PUBLIZIERBARER ENDBERICHT

A) Projektdaten

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Projekt overview

1 Kurzfassung

Ausgangssituation

Freiwillige Klimaschutzmaßnahmen werden oft als zusätzliche Notwendigkeit zu staatlichem Handeln gefordert, um den Klimawandel hinreichend zu begrenzen und z.B. das international diskutierte Ziel von 2°C mittlerer globaler Erwärmung zu halten. Gleichzeitig zeigen Privatpersonen und Firmen ein Interesse an einem Engagement im Klimaschutz, das über individuelle Verhaltensänderung hinausgeht. **Der freiwillige Emissionshandel (voluntary carbon market, VCM) ist eines der zur Verfügung stehenden Instrumente** in diesem Zusammenhang und wird meist für die Kompensation von entstandenen Emissionen genutzt. Ein typisches Beispiel ist die Kompensation von Flugemissionen von Privat- oder Dienstreisen. Auf internationaler Ebene ist der Handel mit Zertifikaten ein integraler Bestandteil dieses Instruments. Diese Zertifikate weisen die Reduktion von Treibhausgasemissionen durch Klimaschutzprojekte nach und entsprechen jeweils einer Tonne reduzierter Emissionen, angegeben in CO_2-Äquivalenten. Die Emissionsreduktion kann vom finalen Käufer beansprucht werden und wird anschließend stillgelegt. Neben seiner Klimawirkung kann ein gut gestalteter VCM mit seinen Projekten Nebeneffekte wie z.B. die Verbesserung von Einkommen und Gesundheit oder den Schutz von Biodiversität haben. Es konnte auch gezeigt werden, dass der VCM als Marktmechanismus einen Anreiz für die Identifizierung von innovativen Klimaschutzansätzen darstellt. I**n den meisten EU-Staaten, einschließlich Österreich, weist der VCM jedoch, beispielsweise im Vergleich zum verpflichtenden EU Emissionshandelssystem, nur marginale Transaktionsvolumina auf.**

Ziele des Projekts

Das wesentliche Ziel des Projekts VCM-AT war es, die **Rolle des VCM in Österreich als zusätzliches Instrument für die Förderung freiwilligem Klimahandelns** zu analysieren. Dies beinhaltete die Identifizierung von Möglichkeiten zur Ausweitung des VCM unter der Annahme, dass der VCM grundsätzlich eine Bereicherung für das Portfolio an Klimaschutz-Optionen darstellt. Basis hierfür war eine Analyse des österreichischen und europäischen Marktes, seiner Angebote und Akteure und deren Präferenzen, sowie (inter)nationaler Erfahrungen. Die übergreifende Forschungsfrage des Projekts lautet: **Welche Gestaltungsmöglichkeiten des VCM können Barrieren zu seiner Nutzung durch private und öffentliche Akteure reduzieren, um den VCM in Österreich zu stärken?**

Projektstruktur und Methodik

Die in VCM-AT angewendete Methode ist in **drei Säulen** aufgeteilt. Im Rahmen der ersten Säule wurde der **Status des österreichischen und des Europäischen VCM** erhoben. Dies beinhaltete detaillierte Erhebungen zu fünf österreichischen und zehn internationalen Anbietern unter anderem in den Bereichen Marktvolumina und Trends, Angebotsportfolio, angewandte Standards und technisches Vorgehen. Hierzu wurden Internetrecherchen auf den Seiten der Anbieter sowie Interviews durchgeführt. Diese Erhebung machte es möglich, den österreichischen Markt in einen internationalen Kontext einzubetten. Die zweite Säule fokussierte auf die **mögliche Entwicklung des VCM aus der Nachfrageperspektive**. Semi-strukturierte Interviews mit Firmen und Privatkunden und -kundinnen sowie eine online-Befragung boten hier Aufschluss über Motivationen und Präferenzen. Die dritte Säule diente der Analyse von **Überschneidungen zwischen dem VCM und staatlichen Instrumenten und Zielen**, insbesondere des EU Emissionshandelssystems (EU ETS) und den staatlichen Klimazielen auf im Rahmen der EU-Gesetzgebung bzw. unter dem Kyoto-Protokoll. Hier wurden die potentiell daraus hervorgehenden Schwierigkeiten thematisiert und Lösungsmöglichkeiten diskutiert und entwickelt. Zur Unterstützung dieser drei Säulen fand ein **kontinuierlicher Austausch mit verschiedenen Anspruchsgruppen** statt, welche einen Realitätscheck sowie die Einbindung von Expertenwissen erlaubte. Sämtliche Ergebnisse wurden in einem abschließenden Arbeitspakte zusammengeführt.

Ergebnisse

Der VCM stellt ein ergänzendes Instrument im Bereich Klimaschutz in Österreich dar, insbesondere bei der **Kompensation nicht vermeidbarer Emissionen**. Das Projekt hat **auf Europäischer Ebene eine große Vielfalt an Angeboten und Services** identifiziert, **die auf nationaler Ebene nur eingeschränkt zu finden sind**. Die weist auf ein Potential für zusätzliche Angebote im österreichischen Markt hin, wenn von einer vergleichbaren Nachfrage ausgegangen werden kann. Auf der Nachfrageseite waren insbesondere **Privatpersonen besonders**

schwer anzusprechen, was auf niedriges Interesse für das Thema hinweist. Unter den Kunden und Kundinnen mit denen ein Austausch stattfand wurde insbesondere bei Privatpersonen auch ein **niedriges Informationsniveau** festgestellt. Die meisten Personen haben keine klaren Wünsche zu einer Anpassung des VCM an ihre Wünsche geäußert oder welche zusätzlichen Produkte oder Services von Interesse wären. Dennoch können die **große Wichtigkeit von hohen Standards sowie insbesondere sozialer Nebeneffekte** von Klimaschutzprojekten hervorgehoben werden. Ebenso wurde ein sehr **hohes Interesse an heimischen Projekten** identifiziert. **Überschneidungen zwischen heimischen VCM-Projekten und verpflichtenden Emissionszielen finden durchaus statt. Potentiell negative Auswirkungen können auf verschiedene Weisen vermieden werden**. Dies beinhaltet zum Beispiel ein „backup" mit internationalen Zertifikaten oder die Wahl von Projekttypen und –Einheiten, welche keinen Verpflichtungen unterliegen bzw. die nicht in die staatliche Emissionsbilanz einfließen.

Ausblick

Während es verglichen mit internationalen Angeboten ein deutliches Potential für eine Ausdehnung des Portfolios in Österreich gibt, kann die Aufnahme neuer Angebote durch dieses Projekt nicht antizipiert werden. Hier ist u.U. ein schrittweises Vorgehen nach „Versuch und Irrtum" nötig. Deutlich **erweiterte Aktivitäten zur Information** von Privatpersonen und Firmen über den Markt wären ein wichtiger Schritt für eine höhere Kenntnis und Akzeptanz des VCM bzw. eine fundierte Meinungsbildung. Hier sollten staatliche Einrichtungen eine wichtige Rolle spielen. **Heimische Projekte verdienen eine besondere Aufmerksamkeit**, da sie einerseits sehr gefragt sind, andererseits aber auch zu Überschneidungen mit verpflichtenden und staatlichen Zielen und Maßnahmen führen können. In jedem Fall sollte der zusätzliche Klimaschutzeffekt solcher Projekte sichergestellt werden. **Eine hohe europaweite Anzahl heimischer Initiativen und ein zunehmender internationaler Austausch auf diesem Gebiet eröffnen die Möglichkeit in diesem Bereich in einen Dialog zu treten** und ein weiteres koordiniertes Vorgehen zu entwickeln – sowohl durch private und staatliche Akteure als auch auf wissenschaftlicher Ebene.

2 Executive Summary

Initial situation / motivation of the project

Voluntary climate protection activities are often claimed to be required in addition to mandatory targets and schemes if climate change is to be limited to a bearable level, such as the international target of 2°C mean global warming. At the same time, individuals and organisations show an interest to engage in climate protection beyond individual behaviour change. The voluntary carbon market (VCM) is one available instrument in this context that is mostly used to compensate own, i.e. individual or corporate, greenhouse gas (GHG) emissions. On international level, a central element of the VCM is the trade of certificates that proof the reduction of one tonne of CO_2 equivalent emissions each. This emission reduction can be claimed by the final buyer and is subsequently cancelled. Beyond their climate effect, a well-designed VCM can have significant co-benefits such as for health, income and biodiversity. It has also been shown that a market stimulus for GHG emission reductions can be a fruitful ground for the identification of innovative approaches. In most EU countries, including Austria, however, the VCM lacks significant transaction volumes.

Objectives of the project

The main objective of this project was to **assess the role of the voluntary carbon market** (VCM) in Austria as a complementary instrument **for stimulating voluntary climate protection actions**. This included an assessment of the possibilities for an expansion of this market based on the assumption that the voluntary market provides a value added for the voluntary engagement. Based on an assessment of the Austrian market and its participants, international experiences and empirical research of actors' preferences and expectations in Austria, the project aimed to develop **strategies to overcome barriers to a stronger Austrian VCM**. The **overarching research question** of this project was: **which VCM designs will reduce barriers to use of VCMs by public and private actors, thus providing the basis for a strong VCM in Austria?**

Project structure and methodology

The methodology used in VCM-AT was divided into three main pillars and two accompanying pillars. Within the **first pillar** the status quo of the Austrian and international Voluntary Carbon Markets were surveyed. This

included a detailed analysis of five Austrian and ten European retailers in terms of, e.g., market volumes and trends, products, and applied standards and technical approaches. This assessment allowed embedding the Austrian market in an international context. The **second pillar** focused on the potential development of VCMs in Austria from the perspective of customers. Semi-structured interviews were carried out with corporate and private customers to better understand their motivations and preferences. The **third pillar** investigated potential interactions of the VCM with mandatory obligations, e.g. the European Emissions Trading (ETS) Scheme or policies in the Non-ETS sectors. It also addressed questions about potential problems that arise due to such interactions and sought for options to address them. In addition to these main pillars, continuous **stakeholder involvement** ensured a reality check as well as incorporation of expert knowledge. All gathered results were merged within a **summarizing work package**.

Results and conclusions

The voluntary market can be regarded as a complementary instrument in the broad landscape of climate protection options present in Austria, in particular if it is used as "last option" for the compensation of *unavoidable* emissions. The work undertaken revealed that European retailers offer a very comprehensive range of services and products that cannot be found in Austria to the same extent. This indicates a potential for new services and products on the Austrian market if similar demand can be assumed. For the demand-side survey individuals of the general public turned out to be particularly difficult to address which indicates a low interest in the topic in the society. Among the surveyed customers, a rather low level of information was identified, in particular for individuals. Most customers did not express clear wishes on how the market should be adapted to their needs or which additional or other products and services are desired. However, the importance of high standards and social co-benefits of projects can be highlighted. A high interest in national projects was claimed. Overall, most customers are satisfied with the current offers of the market. Overlaps between the voluntary market and mandatory emission targets do occur and can be addressed in different ways. These include for instance the backup with international credits or the choice of activities or entities not included in mandatory accounting (e.g. soil carbon).

Outlook

While there seems to be potential for new products and services, the likeliness of an uptake by customers cannot be anticipated based on the findings and may need to be approached on a trial-and-error basis. Information of the general public and organisations on the voluntary market may help to increase awareness, and provide for a better informed formation of opinion. Public institutions may play a major role in this respect. Domestic projects merit particular attention due to the high interest of customers but also because of potential overlaps with mandatory schemes. The additional climate impact of domestic projects should not be jeopardized. A high diversity of domestic initiatives on European level and an emerging international exchange on this topic provide the opportunity to get further involved in this matter – on scientific, market actor and governmental level.

3 Background and objectives

Initial situation / motivation for the project

Responding to Climate Change requires a far reaching transformation of the economy and society. ***Voluntary actions on the part of the public and businesses are often perceived as an important component of this transformation.*** While the international climate protection process led to regional and national governmental targets, increasing public awareness on climate change raised questions about options to contribute to climate protection individually (Diederich and Goeschl, 2011)[i]. Also companies have recognized the possibility to express their corporate social responsibility when contributing to climate protection efforts (Peters-Stanley et al., 2013).[ii]

Voluntarily reducing own Greenhouse Gas (GHG) emissions caused by activities of individuals and companies are however often impeded by several barriers (Steiner and Tuerk, 2013)[iii]. This is in particular true for GHG reductions that are not easily achievable by simple behaviour changes but which would require physical investments. Specific barriers in these cases are high costs both for individuals as well as companies to adapt their equipment and operational processes quickly to "yield" immediate GHG reductions. Also companies and (partially implicitly) households claim short payback periods, i.e. investments need to be economically viable in

relatively short timeframes. Even though public awareness may work in favour for taking action, this implies that companies and individuals might be restricted in achieving considerable GHG reductions quickly by themselves. One potential option for solving this dilemma is offered by the Voluntary Carbon Market (VCM). The VCM provides the possibility to offset GHG emissions from activities of individuals and organisations by external GHG reducing projects of the voluntary carbon market – immediately and to comparatively low costs.

Voluntary Carbon Markets have gained particular attraction in North America and in a few European countries, particularly the UK and Switzerland. On a Global scale the voluntary carbon market has grown over the past year, rising to US$ 424 million in 2010 from US$ 415 million in 2009 (Peters-Stanley et al., 2013)[ii]. Beyond their immediate effect on carbon reduction, well-designed voluntary schemes (e.g. based on the Gold Standard or in conjunction with the climate, community and biodiversity (CCB) standard) can have significant co-benefits such as job creation, health benefits, biodiversity protection and ecological benefits beyond emission reductions. Also, from past experiences in other countries it has been shown that a stimulus for searching for new opportunities of additional CO_2 mitigation is a *fruitful ground for finding and inventing innovative opportunities to reduce* CO_2 *emissions.* ***In most EU countries including Austria however, Voluntary Carbon Markets have marginal transaction volumes as compared to mandatory markets.***

Despite existing efforts, the Austrian voluntary carbon market has a rather low public recognition and has not yet become a broad market. Nevertheless, despite the existence of dense climate protection legislation in Austria an additional – voluntary – stimulus for reducing CO_2 emissions may increase the overall effort for climate protection (see Klimaschutzbericht 2011)[iv]. Figure 1 shows a typical example of an activity of the voluntary carbon market where flight emissions of an individual or a company are compensated based on climate protection projects. The unit used in the voluntary carbon market is in most cases a credit that corresponds to one tonne of CO_2 equivalent (CO_{2eq}), i.e. the climate impact of possibly involved other greenhouse gases (GHG) is standardized based on the impact of CO_2. Such units can either stem from the systems created for the mandatory emissions trade under, e.g., the Kyoto protocol or the EU Emissions Trading System (EU ETS) or from specific voluntary standards. Typical examples for voluntary standards are the VCS (Verified Carbon Standard) and the Gold Standard.

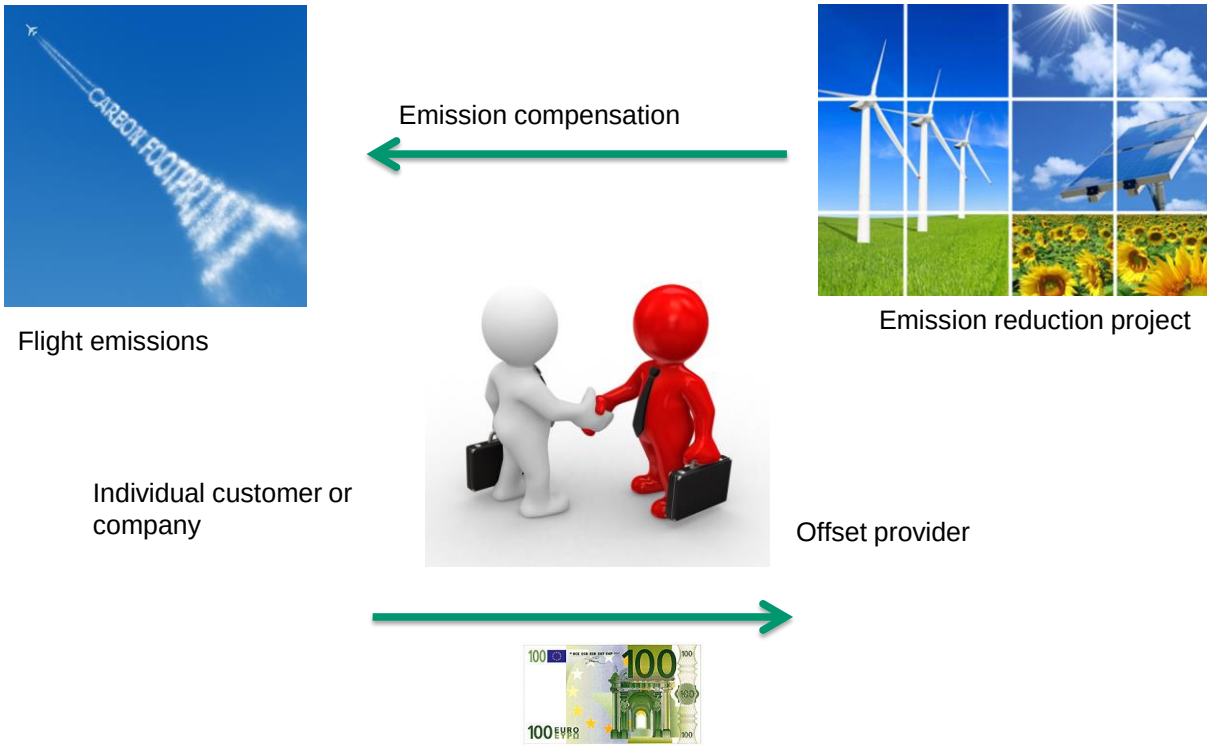


Figure 1: Example of a typical activity of the voluntary carbon market: flight emissions of an individual or a company are compensated based on climate protection projects

While VCMs are expanding globally, the role and integrity of carbon offset programmes are discussed controversially. Critique has been voiced regarding the additionality and double counting of projects; the lack of

regulation of VCMs; and the fact that VCMs may enable 'buying oneself a good conscience' without contributing to structural change (e.g Lohmann, 2006)[v]. The validity of many of these points depends on the way VCMs are designed, organized and operated, and in particular on the offset standards used in connection with them. An important aim of this project was thus to investigate VCM designs which address the points rose by critiques so that VCMs can be designed in a way that appeals to companies and citizens willing to invest in compensating their climate change impact and gains the approval of relevant civil society and public organizations engaged in climate change mitigation.

Objectives of the project

The main objective of this project was to **assess the role of the voluntary carbon market** (VCM) in Austria as a complementary instrument **for stimulating voluntary actions** to reduce Greenhouse gas emissions. This included an assessment of the possibilities for an expansion of this market based on the assumption that the voluntary market provides a value added for the engagement in climate protection. Based on an assessment of the Austrian market and its participants, international experiences and empirical research of actors' preferences and expectations in Austria, the project aimed to develop **strategies to overcome barriers to a stronger Austrian VCM**. The analysis investigated VCM designs that enhance the appeal to companies and citizens that are willing to invest in compensating their emissions while reducing potential adverse effects of VCMs. The **overarching research question** of this project was: **which VCM designs will reduce barriers to use of VCMs by public and private actors, thus providing the basis for a strong VCM in Austria?**

Resulting from this, further research questions were defined as follows:

- What are the **international success factors** of VCMs in terms of institutional design, participating actors and communication strategies?
- What are the **interactions of VCMs with** emission reduction **compliance markets** (e.g. EU ETS) **and** other European and national **climate policies and regulation**, and in particular how could additionality be guaranteed at justifiable costs in this connection?
- What are the **preferences and motivations** of relevant actors in Austria for participating in VCMs, including their **wishes and requirements** for the design and operation of these markets?
- What are the **design options** to contribute to the growth of VCMs; maximise indirect effects on private engagement in GHG emission reductions; advance high standards; and result in approval of relevant civil society and public organisations?
- What are potential **spill-over effects** from VCMs (e.g. raised awareness among the society). Have such spill-over effects reinforced the functioning and success of the VCM?

4 Contents and results of the project

Methodology and activities performed

The project VCM-AT was structured along **three thematic pillars**. **First, an analysis of the VCM's status quo** in Austria was undertaken followed by a similar analysis of selected retailers in Europe. Both analyses were based on a list of specific characteristics of retailers which allowed for a direct comparison of specific features of the market from the supply side. This comparison served to get an impression of potential differences between the Austrian and other European markets and thus provided for ideas on potential additional opportunities in Austria. This supply-side analysis was based on online research and interviews with representatives of the retailer

companies. Interviews with retailers already gave an impression on the specific demand and customer preferences and behaviour in different countries.

The **second pillar** focused specifically on **perspectives of relevant actors of the demand side in Austria**. This pillar served to answer questions such as:

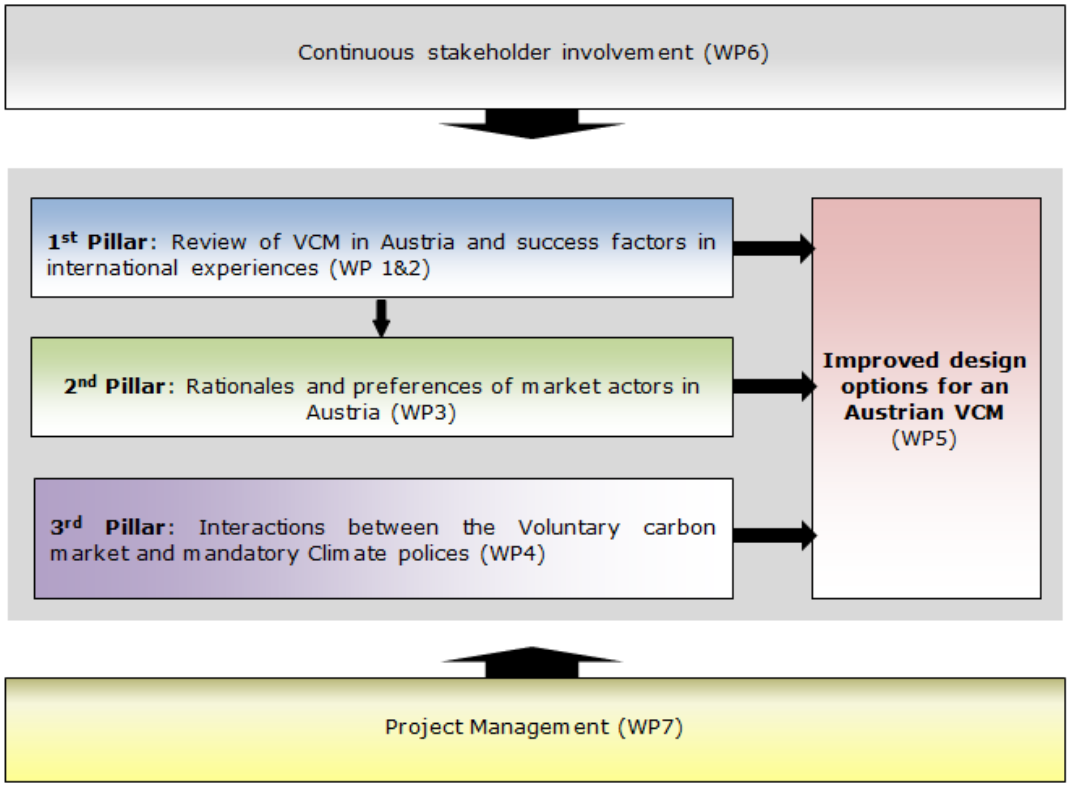
- What are the motivations and pre-conditions for domestic actors to participate in a domestic VCM?
- What are the preferences of domestic actors, regarding, e.g., project types, prices and standards?
- Which changes of the supply are desired?

Research was based on semi-structured interviews with corporate customers that already participate in the VCM. In addition, an online survey and interviews were undertaken to better understand the motivations and preferences of private individual customers. The empirical research was supported by knowledge gathered in the first pillar of the project, in particular for the design of questionnaires.

The **third pillar** investigated **potential interactions of the VCM with mandatory obligations**, e.g. the EU ETS or policies in the Non-ETS sectors. It addressed questions about potential problems or synergies that arise due to interactions between the VCM and other national and international environmental policies. A combination of analysis of literature and expert consultation was used. In particular, an international workshop was carried out as part of the project focused on this topic.

These three pillars defined the thematic content of the project. They were complemented by a continuous **stakeholder involvement** in order to ensure not only a reality check, but also the incorporation of expert knowledge. Besides the above mentioned interviews and workshop, this included the involvement of a scientific advisory board which was involved in particular via regular phone conferences and personal meetings.

The following graph illustrates the project flow.



Project results and project milestones

Characteristics of the Austrian and international VCM and implications for Austria (WP 1, WP2)

VCM offset retailers can be compared and distinguished by certain characteristics. Detailed surveys and analyses of characteristics of both European and Austrian offset retailers have been carried out within this project along the following characteristics:

- ***Economic characteristics*** *(trade volumes and trend, prices, customer groups)*
- ***Portfolio*** *(incl. products and services, project types and location, co-benefits, applied standards, calculation methodology, proof of additionality)*
- ***Transparency and information*** *(incl. information on projects and calculation)*
- ***Customer friendliness of online services***

The economic characteristics and the portfolio turned out to be of particular interest when comparing the international with the Austrian VCM. Therefore, the following summary focuses on these two aspects.

It needs to be noted that the VCM is strongly internationally interwoven; it therefore does not consist of closed national systems. Domestic customers can easily purchase from offset retailers abroad and national retailers can attract foreign customers. "Wholesalers" and project developers partly sell project based credits to further retailers. The analysis within this project focused only on retailers for companies' or individuals' final use, as it was one of the project's aims to analyse how the interface "retailer-final user" could be improved. Retailers based in Austria or having a branch in Austria were treated as "Austrian retailers". In Austria all major retailers were considered, namely Climate Partner/Allplan, Climate Austria, Ökoregion Kaindorf, the BOKU compensation system, and EEC. Furthermore certain consultancies trade voluntary carbon credits on behalf of their customers.

The retailers based in other EU countries were chosen based on several assessments and rankings (Nichols, 2013[vi]; Strasdas et. al., 2010[vii]; Hammer and Vorbach, 2010[viii]). In addition, some retailers were selected due to their innovative products. The retailers surveyed are: ARKTIK (DE), myclimate (CH), Atmosfair (DE), South Pole Carbon (CH), Klimarebellen (DE), PrimaKlima Weltweit (DE), Climate Neutral Group (NL), The CarbonNeutral Company (UK), ClimateCare (UK), and EcoAct (FR).

The voluntary carbon market studied is very heterogeneous in regard to project types, prices, standards or targeted customers. This is facilitated by the fact that it is a market without mandatory requirements as opposed to, e.g., the Kyoto Protocol compliance system or the EU ETS. The diversity of retailers, products, and target groups shows that it is a challenging market. At the same time, the voluntary nature of the market is one of its strengths, triggering the development of a broad range of products and innovative approaches for specific customer groups.

Economic characteristics: Despite intermediate variations, an overall **increasing trend in trade volumes** both for Austrian as well as the analysed European retailers seems to be the case for the analysed retailers. There are large variations between retailers, which can for instance be explained by the size of the market they supply (national, international, customers) and marketing strategies. As the VCM is not a closed system, the trade volume of Austrian retailers may not fully cover the size of the Austrian demand but can be expected to be a reliable order of magnitude. A rough comparison with the German market based on Wolters et al, 2015[ix] indicates much lower per capita transaction volumes in Austria. The absence of wholesalers in Austria may contribute to this difference to some extent. The graphs below (Figure 2 to Figure 4) provide trade volumes for the analysed Austrian and international retailers as far as information could be gathered. The figures illustrate that also on retailer level transaction volumes are rather small in Austria. Figure 4 illustrates the extreme difference between trade volumes depending on the type of the market player – South Pole Carbon is one of the largest international project developers that delivers to both end customers and further retailers.

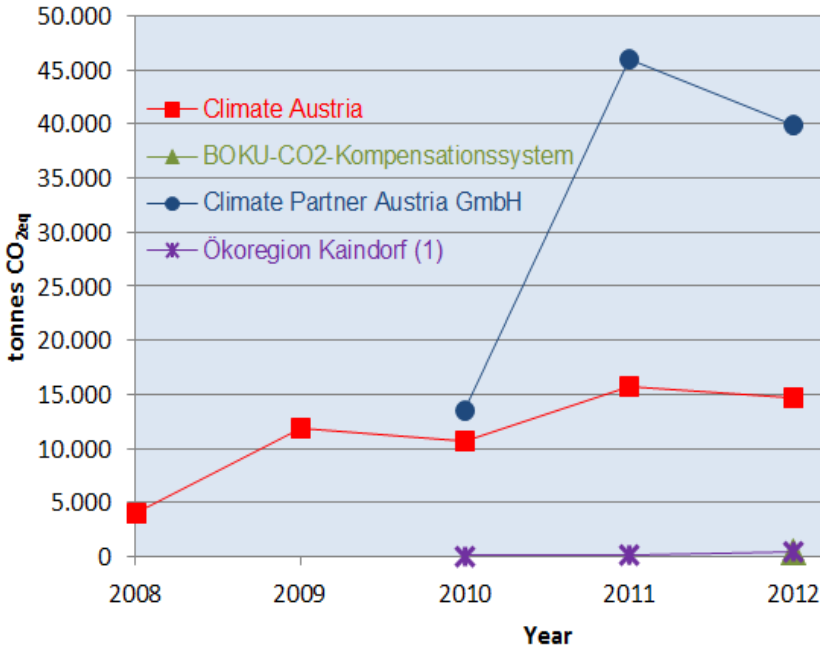


Figure 2: Trade volumes of Austrian retailers (exact values can be found in the Annex, section **Fehler! Verweisquelle konnte nicht gefunden werden.**)

(1): 2010-2012: between 2010 and 2012 certificates with the amount of 641.1 t CO_2 were sold. – Assumption: 10% in year 1, 30% in year 2 and 60% in year 3 (tendency increasing based on information from the "Ökoregion Kaindorf")

Remark: *No information was available regarding the trading volume of EEC GmbH.*

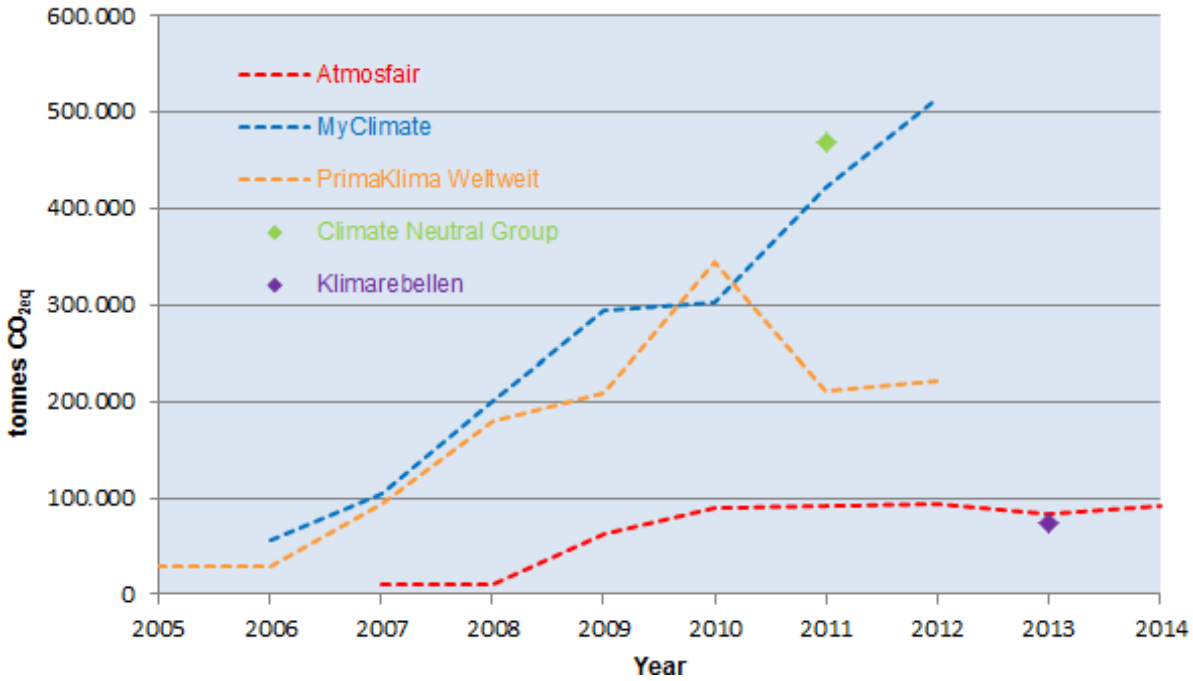


Figure 3: Trade volumes of international retailers excluding South Pole Carbon (Sources and exact values can be found in the Annex, section **Fehler! Verweisquelle konnte nicht gefunden werden.**)

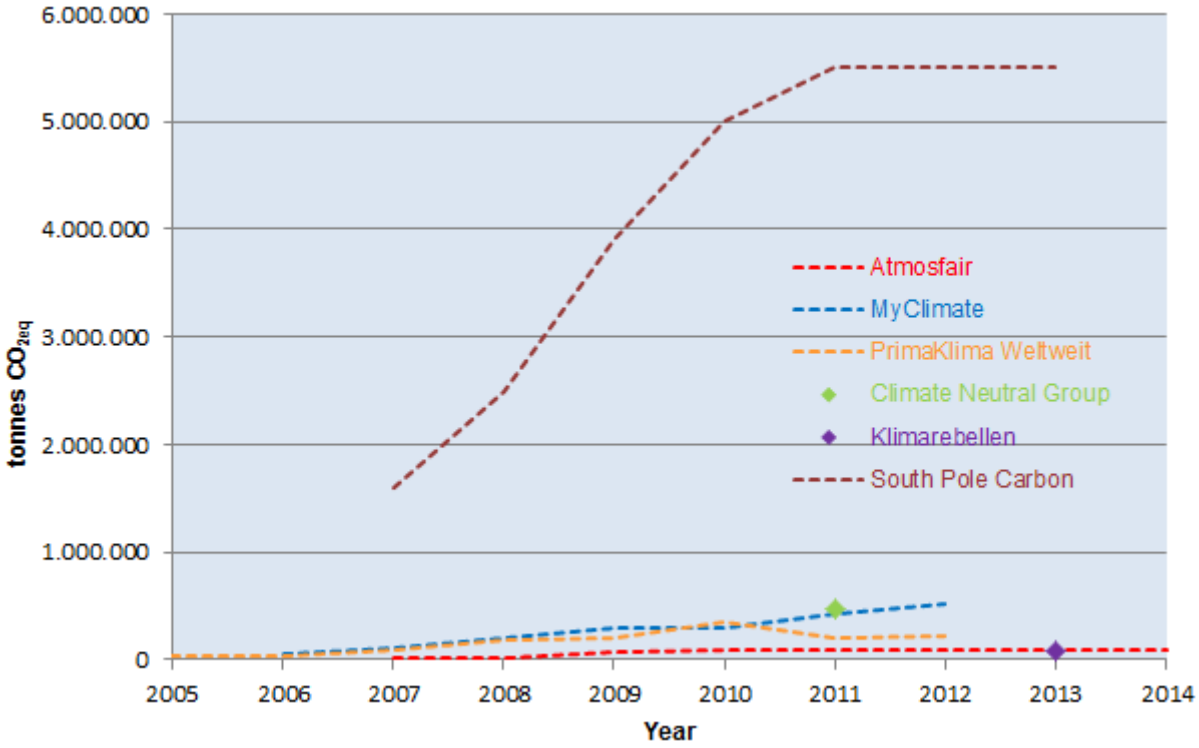


Figure 4: Trade volumes of international retailers including South Pole Carbon (Sources and exact values can be found in the Annex, section **Fehler! Verweisquelle konnte nicht gefunden werden.**)

The **certificate price** of Austrian retailers lies between 9 and 45 Euro/tonne, thus showing a large range. All prices at 25€ or higher are at least optionally based on Austrian projects (Climate Austria: 25€ with the choice between Austrian and international projects; Ökoregion Kaindorf: 45€ for Austrian soil carbon projects). These prices were assessed online and often address individual customers. Prices for corporate customers will often be lower but are subject to negotiation and thus not communicated publicly. On European level, prices for international offsets that are made public on the websites vary between 3€ and 23€. National offsets cost between 25€ (Germany) and 72€ (Switzerland). Prices for corporate customers in Germany were also found to show a very high range and reach prices from as low as 0.4€/tCO2 for 2013[ix]. These **extreme price ranges** suggest that the willingness to pay of different customers vary importantly and that customers aim for different types of credits. In particular, the high price of domestic credits aims at a customer group whose priority is on domestic projects and for which the price is not the most important criteria. The relatively high prices for individuals raise the question whether a larger group of individuals could be addressed with lower-price offers. This is supported by the study undertaken by Diederich and Goeschl (2014)[i].

Regarding the **customer structure,** the majority of the Austrian retailers have primarily or exclusively corporate customers. The exception is Climate Austria which has a bit over 50% individual customers because it delivers the flight compensation system of the Austrian Airlines (AUA) which is used by individuals during the booking process.

Portfolio: A broad range of project types is represented by credits traded in Austria which represents all major categories that are also available internationally (renewable energy, energy efficiency, fuel switch, carbon sequestration and reforestation, reducing emissions from deforestation and forest degradation (REDD)). This implies that **there is no further need for other project types offered by Austrian retailers**. Carbon offset credits are available in Austria both from national as well as international projects. Some retailers offer only credits from international (non- European) projects, for instance because they do not interfere with mandatory requirements in the EU. However, two of five retailers primarily (Climate Austria) or exclusively (Ökoregion Kaindorf) offer Austrian projects which reflects the **interest of customers in supporting climate projection projects "at home"**.

The Austrian retailers for CO_2-compensations recognized, similar to international retailers, that customers are not only interested in CO_2 emission compensations but also in co-effects. Therefore each Austrian retailer provides information on co-effects in different levels of detail.

In terms of the offered services **most Austrian retailers do not go importantly beyond a compensation of CO_2 emissions, while some international retailers offer encompassing services**, such as technical consultancy services for own, company-related, emission reductions, or marketing strategies. Such broader services for corporate customers may help to expand the VCM in Austria.

Also a range of products and services for individuals were identified in Europe that are not or only to a limited extent present in Austria. Here, the innovative character of some European retailers is not present in Austria to date. This indicates a **potential for new services and products assuming a corresponding demand**. Products found only on European level include the extent of offsetting-related options such as multiple offsetting (e.g. twice the amount through additional domestic reforestation) or support of (national) organisations or projects in addition to international offsetting projects. Also rather untypical products were identified on European level which are partly only available to residents of the country where the retailers or their partners are located. This includes the South Pole climate credit card which leads to offsetting of emissions related to the purchases. Other innovative products such as the ARKTIK climate vignette that compensates a pre-defined amount of car emissions can, in principle, be purchased independently from the location of the customer. However, the location of the retailer may influence the willingness of customers to make use of its services. While for, e.g. pure online offsetting of flights it may not be of importance where the retailer is located, some offset characteristics may create a preference for national retailers. Such characteristics include the support of national organisations or domestic offsetting options. In addition, the presence of a retailer in a country facilitates the integration in the national market due to, e.g. easier advertisement opportunities and the proximity to customers that allows a more direct exchange. In particular corporate customers seek the direct contact to the retailers.

Finally, regarding offsetting as “secondary” product, i.e. where offsetting comes along with a primary product, the European market provides examples additional to the ones present in Austria. This includes the optional supply of carbon-neutral gas and electricity or offsetting by car rental companies.

Analysis of incentives for customers in Austria (WP3, milestone 1)

As explained above, both individuals and corporate customers are of relevance for the Austrian market. In the following, we give a short overview over the outcomes of fifteen performed interviews with companies in Austria that use the VCM. Individual customers were addressed by an online survey in cooperation with AUA for customers who have compensated flight emissions. 4115 persons were contacted by AUA, out of which 174 customers that have already done a compensation for their travel completed the questionnaire. 37% of these customers are female, 63% are male. 64% are older than 50 years, 60% have a university degree. Moreover, out of this group, about twenty semi-structured interviews with private costumers were conducted partly personally, partly via telephone calls (see Questionnaires and response statistics in the Annex).

Corporate customers

The interviewed companies using the VCM have a high level of information and a great awareness for this theme. The compensation of CO_2 emissions, however, represents only a small part of their business activities in the environmental sector. The VCM usually addresses business trips, especially flights, but some companies compensate their entire emissions. Most of these initiatives have emerged in the last years.

The choice of the retailer agency was often done through personal relationships. Most companies only work with one retailer they do not change. Usually they are very **satisfied with their retailer** - apart from some details.

The **price of the certificates is mostly not of primary importance** for the companies, partly because the offsetting segment is a relatively small one. This may, however, be due to the fact that rather small corporate customers where interviewed. Some of the retailers stated that for large customers the price is a major criterion. When selecting a project, especially **energy projects** are the first choice but also projects that take account of **social criteria** have a good reputation. Concerning the **location of projects**, companies that are primarily active in Austria prefer Austrian projects, while other companies mostly prefer projects in the countries in which they operate.

It is very important for the companies to have **information about the retailer and the projects** offered as well as it is an important criterion for almost all of them that the projects are certified, best with **Gold Standard**.

A need for more retailers of offsetting projects is currently not seen by the companies. Concerning improvements suggestions are limited. A **better design of the websites** of retailers is mentioned, **easier to-**

understand information or **more specific customer service**. **Some companies want government support** for their activities in this area, for example, through subsidies.

Individual customers

Among the individual customers there is a **small group of very interested and environmentally conscious private consumers** in the VCM market. This group is engaged in additional environmental and climate protection activities outside of the VCM. It is an **older group of people with good education** and thus most likely with higher income.

Most of the respondents' compensations were paid only in recent years, and here from the half of the respondents only once or twice. Half of the respondents who have done compensation payments so far the amount was less than € 50,-. **For half of the respondents € 20,- would be the limit for the amount they would pay for compensating a flight** (for the other half it would be more than EUR 50,-). Three quarters of the respondents pay the amount proposed to them (e.g. when booking a flight) rather than choosing another amount. Motives for the compensation performance are especially climate and environmental considerations. The respondents **prefer to support domestic projects.** Concerning the project type, consumers like **renewable energy** projects, but also **socially oriented projects** play an important role. For the majority of respondents it is very important to get **information** about the retailer of the projects and on certification standards. **Especially environmental organizations are mentioned as trusted institutions** for offering CO_2 offsetting. The AUA system of CO_2 offsetting works well for the respondents, and therefore there seems to be no need to change it. The VCM market is a niche for emissions, which cannot be avoided und where it is not possible to react in another way.

However, there are also some „radical" and sceptical positions, including that compensation payments should be mandatory at all or that it would be better to avoid emissions rather than to compensate for them.

The analysis showed that **private customers are not informed about the VCM in depth** so that it is not possible for them to make suggestions for its improvement or its transformation or to express wishes in this regard.

Interactions with mandatory schemes (WP 4)

The project VCM-AT identified an important demand for GHG emission reductions based on national projects in Austria as described above. Also discussions with international retailers and researchers revealed demand for EU-based projects and corresponding initiatives in several EU countries. The (not exhausting) survey on the EU market identified such demand and initiatives for domestic projects in the UK, in Italy, the Netherlands and in Germany (Frieden et al., 2014[x], compare also Peters-Stanley, 2011)[xi]. National projects can foster innovation, achieve emission reductions in sectors and by entities not addressed by the company-level EU ETS, and contribute to raising awareness on climate change and mitigation measures. For some carbon credit buyers, national emission reduction projects can be more attractive than international projects due to their stronger visibility and tangibility, so that buyers have a greater bond and resonance with the project.

At the same time, overlaps with national emission targets under the Kyoto Protocol and the EU climate and energy package as well as with the EU ETS may arise. Such overlaps are often discussed as compromising the environmental integrity of such projects because they may not lead to a climate benefit additional to existing obligations. For instance, Schneider, Kollmuss, and Lazarus (2014)[xii] state that "*If both the host country and the voluntary user account for the same emission reductions, the voluntary market provides no additional mitigation beyond what was pledged by the country.*" As an example, emission reductions by voluntary projects may be claimed to compensate flight emissions of individuals or companies. The emission reduction may at the same time be accounted for on governmental level for the national emissions target when the project reduces emissions of public transport systems. Thus, the emission reduction is accounted for twice by two different entities – once as part of the voluntary market and once on governmental level. This situation is often referred to as "double counting".

This problem forced the standards of the VCM such as the Verified Carbon Standards (VCS) and the Gold Standard to develop a position in this respect. The VCS published a policy brief including the VCS' policy on double counting (VCS, 2012)[xiii]. The Gold Standard currently seeks solutions for the issue such as the ones discussed further below. However, to date, due to the risk for double counting, projects implemented in the EU usually cannot be certified under an international standard. Exceptions are however made at least by the VCS when it is proven that the emission reductions or removals are not taken into account for national target achievement (Peters-Stanley, 2011)[xi]. As a consequence, most VCM projects within the EU are not certified

based on international standards and a broad variety of initiatives emerged with different levels of knowledge and ambition as well as different opinions regarding double counting.

In Austria, Climate Austria as well as Ökoregion Kaindorf offer emissions compensation based on national projects. Climate Austria primarily supports projects related to renewable energy and energy efficiency while Ökoregion Kaindorf implements agricultural projects that increase the carbon stock in soils. Soil carbon is not considered in the national emissions accounting that serves to prove compliance under the Kyoto Protocol and the EU climate targets. Nor does it form part of the EU ETS. It thus can be considered as unproblematic in terms of double counting. Energy related projects, however, will generally be accounted for on national level and thus contribute to domestic climate targets in addition to the compensation claims by customers. Climate Austria, however, argues with the additionality on project level, i.e. projects would not have been carried out without their support and thus complement rather than substitute governmental measures.

Double counting: Perceptions of stakeholders

Due to the importance and complexity of the issue, the international workshop that was carried out as part of WP6 within this project focused on EU-based projects in the voluntary market and double counting. The majority of the participants of the workshop shared the perception that double counting is an important issue and that it should be avoided or solutions sought. At the same time, strict avoidance of this issue was partly perceived as constraint to the voluntary carbon market.

Figure 5: Plenum discussions during the international workshop

A representative of the Austrian Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) claimed that voluntary climate protection efforts are needed but that Kyoto targets and the EU ETS are a red line for the voluntary carbon market, i.e. interference should be avoided. Where an overlap with the Kyoto system occurs, voluntary projects may help the state to achieve target compliance and might lead to a cost reduction for the state but cannot be claimed to be additional from an emission reduction point of view. This could only be the case if the state already achieved its national target and thus does not make use of the voluntary emission reduction for its target achievement. Such a situation can, however, only be proven retro-actively and does thus not provide a realistic solution for the market.

Possible approaches to deal with double counting

Different approaches are possible in order to address double counting of EU-based projects. Most of the following options were presented and discussed during the international workshop.

- *Upfront avoidance of double counting by creating VCM projects whose scope is not covered by the national GHG reporting*

Double counting can be fully avoided for activities that do not fall in the national accounting system or under the EU ETS. During the international workshop of this project soil carbon was said to be one of the few, if not the only emission source or sink not accounted for. This limits the opportunities to make use of this approach. However, as explained above, one of the Austrian retailers (Ökoregion Kaindorf) exclusively focuses on this project type. The Gold Standard has developed a protocol for climate smart agriculture allowing for future internationally recognized certification of such project types.

- *Exclude VCM project emission reductions from national GHG reporting.*

Excluding VCM projects from the national accounting system would avoid double counting with national targets. During the international workshop, this option was however discussed not to be implementable as this would violate the accounting rules under UNFCCC.

- *Apply an 'insignificance' rule, so that national VCM projects can be implemented until their emission reductions jointly reach a volume which equals 5% of the national GHG emissions of the country.*

This option was presented and discussed during the international workshop of the projects but was perceived as impracticable in Austria.

- *Purchase of international credits to compensate for possible double counting.*

International credits, i.e. emission reductions achieved outside the Kyoto-regime, could, for instance, originate from CDM projects and corresponding costs can be added as a fee to the VCM credit purchasers. This option was generally perceived as feasible. The resulting price increase would strongly depend on credit prices and its acceptance may vary by the customer. Among international retailers, MyClimate already applies this approach.

- *Purchase and cancelling of EU ETS credits where overlaps with the ETS occur*

Voluntary projects in EU ETS sectors would free up company-level emission rights and therefore assist companies in meeting their binding requirements. This would relief companies from their compliance pressure and would allow them to sell emission rights to other companies. Similar to governmental emission allowances, this may lead to additional emissions elsewhere or reduced efforts in the concerned company that would compensate the effect of the voluntary project. Therefore, the purchase and cancellation of EU ETS credits is a potential option to avoid negative consequences of double counting.

- *Cancelling of state allowances*

This option would be comparable to the previous one but would apply to cases where an overlap with the non-ETS (governmental) targets occurs. The option to cancel state emission allowances was commented not to be possible in the current legal framework in Austria. In addition, a transfer of emission rights from the state to the private sector would occur which is opposed by the government. In fact, this approach would maintain the same need for emission reductions for the government but would cause administrative effort.

Conclusions on interactions of voluntary projects with climate policies

There are different perceptions on the relevance of double counting, but it is perceived as possible problem by most stakeholders. While the complexity of the issue did not allow for formulating agreed conclusions with stakeholders, sufficient possibilities exist that can be used to avoid the problem. Without an important involvement of the government, the back-up of national projects with international ones seems to be the most straightforward approach; most other options are not implementable in the Austrian context.

Additional insights from the expert and stakeholder dialogue (WP6, milestone 3)

Results of the survey of customer behaviour and discussions held on the topic of national projects during the international workshop were presented above. In addition, further topics where discussed during the international workshop and additional discussion were held with experts (incl. the science advisory board) bilaterally and during different occasions presented under section **Fehler! Verweisquelle konnte nicht gefunden werden.** (Utilization) below. In particular, workshops in Berlin and Zürich allowed to present and discuss outcomes of the project and to get involved in major international discussions.

Which role has the voluntary carbon market to play?

A general statement of the Ministry of Agriculture, Forestry, Environment and Water Management during the international workshop was that all possible efforts are needed to tackle climate change. Specifically, the international target to limit climate change to a 2°C average warming would require mandatory and voluntary initiatives. The voluntary carbon market could play a role provided that an alignment with the governmental framework is given, that no interferences with governmental targets occur and that no emission rights or subsidies are diverted from the state. On international level discussions equally take place that support the importance of private actions, partly stating that climate change simply cannot be tackled by governments without voluntary action. At the same time, the voluntary market is partly perceived as an intermediate solution which should not be required anymore when decarbonisation progresses and when a broader group of nations takes on emission targets.

Which standards and quality criteria are needed in Austria?

During the international workshop it was discussed that transparency of the market is not fully given, for instance high price differences of credits exist. Also the diversity of verification approaches makes the market quite complex. Verification standards and project details would need to be made clearer. A difference was made between customer groups. Big international customers (global players) would require complete transparency and internationally acknowledged approaches of the verification process which they can communicate externally,

whereas SMEs or individuals may prefer projects with strong national context even if no international standards are applied.

Besides discussions on project standards, a discussion took place on the use of the term *carbon* or *climate neutrality* in terms of its calculation. The point was made that clear rules for the calculation of carbon neutrality of a product or service exist and that it must be guaranteed that accepted standards are applied. In the UK, for instance, the term carbon neutrality is even officially regulated. At the same time, for the case of national projects other participants argued that there should be no additional barriers for national initiatives because they would stimulate implementation and lead to domestic co-effects.

Awareness raising

Awareness raising was discussed at several occasions during the international workshop which confirmed the finding that many customers are not well informed on the voluntary carbon market. This was also confirmed for the international level such as during the workshop held by the German Environment Agency in Berlin. In addition to the level of knowledge on the demand side, developers of some initiatives, for instance in the Netherlands, were said to do a good job but not to be aware about issues such as double counting. At the same time the complexity of the issue makes it difficult to pass on a sufficient amount of information to reach transparency and the point was made that many customers may not be interested in very specific technical issues. There was broad consensus among stakeholders that awareness raising would be of high importance. However, depending on the customer group, the content may need to be limited to rather basic information given the complexity of the topic. The representative of the BMLFUW suggested that the government could support awareness raising and capacity building. Also the Austrian economic chamber offered support.

The role of the voluntary carbon market for companies and individuals

During the international workshop, a breakout group consisting of public administration, NGOs and scientists discussed the position of the voluntary carbon market in the context of potential voluntary engagement of firms and enterprises in climate protection activities. There was broad consensus that CO_2 compensation is covering only one part in this broad spectrum and that the overall goal of climate protection would have to be tackled from other sides simultaneously. This is in line with the above presented customer survey which showed that companies understand climate and more broadly environment protection as broad issue, going far beyond offsetting. A differentiation has to be made between the situation of big enterprises, with designated corporate social responsibility departments, and the situation of SMEs, often interested but lacking knowledge how to tackle this complex subject at their level.

At the level of private households, the group observed that knowledge about the broad spectrum of emission reduction options would increasingly become part of “normality”. However, the gap between theoretical and practical implementation knowledge would still remain open as demonstrated by the example of individual mobility. **Individual resistance to behaviour change** was discussed, also as barrier to climate protection measures in enterprises.

Generally, behaviour change was identified as a crucial aspect. At the private level as well as for enterprises, **climate protection “champions” and “role models”** have been seen as important anchors and identification objects, helping to formulate own personal or business targets. WP 1 and 2 showed that a number of international retailers make use of role models and well known personalities (testimonials) for their advertisement which is currently not the case for Austrian retailers.

Supply-side perspectives for strengthening the Austrian market

The preconditions that need to be met to allow the market to grow and expected market trends were discussed with representatives of the supply-side of the market (retailers). Part of the discussion addressed the question of how to reach customers and place products. It was stated that in particular individual **private customers are overburdened** and that small scale **products need to be very easily accessible and cannot be expected to reach a major share of the society**. One participant of the international workshop asked for an improved marketing by addressing customers more emotionally. Emotion and “coolness” would be required in order to gain larger customer groups. Testimonials as well as awareness raising, e.g. in schools, were mentioned to be potentially helpful.

Role of the government

A representative of the BMLFUW stated that an alignment with the governmental framework is needed but that the Government will not put any barriers to the voluntary market. So far, the government does not take an active role in steering the voluntary market and does not aim at becoming a “regulator” of the voluntary market.

However, an interest in synergies exists and a further involvement may be discussed. In particular, the government should support awareness raising and capacity building. This role was also highlighted by the Gold Standard and market retailers, also regarding an increasing transparency of the market. One additional idea for strengthening the role of the market and climate friendly products voiced by market retailers was that a mandatory labelling for the climate impact of products could be introduced. Also, there should be a minimum quality requirement for credits because customers are not able to check the quality of credits. No other major requirements for governmental action were expressed by the private sector and it was stated that too many claims for governmental involvement would counteract the voluntary nature of the market.

"The perfect VCM project"

An additional short assessment of preferences of (potential) customers was undertaken during the international workshop. Using mind-map methodology, the group (breakout group "customers") discussed the imaginary characteristics of an "ideal VCM project" with a focus on corporate customers. Admitting that there are doubts that such a project could become true, the following ideal characteristics were summarized:

- The project's potential to save CO_2 emissions has to be clearly denominated.
- The project's environmental integrity should be beyond any doubt. This implies that it has to correspond to a standard approved by an independent institution. It should also demonstrate that it creates co-benefits (e.g. biodiversity effects or local employment).
- The project has to be small, enabling the customer's personal/ enterprises' familiarization and identification with targets and contents.
- The project has to require as simple administration as possible. As known from the NGO sector, projects without administrative "burden" and overhead are considered trust worthier than others.
- The price of certificates should not be too high.
- The project's intentions have to be clear and understandable for the customer.
- The project should be located in a region close-by. This corresponds to the customer's need to realize the project's contents, intentions and dimensions of impact. This is also linked to the felt need to make the project's added value "tangible". If the project is a domestic one, these needs are more easily addressed.
- The project should meet the interests of both sides: the interests of the enterprise offering offsetting to its customers, as well as the interests of the customer investing in certificates.
- The project should be thematically close to the enterprise's field of activity and be linked to its business philosophy. This fact increases the coherent image of the enterprise and its credibility.
- The project content should be of interest also for media and enable customers to use their engagement for PR purposes ("positive imaging").
- Controversially discussed remained the criteria that the project should enable or accelerate innovation. On the one hand, investments in VCM projects may foster the development of technologies or strategies that otherwise would not have had the chance to become reality. On the other hand innovation is not always desired to be made public quickly which may contradict the interest to advertise activities in the voluntary market.

Figure 6**:** Breakout group presentation during the international workshop

5 Conclusions and recommendations

The **role of the VCM in Austria** can generally be perceived as providing a complementary climate protection instrument besides governmental instruments and the range of other existing voluntary initiatives such as the *Klimabündnis* or *Klima und Energie Modellregionen*. Compared to governmental emission commitments and the EU ETS it covers marginal volumes, but it provides options for companies and individuals to get involved in climate protection. Besides direct involvement in emissions compensation such as for flight emissions its visibility is given in terms of carbon neutral products which provide for a marketing value added. Initiatives such as *Ökoregion Kaindorf* also show that the market has a potential for innovation and demonstration of new climate protection options in Austria.

The Austrian VCM is relatively small; comparison with Germany indicates a much smaller volume traded in-country per capita. However, absolute national transaction volumes are difficult to obtain and underlie high uncertainties. A major potential for volume increases was not seen by the retailers, in particular for individuals who are difficult to address. However, some actions may have a positive impact on the development of the market which includes addressing existing barriers.

The analysed voluntary carbon market is very heterogeneous regarding the type of retailers, project types, prices, standards or targeted customers and other. This is facilitated by the fact that it is a market without mandatory requirements as opposed to, e.g., the Kyoto compliance systems or the EU ETS. The diversity of retailers, products, and target groups makes a clear identification of success factors challenging. At the same time, the voluntary nature of the market is one of its strengths, triggering the development of tailor-made products and innovative approaches for specific customer groups.

Barriers for an increased use of the VCM by individuals in particular include a **general lack of interest** which became obvious due to the high difficulties to acquire this group for interviews and discussions. We assume an important degree of scepticism and identified a **low level of information** on the VCM by individuals. But also corporate customers did not have specific ideas on the market or on its further development. This however goes along with a general satisfaction of Austrian corporate customers which do not claim major changes. Overall, the **complexity of the market seems to be one of its greatest challenges**, in particular when it comes to its public reputation and interest. Corporate customers suggested that additional retailers are not required and that this would make the market confusing. A study undertaken in Germany highlighted a lack of transparency due to the high number of retailers, high price differences and other (Wolters *et al.*, 2015[ix]). The small size of the Austrian

market may thus also provide the opportunity to achieve a higher level of transparency. To this end, **additional information would be required** which needs to be well balanced with the given complexity of the market.

Besides information, **new ways of marketing** may be thought of. In particular, individuals stated they would most trust environmental NGOs as retailer of VCM credits. This type of retailer is, however, not present in Austria. Also on international level we did not identify large environmental NGOs such as WWF to offer offsetting themselves. However, some of the retailers can be considered environmental NGOs or cooperate with such organisations which is partly much more prominently communicated on the websites than by the Austrian retailers. The Gold Standard is per se founded and supported by NGOs such as WWF. WWF Austria in turn recommends Gold Standard projects and specifically Atmosfair und MyClimate as retailers – none of them being an Austrian retailer. This indicates a certain gap in the Austrian market. In addition to references to environmental NGOs, some international retailers state recommendations by individual authorities of the public life (testimonials), of NGOs, research or politics or corresponding institutions and are partly supported by public institutions. Also labels such as the German donation seal or rankings by consumer organisations are used by some retailers to increase trust. Overall, there is certainly quite some room to make the Austrian VCM more attractive and trustworthy, in particular for individuals. The importance of the presentation of retailers for the acquisition of corporate customers should, however, also not be underestimated. Corporate customers that do not identify "their" retailer through existing contacts base their choice primarily on the websites of the retailers.

The use of the VCM shows quite different characteristics than other possibilities for environmental engagement such as memberships in/donations to environmental protection NGOs. Many NGOs provide some sort of benefits such as journals, news on project progress, the invitation to specific activities or events or different types of "goodies" and thus partly create an emotional bond with their supporters. The VCMs "presence" generally ends with the payment of the offset and perhaps the issuance of a certificate. **Additional activities for the involvement of customers** such as news on the supported projects, an involvement in the choice of future projects and other may increase the identification of individual customers with the VCM. In addition to addressing individual customers and companies, the VCM could also target groups and networks of actors similar to other voluntary initiatives.

In terms of the **design** of VCM systems, a high diversity was identified in Austria and on European level. This diversity includes the involved organisations (NGOs, commercial retailers, governmental institutions), the types of products and services offered, the targeted customer groups, the type and location of projects, price structures and other. All of these have their market share and are successful in one or the other way; a single **most successful design does not exist**. Some gaps in the Austrian market can however be identified which may provide for additional opportunities. Additional attractive, private individuals' friendly niche products and potentially lower prices might increase the market share of individuals (compare also Lütters & Strasdas 2010[xiv]). **Low-price offers do not exist for individuals**. Even though the price level is only one of several potential bottlenecks, low price offers may help to reach an additional group of potential customers with a low willingness to pay. Given that low prices may be in conflict with relatively high efforts for serving the low-volume demanding of private individuals innovative approaches may be required. **Design features that are not available or rare in Austria** but were introduced elsewhere are specific products (climate credits card, climate gifts and other), and encompassing services that include climate and environment-related consulting. Even though additional products for individuals such as a climate credit card or a fuel vignette may not dramatically increase transaction volumes they may help to diversify the market, create a better visibility of the VCM and increase options of individuals to become active in climate protection. At any rate, while corporate customers put some effort in the use of the VCM, offers for individuals need to be very easily accessible.

The low level of interest and knowledge among the society result in a low penetration rate, i.e. they limit the population being directly involved in the VCM and thus the potential of the VCM to foster environmentally friendly behaviour in general. Those individuals already participating in the VCM are already open to environmental protection engagement and the VCM as such cannot be expected to further trigger the engagement of these groups. The VCM therefore currently is not able to importantly trigger overall environmental friendly behaviour of individuals as long as the interest and information level among the society stays at a low level. At the same time, participants of the online survey that already used the VCM claimed not to reduce other environmental activities. Thus, the VCM should not have a negative impact on other environmental engagement. Additional **information and awareness raising would be a first step towards a greater acceptance and a potentially higher use of the VCM**. In terms of corporate activities and spill-over effects, the VCM seems to play a specific role. The example of Ökoregion Kaindorf which gave rise to an innovative emissions compensation approach is now applied by several initiatives country-wide. This success probably is not only due to the use of the VCM but also because of its embedding in a broad initiative while the VCM provides for a new instrument for financing and involvement of regional actors.

The majority of stakeholders, including, e.g., the Verified Carbon Standard, are concerned that **interferences with national emission targets and the EU-ETS**, in particular double counting, are an issue and that they must be avoided. Also, a frequent argument for the voluntary carbon market is that governmental targets alone will not be able to reach the envisaged climate goals such as a limitation of global mean temperature increase to 2C° above pre-industrial level. Voluntary activities acting within the compliance system do not provide the opportunity to go beyond these governmental targets unless they lead to a better achievement of these targets which is difficult to proof. At the same time, an important amount of EU-based projects and initiatives evolved over the last years and a range of initiatives actively deals with the issue. This includes clear exclusion statements for double counting such as by the Verified Carbon Standard but also attempts to find ways to allow for European projects such as by the Gold Standard and domestic standards such as the UK Forest Carbon Code or the Dutch initiative on national projects. **We recommend avoiding overlaps with domestic emissions targets and the EU ETS or to compensate for possible double counting by means of, e.g., additionally purchased international credits.**

A **major role of public institutions could be to contribute to increase awareness and the information level on the VCM**. Information is the first basis for further action. This may be done through different channels such as information briefs, or the integration in school education or other types of environmental education. We suggest to present the VCM as a complementary means to other possible climate protection activities and to embed information in a broader communication on climate friendly behavior.[1] The fact sheets established by this project provide an input in terms of easily accessible basic information on the market.

If a more active role of the government is sought, an engagement in the currently ongoing international discussion on the VCM would be useful.

[1] The brochure „*Klimaneutral leben: Verbraucher starten durch beim Klimaschutz"* by the German environmental agency provides an example: http://www.umweltbundesamt.de/themen/wirtschaft-konsum/konsum-umwelt-zentrale-handlungsfelder/klimaneutral-leben-verbraucher-starten-durch-beim

B) Project details

6 Methodology

The methodology is presented under section 4, Contents and results of the project.

7 Work and time schedule

The table and diagram below show the actual schedule of the project. The last line of the Gantt-diagram shows an additional engagement in workshops and other exchange as described in the section on dissemination.

MILESTONES	
M1	Report on perspectives of corporate actors and individual citizens on voluntary carbon markets
M2	Formulation of conclusions
M3	International workshop with various actors of the VCM
M4	Kick-off of the project
DELIVERABLES	
D1	Qualitative and quantitative data set about the current state of Austrian VCM
D2	Report on international experiences with VCMs
D3	Draft of guidelines for interview and focus group questions
D4	Overview of existing interferences with compliance markets
D5	Possible approaches dealing with interactions
D6	Comprehensive report on advantages and disadvantages of different VCM design options
D7	Policy briefs
D8	Activity Report (Tätigkeitsbericht)

	2013										2014											
	Mid March - Mid April	Apr - May	May - June	June - July	July - Aug	Aug - Sept	Sept - Oct	Oct - Nov	Nov - Dec	Dec - Jan	Jan - Feb	Feb - Mar	Mar - Apr	Apr - May	May - June	June - July	July - Aug	Aug - Sept	Sept - Oct	Oct - Nov	Nov- Dec	Dec - end Jan
WP1: Situation of the Voluntary Carbon Market in Austria																						
Task 1.1: Screening of actors, organisations and institutions																						
Task 1.2: Systematic survey of quantitative data						D1																
WP2: International Experiences with Voluntary Carbon Markets																						
Task 2.1: Establishing an international survey of voluntary carbon offset markets																						
Task 2.2: Structured comparison of analysed voluntary carbon offset markets according to a "check list"									D2													
WP3: Incentives for actors in Austria																						
Task 3.1: Motivation to participate in VCM as a corporate actor								D3														
Task 3.2: Motivation of individual citizens and households															M1							
WP4: Interactions with compliance markets																						
Task 4.1: Survey of potential interferences with compliance markets														D4								
Task 4.2: Discussion of interferences with compliance markets																						
Task 4.3: Approaches to deal with interferences																		D5				
WP5: Improved design options for an Austrian VCM																						
Task 5.1: Synthesis of individual findings from prior work packages																						D6/D7
Task 5.2: Formulation of conclusions																						M2
WP6: Continuous stakeholder involvement																						
Task 6.1: Initiation of a stakeholder process																						
Task 6.2: Stakeholder workshop																			M3			
WP7: Project management																						
Project management, coordination and knowledge transfer	M4																					D8 (30.4.15)
Further engagement of the project							Workshop Zürich-CMA						Klimatag			CMIA special guest				Workshop UBA Berlin		

8 Publikationen und Disseminierungsaktivitäten

The following publications/deliverables can be found on the download area of the project website (http://vcm-at.info/downl.html).

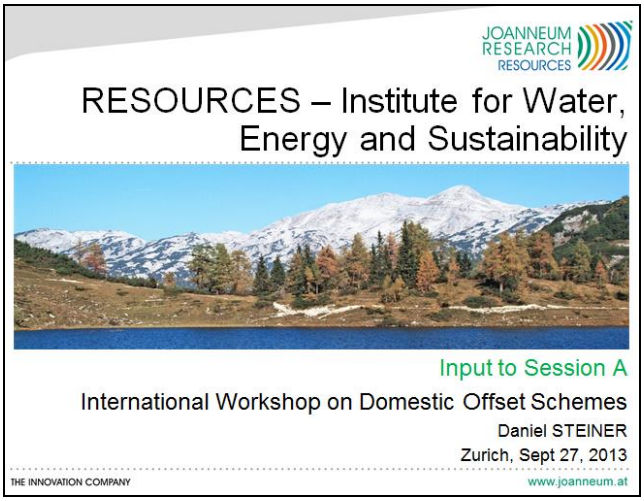
Date	Type of dissemination	Journal/ Target group	Title/content
09/2013	Input to workshop: „Towards scattered ambitions?" by the Zürich Carbon Market Association (CMA) from 26. – 27. September 2013	Experts	Input to break out session A: Treatment of national policies: example of the Voluntary Carbon Offset Retailer "MyClimate" in providing "back-ups" for its credits generated by national (Swiss) GHG mitigation project based on the research done in VCM-AT.
11/2013	Work package report	Interested public and organisations, experts	Status quo des freiwilligen Emissionshandelsmarktes in Österreich
03/2014	Work package report (WP2, deliverable 2)	Interested public and organisations, experts	Survey on the European voluntary carbon market
04/2014	Presentation of interim results, Austrian "Klimatag" 2014. 3- 4. April 2014, Innsbruck. Publication in the conference proceedings.	Experts and interested public	Dorian Frieden, Daniel Steiner, Claudia Fruhmann, Andreas Türk, Susanne Woess-Gallasch, Margit Kapfer, Christian Praher, Jürgen Suschek-Berger, 2014: Strengthening voluntary climate initiatives in Austria – Assessing the scope of the Voluntary Carbon Market. Tagungsband 15. Klimatag, 2.–4. April 2014
06/2014	Newspaper article	Kleine Zeitung (25.6.2014)	Information on project and call for participation in WP3
07/2014	Presentation	Carbon market participants	Special guest: working group discussion of the Climate Markets & Investment Association (CMIA), presentation and discussion of the WP2 report
07/2014	Article	JiQ, Magazine on climate and sustainability, Vol. 20 - No. 2 • July 2014 - Groningen, the Netherlands ISSN: 1877-606X http://jiqweb.org/images/stories/mifiles/jiq_issues/2014july.pdf	Frieden, Dorian, Daniel Steiner, Claudia Fruhmann, Susanne Woess-Gallasch, Andreas Tuerk, 2014: JOANNEUM RESEARCH Presents Survey on European Voluntary Carbon Market.
09/2014	Presentations	Carbon market participants, NGOs, Science, public administration	Presentations on project results during the international workshop of VCM-AT
10/2014	Article	JiQ, Magazine on climate and sustainability, Vol. 20 - No. 3 • October 2014 - Groningen, the Netherlands ISSN: 1877-606X	Austrian Workshop on Voluntary Carbon Markets – "Local Enthusiasm - National Credibility"

		http://jiqweb.org/images/stories/mifiles/jiq_issues/2014oct.pdf	
11/2014	Workshop presentation	German Environment Agency workshop (inclusion in the proceedings): *Freiwillige Kompensationszahlungen und nachhaltige Lebensstile: Passt das zusammen?* Dokumentation der UBA-Tagung am 10. November 2014 in Berlin. TEXTE 24/2015, Projektnummer 47281, UBA-FB 002081 http://www.umweltbundesamt.de/publikationen/freiwillige-kompensations-zahlungen-nachhaltige	Freiwilliger Emissionshandel in Österreich
01/2015	Work package report (WP3, milestone 1 / deliverable 3)	Interested public and organisations, experts	Bericht über das WP3 „Incentives for actors in Austria" im Rahmen des Projektes VCM-AT
01/2015	Work package report (WP5, covering milestone 2 and deliverables 4 to 6)	Interested public and organisations, experts	Project synthesis report
01/2015	Fact sheets / policy briefs (deliverable 7)	Customers, general public, retailers and public institutions	• Treibhausgasemissionen kompensieren: Der freiwillige Emissionshandel • Ergebnisse des Projekts VCM-AT – Information für Anbieter des freiwilligen Emissionshandels in Österreich • Fragen zum freiwilligen Emissionshandel: Information für öffentliche Entscheidungsträger
04/2015	Project report according to KLIEN template (this report)		

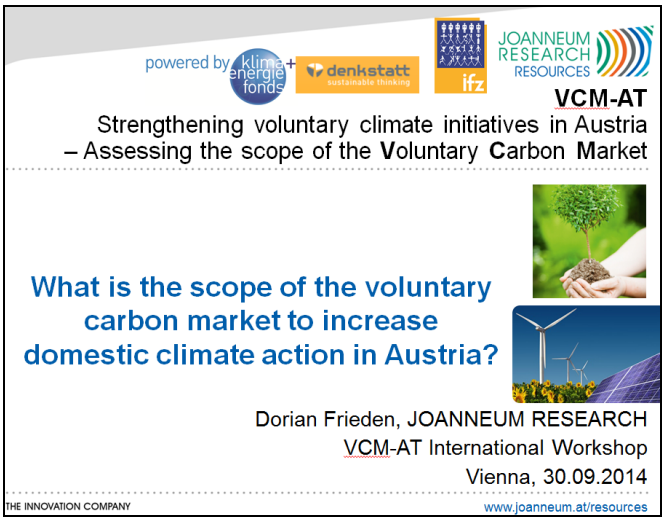
In addition to the avove, **presentation of project results are further schedules** for the Austrian *Klimatag* 2015 as well as for a further workshop of the German Environment Agency in June 2015.

Austrian *Klimatag* 2014:

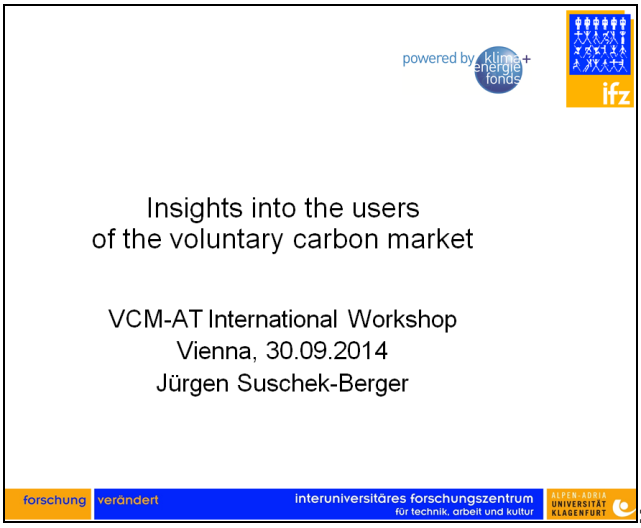
Zürich Workshop:



VCM-AT international workshop:



VCM-AT international workshop:



German Environment Agency workshop:

To be continued…

Diese Projektbeschreibung wurde von der Fördernehmerin/dem Fördernehmer erstellt. Für die Richtigkeit, Vollständigkeit und Aktualität der Inhalte übernimmt der Klima- und Energiefonds keine Haftung.

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