013 and 2020

Starting in 2020, this target will be raised to a more ambitious 30 percent in implementing the EU's economywide 40 percent emission reduction target. No member state will be allowed to increase emissions after 2020, with national targets spanning from 0 percent to -40 percent in comparison to 2005. The exact ESD targets will be proposed in early 2016. According to the European Council, flexibilities are to be "significantly enhanced" under the new framework in order to ensure cost-effectiveness.

Member States are allowed to use flexibility instruments to achieve their emission targets, including trading, banking or borrowing between states and over years. The principle of flexibility under the ESD aims at ensuring environmental integrity by meeting the targets at the end of the period. The use of flexibilities must be complementary to other mitigation policies to set incentives for ambitious long-term policies, should address the different mitigation capacities of Member States, maximize the involvement of private investors and enable cost-effective reduction of GHG emissions. This way, co-benefits may be achieved, including the contribution to innovation and growth. Of the existing flexibility instruments, trading between Member States is to be maintained in the post-2020 framework. Whether or not the 5 percent threshold for transaction volume will be increased to enhance flexibility has not yet been decided. The instruments of banking and borrowing will also continue in the new framework, with borrowing between the years being limited to the current 5 percent value.

A new flexibility option proposed by the European Commission that could be introduced for the post 2020 period is the auctioning of annual emission allocations (AEAs) within the EU. In contrast to the current trading practice, which is bilateral, auctioning would require the establishment of a platform for multiple actors. By putting a price on greenhouse gases, the costs of carbon emissions become more visible and transparent. Moreover, auctioning introduces the polluter-pays principle, generating additional revenues, and reduces transaction costs. On the other hand, AEA auctioning still poses several challenges, as it is different from auctioning under the ETS directive: a market with 28 participants raises the question of liquidity and is linked

to technical issues of auctioning, including suspension, cancellation and modification of certificates.

Another option would be the creation of an internal European Project Mechanism (EPM) under the ESD with the involvement of companies and other private institutions. The mechanism could open up emission reduction potentials that might not be realized otherwise because of financial as well as capacity barriers. It is based on cost advantages of certain sectors across European states, enabling some Member States to realise emission reductions more cost-effectively than others. Instead of functioning as a clearing house, this project based mechanism should have a decentralized structure, in which Member States approve projects and an EPM board checks whether the approved projects meet the overall eligibility criteria. However, the generation of a business case for projects remains challenging. To make investors interested in projects, certified AEAs with adequate quantification of emission reductions are needed and public tendering procedures have to be established. The mechanism would involve a substantial change of the current system in which only member states can hold AEAs, while project developers are not entitled to hold and sell AEAs. Two models for public tendering can be put forward:

- 1. Public tendering plus monetary payment: In this model, Member States call for projects through a public tender. Interested project developers can approach other Member States that may have an interest in buying AEAs to make a preliminary agreement. The Member State hosting the project then decides to which investor the project is awarded. The buying Member State pays the project developer for the implementation of the project in accordance with the preliminary agreement and receives the AEAs from the hosting country. High transaction costs and slow procedures as well as the risk of limiting entrepreneurial creativity are potential challenges in this model.
- 2. Tendering plus AEAs: This model differs from model 1 to the extent that it does not involve a preliminary agreement with a buying Member State. Instead, AEAs are first transferred to the project developers by the hosting state and the sold to Member States interested in buying. In this model, it is particularly challenging to create a clear business case. The model also raises the question whether project developers should be entitled to hold AEAs in the first place.

Additional challenges of an ESD project based mechanism include the bureaucratic structures necessary for its implementation and its relationship to existing initiatives and schemes.

Part 2: Discussion

Following the presentation, the flexibility mechanism of tendering for AEA trading was discussed. Workshop participants drew parallels between the proposed tendering scheme and the Dutch mechanisms ERUPT and CERUPT, which allow companies that wish to reduce emissions to carry out CDM and JI projects in Central and Eastern Europe through bilateral agreements.

A concern that was raised is that the mechanism's reliance on tendering could prove detrimental for private initiatives and innovation. This is particularly challenging for the way that tendering processes are designed. On the other hand, abandoning the tendering process and simply making project information available on a European information platform to enable Member States to approach developers more flexibly would raise issues of cost efficiency: while the main objective of the instrument is to decrease emissions where they are cheapest, without tendering, wrong incentives could promote the proliferation of inefficient projects on the market.

Another issue that was raised revolves around the lessons learned from the EU's Renewable Energy Directive: statistical transfers as currently in place pose the risk of not actually generating emission reductions but rather transferring obligations among the Member States – a problem that could also be challenging for an ESD tendering mechanism. However, practice has also shown that the directive is hardly being used, as Member States have an obligation to meet their reduction targets and prefer to realise these domestically, thereby creating co-benefits.

With regard to cost efficiency, another challenge for the mechanism could be related to defining a threshold at which a project activity in another European country would be more attractive than domestic action. As a measurement of this appears virtually impossible due to political constraints and choices, the decision of whether or not to pursue AEAs abroad would remain with each Member State. Government involvement is also needed to control and regulate project design and implementation in each country.

Concerning the involvement of the private sector, several advantages would be related to the new tendering mechanism: First, it is based on actual demand and private companies can be expected to make more efficient choices with regard to GHG reduction potentials than the public sector. Sec-ondly, private investment could help to generate mitigation projects also in countries that for capacity restrictions were not able to implement projects and sell AAUs in the past, as was the case for Romania.

3.2 Working Group 2: What can Europe learn from existing carbon markets? Sharing experiences from California and Spain

Andres Espejo – Scientific Certification Systems (SCS)

The discussions in this workshop centred around two carbon offset initiatives: The Californian Compliance Offset Program by the Air Resources Board (ARB) of the Californian Environmental Protection Agency and the voluntary offsetting scheme by the Spanish government.

The Californian carbon initiative

The Californian Compliance Offset Program was initiated by the Californian Air Resources Board in 2012 and is complementary to the Californian cap-and-trade program. The Compliance Offset Pro-gram gives regulated entities the possibility to meet up to eight percent of their compliance obliga-tions under the cap by investing in offsets. This regards entities in the energy sector and fuel distribution which together amount to 85 percent of total emissions. All forestry projects in the US are eligible because the U.S. is not a party to the Kyoto Protocol, including credits from avoided deforestation. A further particularity is that Early Action Offset Projects' (EAOPs) allowed offsets through the Climate Action Reserve until the end of 2014 to create an initial supply of offset credits for the cap-and-trade program. So far 17 projects have offset a volume of about 10 Mt CO₂,



about 5.6 Mt CO_2 of which through EAOPs. Given that there is no cap on the forestry sector, where all offset credits come from, the issue of double-counting does not apply.

Verification throughout the project-cycle is done by ARB-accredited offset verification bodies and offset verifiers, leading to a high-quality and robust, but also rather expensive process. Annual re-ports, a buffer based on project specific risks (i.e. forest fires), as well as monitoring for a period of 100 years are set to ensure permanence. The ARB's registry allows stakeholder to access important documents and ensures transparency.

The Spanish carbon initiative

The Spanish voluntary carbon offsetting scheme (Spanish registry of carbon footprint, compensation and absorption projects) only comprises certain afforestation/reforestation projects at the moment. Currently, it still has a modest volume, counting five registered and one listed projects with an (ex-ante) volume of $15,533.32tCO_2$ and $190,580.00 tCO_2$ respectively. The eligibility of one type of the projects is tied to the Kyoto Protocol baseline. This means that afforestation/reforestation projects need to concern land that was non-forest in 1990 in order to be eligible. For the other type of projects, this requirement does not need to be met, but the project has to be developed in a burned area.

The credits will be used for compensating emissions by companies (i.e. emissions generated within Spain) that do not need to meet their compliance obligations under the Kyoto Protocol (i.e. compa-nies that do not hold AAUs) and that have voluntarily listed their carbon footprint in the registry "Calculo, reduzco, compenso" launched by the Spanish Ministry of the Environment (MAGRAMA). The credits therefore serve to compensate gross emissions in the non EU ETS sector. On the other hand, the government counts these units towards the national GHG inventory, and they are used for compliance obligations under the KP. This registry is effectively used by the government to account for GHG removals that otherwise would not be counted, as the GHG

inventory only accounts for removals of afforestation/reforestation activities planted as part of government programs. Thus, this allows to identify and account for Removal Units (RMUs) from the private sector that were not accounted for in the past. Strictly speaking, this causes issues of double claiming, but since removals are used on the one hand to compensate gross emissions within the Spanish non EU ETS sector and, on the other hand, for compliance obligations, there is actually no risk to the environmental integrity of the system.

The project cycle is limited to a simple methodology, based on a freely accessible government registry. Some project information is available in the registry, but it is not complete as in other schemes where there is a full Project Design Document (PDD) freely available to stakeholders.

It is also worth mentioning another Spanish initiative that facilitates the acquisition of carbon credits. Under the *Fondo de Carbono para una Economía Sostenible* (FES-CO₂), the government acquires the verified emission reductions from domestic climate projects through the Spanish carbon fund in order to promote private actions to reduce emissions on non-ETS sectors.

Lesson learning

The Californian and Spanish case represent two extremes which make a direct comparison difficult. Still, there is added value in considering the benefits and challenges of both the comprehensive Californian scheme and Spain's 'keep-it-simple' approach. Mr. Espejo highlighted that the absence of Kyoto obligations limit the extent to which lesson learning from the Californian market is possible. On the other hand, an interesting insight can be gained from the fact that the Californian EPA appears to apply more stringent rules under afforestation/ reforestation for the issuance of credits than the CDM under the Kyoto Protocol. The EU can learn from California's experience with forestry and forest protection credits in particular.

Asked about the possibility of linking the EU ETS and the Californian scheme, Mr. Espejo saw limited chances for it in the short-term. In this respect, a participant remarked that the question of scheme linking might even take a secondary role in the future, giving more importance to the creation of similar rules. The main reason is that under the UNFCCC, strong top-down rules are difficult to agree on; therefore, there are initiatives to promote agreements on common rules among states outside the framework of the UNFCCC (i.e. "Carbon Clubs", G7 Platform").

3.3 Working Group 3: How to ensure additional beyond carbon co-benefits in domestic initiatives?

The workshop participants discussed the role of co-benefits in carbon offset projects and possible ways of measuring these co-benefits. As an introduction, the regional manager for Africa of the Gold Standard Foundation Johann Thaler, who led the workshop, presented the study that his organisation had commissioned in order to monetarise the environmental, economic and social co-benefits of projects implemented in different areas like afforestation, wind energy, or biogas use. The aim was to show investors the value of each tonne of CO₂ reduced when co-benefits are included. The calculated co-benefits value of one carbon credit varied between one and 150 international dollars. To identify additional positive outcomes, this report used the Sustainable Development Goals (SDGs) that are meant to replace the Millennium Development Goals as a post-2015 development framework.

Identifying and measuring co-benefits



The discussion showed that, although the importance of additional benefits of carbon offsetting is widely recognised, only few actors among the ones represented during the workshop had specific methods of measuring these benefits. Representatives of organisations that implement carbon offsetting projects said that they monitored co-benefits. PrimaKlima employs a qualitative MRV system while the FirstClimate quantifies co-benefits, but does not monetarise them because of doubts concerning reliability of monetarisation methods. As for the specific areas in which side benefits can be achieved, many participants agreed that the issues ranking high on the national agenda are likely to be prioritised. Employment is the case in point in Belarus and Spain, while in the UK, water quality and flood alleviation are important co-benefits of carbon offsetting projects. For Gabon, the discussion centres around education, eco-nomic diversification and decreased dependence on fossil fuels. Fostering biodiversity proved to be an important topic for many projects. Notably, in practice co-benefits can be essential, rendering carbon emissions reduction a secondary consideration, as reported by experts from Belarus, Spain and Gabon.

The importance of co-benefits for project success

Developers of offsetting projects reported a positive correlation between the amount of co-benefits and the price of carbon achieved. Moreover, identifying co-benefits allows a more targeted presentation of projects to clients. The companies who wish to offset their emissions are increasingly interested in the co-benefits of the projects and in the relation of these impacts to the company profile, e.g. additional employment generation in the same economic field in which the company is active. In a similar vein, quantification of co-benefits becomes more important for offsetting clients and other stakeholders. However, this can also represent additional difficulties for project developers, especially if measuring co-benefits is connected to a complex framework such as SDGs.

Therefore, most participants agreed that practical considerations should remain in the forefront. Even projects with a small carbon reduction potential can be implemented if the overall positive impact is significant (e.g. e-scooter sharing in Spain) and the unique selling point is stated clearly. To promote these and for other initiatives, a specific methodology is required, not so much an abstract framework.

The need to consider co-benefits

The need to include co-benefits in the carbon-offset project development and to conduct comprehensive assessments was a general consensus. The participants expect an increasing demand for this in the future. In Gabon, for example, considering co-benefits is mandatory (though the respective regulation faces implementation challenges). It was also pointed out that co-benefits gain significance when the carbon price is low. With a cap-and-trade mechanism in place, reinvesting auctioning revenues in activities with both carbon and non-carbon benefits can increase system legitimacy.

The group also agreed that, to strengthen a comprehensive vision of carbon offsetting initiatives, both financing and methodological needs have to be met. Research is necessary to be able to quantify diverse impacts of a project, as the causality relations and interlinkages are complex. It was highlighted that transparency is always key. In this respect, domestic projects have a significant advantage of proximity and can be observed directly.

Measuring, quantifying, monetarising?

The question of how far measurement should go and especially the necessity of monetisation caused controversy. First of all, measurement should not become an end in itself, but should help realise activities. Though it may be desirable to obtain measurement instruments that are as exact as possible, the actual project context should be the final reference when defining measurement needs. Workshop participants adverted to the importance of trust in the project and in the people implementing it.

At the same time, contributing to development has been an integral part of carbon trading, e.g. the CDM, since the beginning, though this might have moved to the background later on. Thus, the issue is



creating a common metrics to ensure comparability of sustainable development benefits provided by carbon offsetting. Monetarising could be the best means. Additionally, if project results should be a tradable asset, they need to be monetarised.

The reliability and comparability of studies that set a monetary value for achieved benefits, however, was contested. For many impacts a monetary equivalent might not offer an added value, e.g. it could suffice to know the number of species conserved in an area instead of pinpointing the financial value of this biodiversity. A scoring system based on points was proposed as an alternative.

On a more general note, some workshop participants stated that projects also generate negative impacts which should be included in the assessment. In Germany, the adverse biodiversity impacts of wind energy projects are often discussed. Finally, even determining which consequences are negative or positive might be challenging. For instance, rewetting a landscape attracts new species, but drives others away. So, practitioners should keep in mind that every assessment is based on normative judgement.

Summary

Identifying and measuring sustainable development co-benefits of carbon offsetting initiatives are necessary to understand the real project impact. It also helps to convince investors, governments and other stakeholders, and to achieve a higher carbon price. Though measuring co-benefits is a limited practice to date and quantifying even more so, the demand for both is projected to grow, requiring additional effort of project developers and finance. Putting a monetary value on co-benefits may further increase the buy-in of donors, but it is also challenging as reliable methodologies are lacking. Moreover, in some cases the possibility of plausible monetarisation and its added value are debateable. A comprehensive assessment of co-benefits and adverse effects beyond CO_2 reduction should be enhanced, while their measurement should support the initiatives and integrate practical considerations.

3.4 Working Group 4: How to account for project credits in the national inventory?

In Workshop 4, participants discussed whether the problem of double counting exists and if so, when and how it occurs. Double counting occurs if the environmental benefit of one greenhouse gas reduction unit appears in several contexts such as national inventories, national emission trading schemes and registries of independent standards for voluntary and compliance markets. There are several sub-categories double counting can refer to. If a benefit is merely claimed by different parties, double claiming occurs. In the case of double selling, the same greenhouse gas reduction is sold more than once. In double accounting (or issuance), the benefit is accounted for on multiple occasions. The last and the most problematic case is double monetization: the



emission reduction benefit is made available for accounting or trade under multiple mechanisms, e.g. under an international standard like Gold Standard and under a national scheme (typically an emission trading instrument or a carbon tax).

If the projects on the voluntary carbon market are accounted for in the national inventory, they support the achievement of emission reduction goals that should be financed and promoted by the government. Participants agreed, however, that the problem of double counting in the sense of the same unit being counted twice towards a reduction target, does not arise. It would only occur in case the respective credits were sold to another country and thus used twice for compliance, which is not a concern regarding domestic offsetting projects.

However, there is more to the issue than the merely formal ruling out of double counting, as the ensuing debate showed. Two conflicting perceptions emerged among the workshop participants, revolving around two main issues: (1) the effect that voluntary projects may have on ambitious climate action, and (2) the implications of voluntary projects not being counted on the national level.

With regard to the first issue, some participants believed that although projects on the voluntary market, if accounted for in the national inventory, cannot be used for compliance twice, they might still have a negative impact on the action taken by the government. According to this view, double selling might still indirectly occur on the governmental level. A problem of the constellation de-scribed above can be that the customers of voluntary carbon markets may pay for reductions that would also have happened without their investment, as less credits are bought for domestic compliance and lower efforts are made on the national level to reach the domestic target. This substitution effect is equal to sponsoring the government in achieving its emission reduction goals. If this were to happen to a significant degree, the national reduction target may be achieved earlier and with less action from the government. This could turn voluntary offsetting into a disincentive for the government to take ambitious climate measures. Individuals' or companies' voluntary contribution is no longer guaranteed to be additional but runs the risk of eliminating government action for compliance purposes that would otherwise be financed anyway.

Others however did not perceive the recognition of voluntary projects in the national inventory as problematic. Countering the argument of the first group, participants objected that supporting the government in saving costs on compliance may not constitute a real problem: after all, the reduction physically happens and no one is paying for something that has not taken place. In addition, the focus should be put on reaching the target in the first place instead of questioning the way that it is achieved. According to this view, it should be seen as positive if governments are supported by bottom-up offsetting, as it might also push them further than the initial target. In such a case, the voluntary market helps to put the system in place and double-counting does not represent a problem.

Concerning the second issue, participants agreed that if voluntary offsetting is not captured on the governmental level, the issue of double-counting does not arise. This is often the case, as voluntary offsetting projects tend to be small and thus not appear on the radar of the national inventory. In the view of some participants in the discussion, in these cases, the concern that governments might reduce their mitigation efforts in reaction to voluntary offsetting is unfounded, given that voluntary offsets are not accounted for. Adequate communication may resolve both issues described above with the result that "sponsoring the government" and "invisibility" need not be a problem, as long as actors are aware of what they support.

A strong objection was raised against this line of argumentation. It was remarked that the aim of voluntary offset projects was of course to eventually make a visible contribution, also on the national level. Simply not counting the positive impact of voluntary projects on the governmental level would send the signal of degrading such small, voluntary projects. Their methodology thus should still be made compatible with the national inventory to be able to integrate the accounting process in the future. Among this group of participants, the suggestion of resolving this issue through adequate communication was controversially discussed. Some participants perceived it to run counter to the underlying idea of voluntary offsetting (i.e. of creating additional and voluntary climate impacts that can be clearly distinguished from government action), threatening to undermine the credibility of the mechanism.

Both lines of discussion show that a central question of integrity for voluntary carbon market suppliers and regulators is to clarify what exactly is financed by customers. The aim should be a solution in which the local level is relevant, recognized and accounted for. In any case, a careful selection of example scenarios and their visualization could considerably enhance the communication on double counting.

On the possible use of discount factors

The discussion further evolved around the possible volumes of double counting that can be produced by the gap between the national inventory calculations and bottom-up project data collection. The rule for an 'insignificance level' under UNFCCC and Kyoto obligations of up to 5% could be filled in by voluntary market contributions. However, the possibility of accounting for 5% is sector dependent, and therefore should come second to building a methodology coherent with national inventories.

Still, if it were possible to find a consensus on this, the national inventory could apply sector-wise small discount factors (e.g. about one percent), in order to demonstrate problem awareness while letting the voluntary market develop below this mark. As the certainty of reporting for installation and project-level emissions grows, more precise accounting will be possible.

Though the UNFCCC does not prescribe a level of precision for national reporting, such a discount factor could

prove unacceptable for the governments and review teams who work to ensure high national accounting standards and are exposed to political pressure in this regard. Also, ignoring activities in this way may pave the way for unchecked dispersion of unaccounted emission reduction efforts.

In sum, transparency and trust are key

Overall, there is a compelling case for maximum simplicity and transparency in the communication to businesses and individuals. Increasing trust in domestic offsetting is a key task ahead which will require additional efforts to communicate clearly. Emphasizing the opportunities of voluntary carbon trading may offer a more fruitful approach than concentrating on its limitations, i.e. there is a need for moving from a problem-focused double counting approach to an opportunity-focused transparent accounting approach. In any case, the lively debate showed that there is not yet a clear way forward and that there is a need for more in-depth discussions.

3.5 Working Group 5: What kind of platform for dialogue and cooperation on carbon offsets in Europe?

Workshop 5 focused on the question as to what kind of platform for dialogue and cooperation on carbon offsets in Europe was desirable. The discussion, moderated by Dennis Tänzler from adelphi, was structured along three guiding questions, covering function, actor involvement and format of a new platform:

- 1. What should be the main **function**(s) of a platform for dialogue and cooperation on carbon offsets? What are the specific needs to establish a platform?
- 2. Who should be the stakeholders involved? Who should be in the lead?
- 3. What should be the **format** of the platform? How should it be organized?

Different levels of engagement are conceivable for a new cooperation platform, ranging from a loose cooperative approach to a harmonised and coordinated model:

	Function	Actors	Format
Loose cooperative approach	 Knowledge and best practice sharing; e.g. on steps taken to reduce emissions; carbon prices; methodological approaches towards calculating emissions and standards, capacity building activities. 	 Agencies respon-sible for manag-ing domestic car-bon offset regulatory framework Domestic offset initiatives (pri-vate sector driven) 	 Informal association / ex-ch- ange without a fixed structure Irregular meetings with changing participation Online discussion platform (incl. webinars etc.)
Harmonised coordinated approach	 Enhance visibility of voluntary offset mechanism Technical dialogue on a de-sirable regulatory approach Joint AAU and/or AEA regulation for voluntary offsets to ensure these are not counted towards int'l reduction obligations Set a voluntary standard: Not in competition to ex-isting standards in the market but to reinforce those that are robust and already exist Promote transparency & standardization of emis-sion reduction market. transparency and assurance against double-counting. 	Facilitate inclusive, multi-stakehol- der dialogue, involving decision-makers from companies, policy, civil society, and science	 Formalized, institutional-ized platform High-level political in-volvement: Ministerial / national agency level, which would be necessary for establishing a binding agreement on AAU cancellation etc. Establish a steering committee, composed of representatives of the member institutions Members and observers meet personally on a regu-lar basis Establish a secretariat to coordinate day-to-day work; prepare background material and analysis/ supporting documents



Workshop participants discussed their ideas and perceptions on how to design a platform for dialogue and cooperation on carbon offsets within Europe. Along the spectrum of a loose cooperative approach towards a regulated coordinated approach the majority of the participants opted for less regulation and a more flexible level of engagement. The following table clusters and summarises the conceptual ideas on a cooperation platform that were elaborated and presented during the workshop:

Function	Actors	Format
 Facilitating the learning process: Sharing information / ex-change of knowledge Dialogue Learn from each other / exchange on best practice 	 Carbon traders & resel-lers Carbon standards Companies / private sector NGOs and civil society: also include advocacy groups that are not di-rectly involved in the market Science Project developers Government agencies responsible for ac-counting and reporting 	 Informal dialogue that does not to follow estab-lished tracks Online information portal for discussion and ideas Occasional meetings in different countries with a rotating host Visiting projects on the ground Implementing joint pro-jects
 Working together: Harmonisation of methodologies; establish a common standard Establish a label Cross-border initiatives Create synergies 		
 Creating transparency: Build a common language and understanding Joint marketing Create a level playing field: local vs. global initiatives -> there are very many different standards 		

4 The way forward

The conference proved to fill an important gap: It managed to bring together actors and experiences on domestic offsets from across Europe and therefore provided a vital, productive first step in an effort to institutionalize mutual learning and to establish a forum for coordination.

More specifically, the following key lessons and recommendations emerged from the conference:

- Learn from domestic offset initiatives: There are manifold lessons from the various domestic offset approaches. They are important not only in that they incentivize additional efforts to pro-tect the climate beyond mandatory measures. The voluntary carbon market furthermore fulfils an important "sandbox" function that allows exploring useful innovative ideas for climate protection. Lessons should therefore feed into broader climate protection efforts.
- Continued need for a dialogue platform: There was great consensus that there is a need to continue to provide a space for mutual learning and exchange. The informal, loose format of the conference worked well and proved to be a big step forward. It is aimed to continue this dialogue through annual conferences on a rotating basis.
- Institutionalizing deeper cooperation: There would be great benefits in intensifying coopera-tion against the backdrop of heterogeneous initiatives with diverse scopes, interests, problem perceptions and actors. Promising activities include disseminating and discussing ideas and experiences with further stakeholders, developing joint concepts and language, resolving and suggesting joint approaches and understanding for regulatory questions including double counting and the post-2020 framework. It would be very useful to exchange methodologies, or to set up own standards defining commonly accepted methodologies. It will also be tremendously helpful to review, synthesize and update domestic initiative analyses in a coordinated, consistent manner. These activities will allow developing a clear framing for the way forward. There is a desire to join efforts in this regard; however, this will require tapping adequate resources.
- From double counting to transparent accounting: There seems to be no easy solution on how to harmonize approaches and on how to overcome all inconsistencies and challenges with re-spect to double counting. There is a plethora of differing experiences. However, a consensus is emerging that rather than searching for a panacea in vain, it will be more fruitful to focus on adopting a transparent approach, that is to have and to make available clear information on emissions and the respective reductions – the context and source they are derived from, and how they are financed.
- Provide adequate finance: All of these efforts require financing. The suggested activities can yield great benefits in particular to policy-makers. Environmental ministries and agencies should hence support such work, ideally in an internationally coordinated manner and possibly with EU involvement.

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6 Annex I: Program

Time	Topic
	Moderator Maria Vahvar (Cold Standard)
08 15	
00.15	Walcome Note
09.00	Dr. Enno Harders (German Emissions Trading Authority)
09.15	Introduction
	Corinna Gather (German Emissions Trading Authority)
09.45	France
	Jean-Claude Gazeau (French government)
10.15	Germany
	Stephan Wolters (adelphi)
10.45	Austria
	Donan Frieden (Joanneum Research)
11.15	
11.30	Arnoud Brohé (CO2) agie)
	Luc Wittebolle (SuMa Consulting)
12.00	Netherlands
	Jos Cozijnsen (Consulting Attorney Emissions Trading)
	René Korenromp (Ministry Infrastructure and Environment)
12.30	Switzerland
	Aric Gliesche (Swiss government)
13.00	United Kingdom
	Vicky West (Woodland Carbon Code)
13.30	Lunch
14.30	Workshops
	Working Group 1:
	Flexibility Mechanism under the ESD (Effort Sharing Decision) post 2020
	Dr. Nils Meyer-Ohlendorf – Ecologic Institute
	Working Group 2:
	What can Europe learn from the US? Sharing experiences from the Californian carbon market?
	Andres Espejo - Scientific Certification Systems (SCS)
	Working Group 3:
	How to ensure additional beyond carbon co-benefits in domestic initiatives?
	Sarah Leugers - Gold Standard
15.30	Coffee Break
15.45	Workshops
	Working Group 4:
	How to account project credits in the national inventory?
	Gold Standard
	Working Group 5:
	What kind of platform for dialogue and cooperation on carbon offsets in Europe?
	Dennis Tänzler - adelphi
16.45	Summary of Working Groups & Closing remarks
	wonz vomer (Golu Standard) Frank Wolke (German Emissions Trading Authority)
17 30	Find of conference
VE.11	

7 Annex II: Speakers



Arnaud Brohé - Belgium

Arnaud Brohé is a Project Manager at CO2logic and a renowned expert in the field of climate and energy policies, environmental management and sustainable reporting. He is also a Professor of "Management and Sustainable Development" at the Solvay Brussels School of Economics and Management (Université Libre de Bruxelles) and has authored many publications in academic and professional journals or reviews. He holds a PhD in Sciences. His latest book "la Comptabilité Carbone" has been published in 2013. His book 'Carbon Markets' is foreworded by Lord Nicholas Stern and endorsed former EU Commissioner Stavros Dimas.. Arnaud holds degrees in environment (PhD/MSc/MPhil), finance (MSc/BSc) and international relations (MA/BA). At CO2logic, Arnaud has managed more than 50 consulting projects for prestigious public and private clients.



Jos Cozijnsen - The Netherlands

From 1985 to 1993 he worked as a legal aid attorney. From 1993-1997 he worked for the Netherlands' Environment Ministry on the development of climate change policy and as member of delegation to EU and international climate meetings including adopting the Kyoto Protocol. Since 1998, he is based as an independent consulting attorney out of Utrecht in The Netherlands. His clients are companies, public authorities and NGO's. Core activities are knowledge transfer (market analysis and columns in magazines), legal consultancy (overviewing all the legal areas related to emissions trading) and strategic consultancy (showing carbon market opportunities).



Dorian Frieden - Austria

Dorian Frieden studied forestry in Germany and France and was training participant and freelancer at the Centre for Advanced Training in Rural Development (SLE), Berlin. Dorian joined JOANNEUM RESEARCH in Graz, Austria, in 2008. His main areas of work are the evaluation of climate, land use, and energy policies; assessment of emissions trading and accounting systems; development of projects for the CDM and voluntary market; modeling of bioenergy and land use system emissions. He participated in several EU funded projects (FP7, Intelligent Energy Europe) as well as in Austrian public research programs.



Corinna Gather - Introduction

Corinna Gather holds a diploma in economic science and is specialized in environmental economics. Since 2008 she has been working at the Section E 1.6 Emissions Reduction Projects - CDM (DNA) / JI (DFP) in the German Emissions Trading Authority which is part of the Federal Environment Agency. Here main area of work is the voluntary carbon market and climate protection projects for peatland restoration.



Jean-Claude Gazeau - France

Jean-Claude Gazeau, senior engineer (Ecole Polytechnique), was from 2005 to 2008 president of the French Interministerial Taskforce for GHG in charge of French climate policy and delegation during international negotiations. He then integrated General Council for environment and sustainable development as Energy and Climate WG coordinator and managed several missions on energy, climate and building efficiency, among which one on domestic offset projects in autumn 2014.



Aric Gliesche - Switzerland

Aric did his PhD thesis in Physics at the Swiss Federal Institute of Technology (EPFL) after finishing his Diploma in Physics at the Philipps University, Marburg (Germany). Since 2007, he worked as a project manager in Hamburg, Germany. He developed JI and CDM projects (Ukraine, Morocco), as well as the first registered domestic offset project in Switzerland. Having a very theoretical background, he gained more practical experience as project developer of agricultural biogas plants in Switzerland, Germany and France. Since 2014, he is responsible for domestic CO2-compensation at the Federal Office for the Environment, Bern.

Enno Harders



Since 2004 and the start of preparing for emissions trading in the EU and Germany, Enno is with the German Emissions Trading Authority (DEHSt) at the Federal Environment Agency (UBA), Berlin. He is Head of Department and responsible i.a. for industry installations, for customer service and legal affairs as well as for CDM and JI. His portfolio also includes accreditation and verification. Enno is a long-standing member of the Steering Committee of the EU Compliance Forum of Designated National Authorities in emissions trading.

Before joining the Environment Agency, Enno had international responsibilities in various areas of environmental protection at the German Federal Ministry for the Environment including the UNFCCC climate change negotiations. He is a lawyer and holds a Doctorate from Goethe University, Frankfurt, and a LL.M. from the University of British Columbia, Canada.



René Korenromp - The Netherlands

Policy coordinator at the Ministry of Infrastructure and Environment. Main working domains are the EU Emission trading System (and its reform) and implementation of the Renewable Energy Directive. In the past I have been working with the Ministry on chemicals: implementation of REACH legislation, member of the Member State Committee at the European Chemicals Agency and asbestos.Before joining the Ministry I worked a.o. at TNO as team manager in the area of environmental management and sustainable urban development.



Pieter van Midwoud - Introduction

Pieter van Midwoud is Director Business Development at the Gold Standard Foundation. He is in charge of the business development side of the Gold Standard certification scheme, including high level strategic partnerships with FSC, Fairtrade, WWF and the German Ministry for Environment. Pieter worked before on various sustainable forest policy functions on all levels. He holds and M. Sc. in Forest and Nature Conservation Policy from the Wageningen University in the Netherlands.

Moriz Vohrer - Moderator

Moriz holds a French-German double Diploma in forest engineering and environmental sciences. He started his career as project manager of a climate forestation in Eastern Africa, followed by consultancy work for the Worldbank and the Peace Nobel Prize Winner Wangari Maathai (Kenya) on the rules of A/R CDM. With his continuous focus on forest and climate, Moriz is one of few experts that knows the different forest carbon standards on the market like the back of its hand. Since 2007 Moriz was Chairman of the Technical Board of the CarbonFix Standard. In 2010 he became member of the FSC Advisory Board on climate and in 2012 Technical Director for Land Use & Forests at the Gold Standard Foundation.



Vicky West - The United Kingdom

Dr Vicky West graduated from Edinburgh University with a PhD in Climate Modelling. Coming down to Earth, she worked at the Forestry Commission in both policy and data management teams before becoming FC's Climate Change Analyst in 2010. Responsible for development and management of the UK's Woodland Carbon Code, Vicky is an expert in forest carbon standards and the carbon market. She has been involved in the development of UK government guidance on greenhouse gas reporting, and manages research on the role of forests in helping to tackle climate change.



Luc Wittebolle - Belgium

Luc Wittebolle lawyer and economist, has been advising public and private sector clients on climate change related policies and instruments for many years. Luc notably analyzed the relevance of Domestic Offset Projects (based on art. 24 a EU ETS directive) for the Flemish region (Belgium) in 2011. Currently a substantial part of Luc's work focuses on the design of financing solutions for (local) climate action plans. In relation hereto Domestic Offset Projects benefit from a renewed attention from public and private stakeholders as a potential additional revenue stream. Luc investigates alternative ways to introduce and mainstream Domestic Offset Projects in Belgium, notably via a multi-stage approach that starts with the voluntary market and culminates in the compliance market.

Stephan Wolters - Germany

Stephan Wolters works as a project manager at adelphi. In his research and consulting projects, he specializes in addressing current issues in the area of climate and energy policy. He has coordinated projects for various federal ministries, particularly in the fields of Climate Diplomacy and Market Mechanisms for climate mitigation. As an economist, Stephan Wolters is the lead author of numerous publications on voluntary carbon offsets, most notably an analysis of the German carbon offset market, and devises strategies and opportunities for developing this market in cooperation with political and economic decision-makers.

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