FOREST TRENDS Ecosystem Marketplace

New Approaches to Old World Carbon:

Closing the Loop on Supply and Demand for European Voluntary Emissions Reductions

Molly PetersStanley
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Ecosystem Marketplace, a project of the non-profit organization Forest Trends, is a leading source of information on environmental markets and payments for ecosystem services. Our publicly available information sources include annual reports, quantitative market tracking, weekly articles, daily news and news briefs designed for different payments for ecosystem services stakeholders. We believe that by providing solid and trustworthy information on prices, regulation, science and other market-relevant issues, we can help payments for ecosystem services and incentives for reducing pollution become a fundamental part of our economic and environmental systems, helping make the priceless valuable.

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Executive Summary

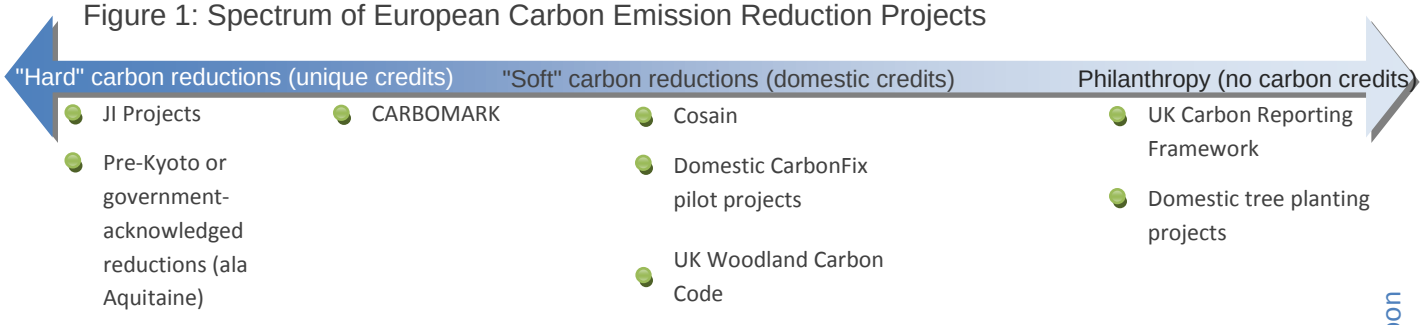
Over time, European buyers have purchased the largest volume of voluntary carbon credits from non-domestic projects of any region in the world. However, the volume of credits transacted *from* voluntary emission reductions projects based in Europe is currently less than 2% of global market share.

This imbalance is due to European countries' regulation of greenhouse gases. All European countries have national emissions reduction targets that they pursue through the Kyoto Protocol's international cap and trade markets. Because these targets are enforced at a country level, most domestic Co_2 reductions only help the country to meet its target – and would have occurred with or without voluntary action.

When any project reduces emissions in a regulated sector, that's less Co_2 the government is ultimately liable to reduce. Because the government no longer needs allowances to "cover" the tonnes that were voluntarily reduced, it can also sell the excess permits to other Co_2 intensive countries. So, voluntary carbon credits are potentially monetized twice – sold once as voluntary reductions and again as permits.

Avoiding "double counting" is a prerequisite for generating genuine and unique emissions reductions – hence the small number of EU-based projects. But programs are emerging in Europe to meet demand for domestic projects head-on. This report examines five such programs' motivations and approaches.

Figure 1: Spectrum of European Carbon Emission Reduction Projects



Each of the domestic programs in this report sprang from EU corporates' desire to turn their investments to domestic projects given the region's current economic crisis. They also mirror domestic buyers worldwide in their preference for projects with which they and their employees can actively engage.

However, the double counting challenge still exists as long as voluntary projects sit beneath the Kyoto or EU ETS cap. The five programs in question address double counting from a variety of angles – like securing government sign-off to generate unique reductions; accepting that the reductions only contribute to attainment of the national target and selling them "as is"; or philanthropic lump-sum contributions to emission reduction projects that do not deliver carbon credits.

For projects in Europe's land-based sectors, the expiration of the first Kyoto commitment period – and current lack of a successor regime – could enable genuine offsets from domestic forestry and land use activities after 2012. This will depend on whether or not nations will continue to include forest carbon activities in their national EU ETS accounts as currently included under Kyoto Protocol articles 3.3 and 3.4 – even if there is no longer a Kyoto commitment in place.

For non-forest carbon projects, the EU ETS will extend until 2020 and still limits the type of projects that can occur to those outside of ETS-covered sectors. For voluntary efforts that fall under the EU ETS cap, the traditional double counting limitations apply.

Addressing projects of this type will require a reevaluation of how standards and registries treat double counted domestic reductions, and consideration of alternative (i.e. non-carbon-based) metrics to account for domestic corporate social responsibility projects.

I. Introduction

GLOSSARY

AAU: Assigned Amount Unit
CDM Clean Development Mechanism
ERU: Emission Reduction Unit
EU ETS: European Emissions Trading Scheme
IFM: Improved Forest Management
JI: Joint Implementation
LULUCF: Land Use or Land Use Change and Forestry
RMU: Removal Unit
VCS: Verified Carbon Standard

European voluntary carbon offset buyers – you thought you knew them. They faithfully purchase the largest proportion of the world's carbon offsets. They're first in line to grab credits from cutting-edge projects.

And over the years, their investments have sustained year-on-year growth in voluntary market activity, seemingly unfazed by the absence of projects that are able to generate credits locally.

But as regional economic woes converge with the end of Kyoto commitments, Europeans are increasingly looking to programs that boost green growth at home. Add to that the mounting pressure from multinational corporations to green their supply chains and you have a perfect recipe for both new demand and supply.

But wait – there's a catch. Until Kyoto Protocol participants officially mark the end of (or a gap in) the international emissions trading program at its core, most European countries still operate under pre-existing commitments to reduce or offset the majority of their emissions. Beneath that, there's the European Emissions Trading Scheme's (EU ETS) cap on power generation and various other sector emissions.

As long as long as these super- and sub-commitments exist, it's fairly difficult to design projects that target emissions that someone, somewhere has not already committed to reduce.

Now add to that the voluntary carbon market's criteria that emission reductions should be "real, unique, additional, permanent, and verifiable." To this end, the market pursues accountability through third-party standards and registries to prevent one reduction from being sold to or claimed by multiple parties ("double counted") – be they person, government or firm.

Hence why in 2010, European projects generated a scant 2% of all credits transacted worldwide.[1] It's just too hard, confusing and/or expensive to operate under all those regulatory layers.

That's not stopping a growing number of voluntary projects across Europe from trying. Projects in France may have finally found a way to bring the VCS standard to their forests. Others like Italy's CARBOMARK[2] program hope they've skirted the issue of country-level emissions accounting. Still others, through the Irish platform Cosain[3] and CarbonFix Standard[4], are helping countries meet their domestic targets, even if it means generating credits that are only domestically viable.

Of course there are concerns that without adequate transparency, these EU programs could cause more confusion than good in a region where offset scandals seem fixed in the spotlight. But nothing lasts forever. In a little over a year, some sectors currently regulated under Kyoto may be free game for project developers if nations can't agree on a post-Kyoto framework. As a result, forest carbon programs

[1] *Back to the Future: State of the Voluntary Carbon Markets 2011*. Ecosystem Marketplace and Bloomberg New Energy Finance: http://www.ecosystemmarketplace.com/reports/SOVCM2011

[2] Official website: www.carbomark.org

[3] Official website: www.cosain.ie

[4] Official website: www.carbonfix.info

that are now pushing the envelope for what's considered a "carbon credit" *could* soon be legitimate early movers in the most moneyed domestic carbon market in the world.

In the mean time, this paper explores how five European approaches have been designed – and why – and what they mean for registries, standards and buyers.

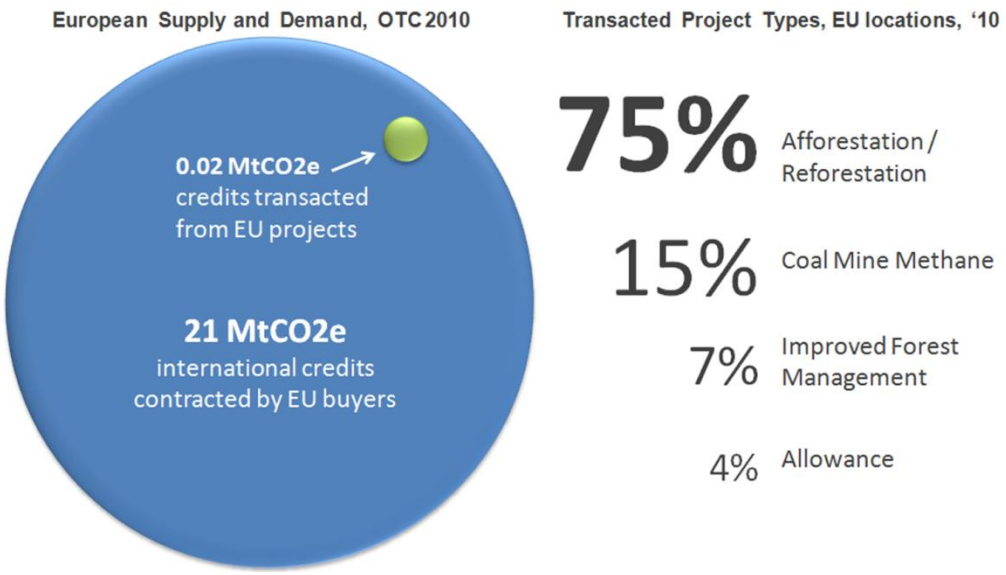
II. EU Emissions Caps: double trouble

It's not easy being greener in the most Co_2-conscious region in the world. This is one reason why EU buyers have traditionally looked outside the region for their reductions. But Lucio Brotto, researcher for a market "observatory" established at Italy's University of Padova with the Ministry of Agriculture, Food and Forestry says the international sell actually isn't that straightforward.

"We are struggling to convince customers that they *don't* have to invest locally to have an impact," Brotto says of the region where his observatory's annual market report tracked 33% of all investments going to domestic projects from 2002-2009[5].

"But at the same time we have private sector actors selling Italian afforestation/reforestation credits while they're also being accounted for in the national target," he explains. "The majority of them don't understand."

Figure 1: Credits Transacted From European Projects vs. Contracted by European Buyers, OTC 2010



SOURCE: Back to the Future: State of the Voluntary Carbon Markets 2011. Ecosystem Marketplace, Bloomberg New Energy Finance

This isn't hard to imagine. Rocket science looks like a walk in Regents Park compared to sussing out "double counted" carbon reductions in the EU. Even after 5 years of relatively steady voluntary market growth, actors like the Verified Carbon Standard (VCS) and the CarbonFix Standard (CFS) have only seriously aired the topic in the last 18 months.

[5] Pettenella, D., L.Brotto, L.Ciccarese, V.Giulietti, P.Mori, L.Perugini, R. Romano (2011) *Gli accordi volontari per la compensazione della CO2. Indagine conoscitiva per il settore forestale in Italia*. INEA, Quaderno 2, Osservatorio Foreste-Compagnia delle Foreste, 2011, p. 237

So before investigating emerging approaches to domestic voluntary projects, here's a brief explanation of double counting for readers whose first language isn't carbon (see also Box 1):

Through the Kyoto Protocol, thirty seven industrialized nations – mostly in Europe – have committed to reduce their emissions by around 5 percent through 2012. These countries are allocated permits called Assigned Amount Units (AAUs), each representing the right to emit one tonne of Co_2.

Countries monitor and report their progress annually, tracking emissions from almost all sectors including some land use and land use change emissions (LULUCF). Countries with more AAUs than they need to "cover" their emissions can sell them to countries that are short.

They can also offset their emissions with credits from developing country projects through the Clean Development Mechanism (CDM) or projects financed in other developed nations through Joint Implementation (JI).

Or, under Kyoto's Article 3.4., they can opt to include in their accounts emissions and sequestration from the management of forests[6] – earning Removal Units (RMUs) for a predetermined volume of managed forest carbon stocks.

And then enter the European solution to managing regional compliance – the EU ETS. While the Kyoto program will suffer an undecided fate post-2012, the EU ETS is committed to a third trading phase from 2013-2020. Between the EU ETS and its Kyoto parent, hardly a pound of Co_2 evades European national carbon inventories.

Box 1: Out for the Count

A breakdown of the various ways credits can be double counted:

Double monetization (focus of this report) A voluntary reduction made within a capped sector "frees up" an allowance that can then cover additional domestic pollution *or* be sold to another country to cover its domestic pollution

Double claiming (could result from developing countries taking on national targets) Developing Country X makes a CO2 reduction under the CDM (generating a CER credit) *and* claims the reduction against its national target. *And then* Developed Country Y buys same CER to cover its domestic emissions; claims attainment of national target

Double selling A voluntary reduction is verified to two different standards (i.e. VCS and Gold Standard) and sells the same reduction twice, *or* a singular reduction is sold to multiple buyers.

Here's the challenge to voluntary carbon offset projects: in order for companies to pursue carbon neutrality through the use of offsets, those offsets must represent real, unique emissions reductions. Specifically, no other party should claim or monetize the same reduction twice.

Any voluntary emission reduction that's accounted for in a national accounting system under Kyoto is one less tonne that the national government is ultimately responsible for. This makes room for another Co_2 emission elsewhere and "frees up" an AAU that the government can then sell to another country to cover *its* surplus emissions.

So one tonne may have been reduced domestically, but could enable Co_2 emissions elsewhere. This catch applies to any reduction in a capped sector – even if a company chooses to reduce emissions internally (e.g. improving energy efficiency) instead of purchasing offsets.

Reductions that generate carbon offsets are eventually sold, however, and in the case of domestic reductions are potentially sold twice – once as offsets and again as AAUs.

Does this take away the incentive to try to reduce emissions if you're an individual, small to medium sized or "uncapped" entity? Perhaps. But governments with emissions targets argue that the domestic policy is designed to address almost all national emissions without asking more of consumers who already bear the pass-through costs of compliance. International offsets are available for those that want to do more.

[6] Other LULUCF activities like reforestation are dealt with under Article 3.3, but this report focuses on forest management.

Proponents of international projects (and critics of double counting) say that the project location – be it Italy or India – comes second to ensuring genuine Co_2 impacts. And given the diffuse (i.e. global) nature of atmospheric Co_2, "where" a reduction occurs technically doesn't matter.

Technically, no. But designers of some new European programs discussed below would argue that "where" is everything. Here's why and how.

Figure2: Carbon Reduction Project and Program Locations, Europe 2011

SOURCE: Back to the Future: State of the Voluntary Carbon Markets 2011. Ecosystem Marketplace, Bloomberg New Energy Finance

III. France: DNA gives life to projects

Let's start with most generally accepted approach to European domestic offsetting – JI projects. As a Kyoto Protocol "flexibility mechanism," they fit within the regulatory framework with relative ease and transparency. Though primarily used for compliance purposes, voluntary actors also transact credits from JI projects (labeled ERUs).

"Currently, the only kind of offsets that can be generated domestically are ERUs," explains CDC Climat's Offset Research Unit Manager Valentin Bellassen. "In France, the thinking was that if we have nice JI projects, maybe they would sell for a *nicer* price in the voluntary market than in the Kyoto market."

Regarding any voluntary price premium for domestic ERUs, Bellassen contemplates, "I think it's an issue of avoiding double counting plus strong demand in the French voluntary market for local projects."

"Businesses want to purchase offsets that cater to local customers or their employees," he says, "and the marketing of the project is better if they can easily bring their customers to the project site."

France has been a proactive JI project host, home to 17 operational projects. Programs like Cosain say they paid close attention to this French approach when designing their own initiative.

More recently, though, France has been a thought leader on the forest carbon frontier. Recent activism revolves around its vast annual sequestration from managed forests (80 Mt Co_2e in 2007) – compared to

the small volume of these Co_2 removals that can actually be credited with RMUs (capped at 3.2 Mt Co_2e/year).

From a national compliance standpoint, there's little incentive to mind forest management beyond the small percentage that can receive RMUs to offset other emissions in the country's accounts. But some voluntary market programs are looking beyond the ledger to find additional carbon finance for forest abatement.

Consider the French region of Aquitaine, home to the largest West European forest and victim of the 2009 cyclone Klaus that damaged 200,000 ha. To fund restoration efforts, the region launched the Aquitaine Carbon Association on May 16, 2011, with partners Caisse des Depots, the National Forestry Commission and Regional Center of Forest Owners. Their aim? To investigate the regional project's potential for VCS certification.

Due to double counting concerns, the EU has traditionally been considered a "no-go" area for new VCS projects. But at the behest of CDC Climat and others, VCS Version 3[7] clarifies the standard's position on projects located in "capped" countries or regions.

Simply put, projects must provide documentation clearly stating that the project activity is not included in UNFCCC or any other compliance accounts.

"We typically think that if it's a European country, everything is covered – but not everything is included in the UNFCCC accounts, looking particularly at some LULUCF activities," says VCS Director of Program Development Jerry Seager. "Projects just need to make that clear to us."

In Aquitaine, additional voluntary reductions are unlikely to be issued RMUs, owing to the already large national surplus of managed forest sequestration. Because projects of this kind effectively take place outside of its UNFCCC accounts, in May 2010 France's General Director of Energy and Climate Pierre-Franck Chevet issued a written certificate to this effect (Addendum A).

The project is now *en route* to writing a methodology to submit to the VCS methodology approval process.

The VCS has proven flexible when it comes to other situations, too, when the Kyoto accounts don't necessarily equate to additional reductions. In Canada for example, a "lack of political will" at the national level has sent the country so far adrift of its Kyoto targets that, under international trading rules, it can no longer trade AAUs or compliance offsets.

As a result, in 2009 the VCS lifted its double counting restriction in Canada – specifically stating that credits transacted from Canadian projects are not required to cancel an equal number of AAUs in order to achieve legitimate reductions.[8]

Some experts argue that the same consideration should be given to some countries in Eastern Europe, where the volume of AAUs is so over-allocated that any voluntary reductions are unlikely to "free up" AAUs that are not already free. Voluntary reductions could be meaningful in this case, but the voluntary carbon market has not engaged these countries due to a blanket concern for double monetization.

[7] See the latest version of the VCS Standard: http://www.v-c-s.org/program-documents/info

[8] More information about the VCS' Canada decision: http://www.v-c-s.org/news-events/news/applicability-section-522-vcs-20071-projects-hosted-canada

IV. Italy: MARK-ing its voluntary territory

Through the regional CARBOMARK program, Italians are taking a different tack to encourage local land-based reductions. Launched in 2010 as a pilot trading program between two regions in Italy (Veneto and Friuli Venezia Giulia), CARBOMARK is taking aim at the same managed forest removals surplus seen in the French example.

But rather than look to VCS for certification, CARBOMARK wrote its own methodologies for four project types – improved forest management (IFM), urban forestry, long-lived wood products and biochar. The methodologies are broadly based on VCS and CarbonFix approaches for IFM and biochar credits, as they try to address issues of permanence, baseline and additionality.

Additionally the project wrote from scratch a new methodology for long lived wood products and the first credits in the market will soon be issued from a pilot project. Currently, there is no intention to submit the methodologies for review under the VCS – instead, CARBOMARK reports that it carried out a consultation with Italian carbon credits experts before approving the methodologies.

Under the IFM methodology, four landowners have so far committed their forest management plans to set aside an additional part of the wood increment currently available for harvest. These credits will be purchased by the 20 regional enterprises that have signed onto the voluntary trading program – composing a full carbon management plan for onsite emissions and making (non-binding) reduction commitments. Companies contractually commit to purchase the local offsets, which can account for up to 20 percent of their reductions.

That CARBOMARK has more buy-in from buyers than suppliers isn't surprising. In reality, the *supply* side of the voluntary carbon market is newer to Europeans than to some developing country landowners.

"We thought that forest land owners or municipalities would be more willing to join the market because at the moment there are no transaction costs," Silvia Stefanelli says of the Friuli Venezia Giulia Region – where her Department of Environement and Energy actually carries out projects on behalf of landowners.

"But it's also true that the forest sector is quite conservative," she continues, "so before making progress on the issue of permanence and making a commitment, it takes a while to convince them to sign on."

That's not the only challenge. Compared to France – where more than half of carbon stored in its managed forest sinks will not be used to meet Kyoto targets (see Addendum A) – Italy's Article 3.4 cap is much higher.

Up to 10.2 $MtCo_2e$ can be credited with RMUs, because managed forests account for most of Italy's forest sinks. In fact, they account for a whopping 24 percent of all European sequestration making use of Articles 3.3. and 3.4. The Italian government relies heavily on forests to attain its Kyoto targets, and for years has been agitating within international climate negotiations to even increase its Article 3.4 cap.

And unlike the French Ministry, the Italian government has not given its stamp of approval for voluntary projects to be credited within its Article 3.4 budget.

Given this, actors that are trying to shape the Italian voluntary carbon marketplace express a very real concern that, even if they try to operate within the same "unused" forest carbon space as their French counterparts, the government may still take credit for voluntary reductions.

In light of this, the CARBOMARK designers have designated Italy's national forest inventory and carbon stocks measurement plan (its Kyoto forest carbon inventories) as "business as usual." They then ask forest owners to set aside an additional part of their increment and not to use its entire yield, so that it's (hopefully) not accounted for at the national level.

But given claims that the state doesn't offer much formal guidance to forest owners for their forest management activities in the first place, will this work?

"It is still a grey area of interpretation, yes," Stefanelli says, but reiterates, "In our forest management methodology, we deduct what's taken into account in national inventories and say, 'ok that's the baseline. We are in fact doing something more.'"

"The permanence and baseline tests are strict and, we reckon, credible," she adds.

Double counting questions have not fazed the 20 companies that have so far signed on to the program – including Italian furniture makers Moroso and appliance manufacturer Electrolux. And Stefanelli says that while their investments are domestic, their motivations extend far beyond Italian borders.

"Several of the companies are trading with partners in Australia and California, that ask them what kind of climate change commitments they've adopted," she explains. "This was behind their motivation to join this market. It's not only about branding and the image – there's something more."

She anticipates that the program will see its first transactions before the end of 2011, which will be tracked in an internal registry managed by the observatory. Depending on the number and volume of transactions, CARBOMARK may in the future connect with a third-party registry.

V. The Netherlands: forests first

The next category of European carbon projects (termed "soft" carbon reductions) does monetize reductions as carbon credits – that are most certainly double counted.

And they don't care.

Their motivation is clear. Looking at the Kyoto marketplace from a national perspective, fuel switching is the same as converting to CFLs is the same buying international offsets. A reduction is a reduction at the level of a national accounting framework.

But there's more to carbon reduction projects than just Co_2. Carbon mitigation projects around the world additionally restore scenic beauty, reforest damaged landscapes, install clean energy in schools, create jobs, fund healthcare programs, protect habitats and watersheds and raise carbon consciousness.

In the thick of Europe's gross economic and employment crisis, Europeans are increasingly asking themselves, "How can we leverage those benefits here?"

Indeed, they're trying, but implementing truly unique reductions as in the French example requires a special set of circumstances and government engagement for which there's no guarantee.

So some domestic actors are exploring the next best thing – projects that help the nation meet its target (and so free up AAUs for use elsewhere) but, more importantly to them, confer the local benefits they're seeking. And they're using the voluntary carbon market's existing tools and knowledge to do so.

For example, earlier this year the Dutch National Fund for Rural Areas (*Groenfonds*) – a fund established by the Dutch government to increase forested area in the Netherlands – selected the CarbonFix Standard to generate domestic afforestation certificates. Returns from the sale of the certificates will pay farmers to set aside and forest part of their land, incentivizing conservation in a European country with a surprisingly high deforestation rate.

Under the current Standard,[9] sellers can assign Co_2 certificates generated in capped countries to buyers from the same country – if they explicitly consent in the purchase agreement to following statement:

> "I am aware that this project is part of a national or pan-national scheme which is accounting the same Co_2-fixation that I am purchasing with this contract in order to achieve its national reduction target. I am aware that this may have the effect that other companies within the project's host country have to reduce less Co_2, as the project contributes to the reduction target of this scheme."

This kind of arrangement poses more than a few challenges. First, how does CarbonFix ensure that the buyer actually "got" the message behind the above statement and doesn't attempt to make carbon neutral claims on the investment?

Says Pieter van Midwoud, CarbonFix Executive Secretary, "We are of course not at the table with the project developer and potential buyer to emphasize the importance of every word."

"But what we can do," he continues, "is to make sure that they have the right kind of contract that communicates clearly what they are buying."

Related to that is the challenge of enforcing a short chain of custody for the certificates that only extends from the project developer to the consenting (and domestic!) buyer – to make sure that "buyer zero" doesn't pass the quasi-offsets into the international market.

Here, van Midwoud reiterates the important role of registries (in this case, Markit), where CarbonFix can confirm the one-off transfer and immediate retirement of the Dutch certificates, either in the project developer's or buyer's account.

So why go to so much trouble for what, in the end, amounts to a non-offset-based donation to fund conservation activities? "To put it simply, the carbon is not additional but the forest is," says van Midwoud, "and our aim is to create more forested areas that would not have happened otherwise."

"As long as it is clear and transparent what you're selling, we're happy to provide modalities to that."

CarbonFix is not the first third-party standard to allow for European domestic projects with caveats. The VER+ Standard – an early standard less utilized in recent years – has a similar domestic-buyer-only provision for offsets generated under a cap in the most recent version of the standard.

As of its most recent update, the CarbonFix Standard also enables project developers to use a "basket approach." Instead of obtaining this written consent from the buyer, sellers can bundle European certificates with non-double-counted credits (i.e. from outside the EU) and sell them as one unit. Such an approach is more costly but also ensures that a *unique* reduction occurs – somewhere.

[9] See the latest version of the CarbonFix Standard: http://www.carbonfix.info/CarbonFix-Standard.html

VI. Ireland: putting on the green jersey

Following closely on the heels of the CarbonFix approach is the Cosain platform – a voluntary Co_2 trading platform founded by and for the Emerald Isle.

In May 2011, the platform went live under the first license agreement with the Carbon Trade Exchange (CTX). While Cosain offers all the same international credits as can be found on its parent exchange, Cosain founder Niall McManus says Irish buyers smile on domestic reductions.

"When we're talking to people, they really only want to talk to us when we talk about Irish credits," Niall admits. "It's not that there's any issue with foreign credits, but for us it's an issue of what we call 'putting on the green jersey.' Supporting everything these credits are about at an Irish level."

But again, the catch is having something domestic to sell.

After determining that most other third-party standards didn't sit well with Cosain's simple aim of doing good domestically, McManus went with the mother of many third-party standards – ISO 14064. It didn't hurt that the ISO standard is policy/program neutral.

Once they had a standard, Cosain obtained the resources for 30 independent consultants nation-wide to become ISO certified. It also got the nod from registry TZ1 to list Cosain credits. That agreement was honored by Markit when it acquired TZ1 in 2009. After then linking up with CTX earlier this year, Cosain traded the first Irish credits from a wind installation that were purchased by a hotel in Cork.

Like some other "soft" EU carbon programs, Cosain's domestic projects are deep in the double counting woods. But its creativity in conferring local benefits "beyond carbon" can't be ignored.

In addition to projects that incentivize process change (like renewables installations), Cosain has a method for crediting community-wide behavior change. Looking to land use, the Irish Heritage Council also approached the platform to leverage carbon finance for conservation efforts given the challenging economic environment.

Cosain is now exploring the potential of high nature value farming, promoted by the Council and others for conservation reasons, as a domestic example/pilot project. It's also investigating the possibility of adapting the Oregon-based Willamette Partnership's approach to wetlands conservation. McManus estimates the model is 90 percent applicable to Ireland's wetland areas – an absence of beavers withstanding.

Whatever the local benefits may be, one challenge remains – to ensure that what happens in Ireland stays in Ireland. Again, the Markit registry will be relied upon to track transfers and retirements to prevent Cosain credit exports.

V. The United Kingdom: projects for projects' sake

The UK Carbon Reporting Framework (UK CRF) brings into stark relief the above arguments that the "reductions may have happened anyway, but not the project."

At the purely philanthropic end of the EU voluntary carbon spectrum, this framework softly addresses carbon reductions – but with a hard focus on UK-based charity for carbon reduction projects.

Developed by BRE with partners Forum for the Future, British Airways and Deloitte, the UK CRF launched in late summer with a database of (currently, 26) local projects in need of a monetary kick-start and a handful of carbon accounting methodologies.

The methodologies developed by BRE currently extend to renewable energy generation – used by 9 out of 10 CRF projects – energy efficiency for multiple dwellings or schools and woodland projects adhering to the UK Forestry Commission's Woodland Carbon Code.

The UK CRF is yet another recent approach to meeting the country-centric demands of domestic buyers. BRE's John d'Este-Hoare explains that the UK CRF emerged from a study funded by the BRE Trust that found a present (and presently large) demand among UK corporates to put their money where their home office is.

"Our findings told us that UK corporates wanted a reduction strategy that went beyond financial support," he recalls, "something they can get involved with that resonates with their customers and supply chain."

Respondents also wanted an easier way to identify projects and their attributes – both their carbon and social impacts. Rather than go the route of Cosain or CarbonFix and rely on existing market mechanisms, BRE and partners took a simpler path.

One without any carbon credits at all.

Instead, the UK CRF's methodologies determine the potential carbon benefits the project might deliver if implemented as designed. The project's eventual achievement of the estimated reductions is not verified.

When corporates search the UK CRF website and land on a project they want to support, they do so by contacting BRE, which connects their support directly with the project. The investment is made on a lump sum donation basis and not according to a per-tCo_2e price.

That there's no Co_2 price, no verification, no additionality assessments and no credits would indicate that carbon is a small part of the story. But UK-based offset suppliers are concerned that the projects' carbon reduction components might lure current offset buyers away from unique, verified emission reductions.

This was the case with British Airways, an original program partner that ended its customer offset program in favour of backing its new One Destination Carbon Fund with UK CRC investments.

Still, d'Este-Hoare and even some actors in the offset community believe that the UK CRF and genuine offsetting are not mutually exclusive. Corporates with carbon neutral targets must keep some cash in conventional offsetting due to their inability to make carbon claims on the UK CRF contributions – or any other domestic program's double counted reductions.

Even BRE itself has a foot in both camps, also operating the offset charity PURE: the Clean Planet Trust.

More pointed concerns revolve around the UK CRF's recognition of UK Woodland Carbon Code projects. The Woodland Carbon Code sets best practice for UK forest management through a domestic forestry standard based on offset mechanisms like the VCS. Its project developers also sell carbon sequestration on a per-tonne basis to notable buyers like Marks and Spencer.

Like other previously discussed domestic forestry programs, The Woodland Carbon Code website states that any tonnes generated by use of the code's project standard cannot be traded internationally – because they clearly contribute to the UK's national Kyoto inventory.

Where this differs from projects like the CarbonFix pilot is in the fact that, as of May 2011, DEFRA's corporate reporting guidelines enable UK companies to report the net carbon sequestration from their Woodland project investments against their corporate emissions.[10]

The UK CRF promotes all of these attributes – including the DEFRA decision – as bonus features of the woodland projects, though only one of these projects has so far made the map.[11]

D'Este-Hoare also expects the same level of recognition could be credited to other project types within the UK CRF. "I do think that in time it may come to pass that organizations can support reductions within their supply chain here in the UK and get credit for that," he predicts.

Since its launch – and as anticipated in its research – BRE reports marked interest from UK companies interested in the projects. In addition to founder British Airways, d'Este-Hoare says BRE has also been in talks with companies in the automobile industry, financial sector, utilities and retailers, among others.

"The framework hits the nail on the head regarding marketing and CSR," he says. "As a result, lots of customer facing and brand oriented organizations are looking to it."

VI. Discussion: bringing it home

From a review of this handful of better-known European projects, programs and standards – and we're sure there are more – a few important questions are left to be answered.

Is double counting really so bad if it contributes to national emissions reductions?

Perhaps you're thinking, "Well, domestic projects reduce emissions while enabling someone else to pollute under the national cap. International (uncapped) offsets also reduce emissions while enabling someone else to emit one more tonne of carbon and claim neutrality – what's the difference, really?"

The difference is that without carbon finance, the reduction in the uncapped country would not have happened otherwise.

If the European reduction *within a capped sector* had not happened, polluters – and ultimately the government – would have been liable to ensure that it does. The reduction, though perhaps not the project itself, would have happened anyway.

But even if the carbon reduction is not additional, in some cases the local actions are. And for the positive impacts they have on communities and conservation efforts, they may be worthwhile endeavors.

"Just don't call them offsets."

When BRE launched the UK CRF earlier this year, this quippy phrase echoed throughout the environmental community's coverage of the program. While reports carefully drew a distinction between genuine offsets and the UK CRF projects' reductions, none dared to question whether the UK CRF could rightfully bill project benefits in terms of carbon reduced in the first place.

But this question applies to any program operating within capped sectors that seeks to finance reductions that would have occurred without the project.

[10] See guidelines for reporting from the Woodland Carbon Code website: http://www.forestry.gov.uk/forestry/infd-8j3r2h
[11] See UK CRF map of projects/project locations: http://www.ukcarbonreporting.org/map.jsp?id=17

Is Co_2 mitigation the most transparent and honest way to communicate these projects' impacts? For now, at least, it seems to be the only way.

Are existing systems within the voluntary carbon market appropriate (and appropriately equipped) to address these types of projects?

This leads to a much deeper question about the role that non-carbon benefits ("co-benefits") play in attracting CSR buyers to voluntary projects.

Internationally and over the years, project developers have quantified positive project impacts like food security, poverty alleviation, employment and habitat preservation alongside projects' Co_2 impacts. Credits conferring these kinds of co-benefits, particularly from developing country locations, typically command a price premium that Europeans in particular have been willing to pay.

Now that the European private sector is increasingly supplementing troubled governments' roles in financing domestic sustainability and conservation, they're seeking to apply these same benefits to national conditions.

The problem is that the co-benefits they want to support are inextricably linked with carbon reductions – which are in most cases redundant in the European setting.

But what's the alternative?

After all, carbon credits come in a neat per-tonne package for which project developers have made the co-benefits case, verifiers have (in most cases) validated the projects and verified reductions, which are then serialized for uniqueness and sold. The evaluation of outputs and outcomes is ready-made.

"Maybe these programs are coming about now because the voluntary market has a pretty well established system to piggy back off of," suggests Seager.

Indeed, offset suppliers point out that from a corporate CSR perspective, measuring and reporting the per-tonne impacts of an investment is by now more efficient and cost-effective than establishing an internal review to quantify the results of corporate community or conservation philanthropy, *sans* carbon.

One interviewee for the *State of the Voluntary Carbon Markets* report mused, "Maybe carbon isn't the right lens for looking at these benefits, but is there a unit of '3rd grader environmental consciousness' that can be measured per dollar invested, in the same way as a tonne of carbon?"

Even sophisticated co-benefits certification schemes like the Climate, Community and Biodiversity Association's Standards couch these benefits according to the integrity they add to a tonne of carbon. And they, too, don't allow activities to occur in countries with jurisdiction-wide emissions caps.

Of course, as marketplaces emerge for crediting ecosystem services like water quality and quantity and species banking (see efforts like the Willamette Partnership[12]), finding and funding domestic non-carbon ecosystem assets may become less of a challenge.

[12] More information about the Willamette Partnership's Ecosystem Credit Accounting: http://willamettepartnership.org/ecosystem-credit-accounting

Still remaining is the question of whether and how projects could/should measure and monetize community benefits like sustainability and energy independence, job creation, scenic beauty, carbon consciousness – according to units other than carbon.

But as long as "Co_2 reduced or avoided" is the next best unit of measurement, it's likely that EU corporates will continue to rely on carbon reduction projects to confer co-benefits in a systematic way.

If this is the case, can the limitations of these projects be clearly communicated and enforced? And if they continue to gain traction, is it the responsibility of project developers or the voluntary carbon market infrastructure (standards, registries) to differentiate these credits from offsets in order to: A) track them and B) mitigate buyer confusion?

What becomes of these efforts if there's a gap between the Kyoto Protocol and a successor regime (or no new regime at all)?

For Europe's land-based projects, this may not be an issue for long. In a little over a year, the Kyoto Protocol will expire. If nations *do* extend the Protocol to a second compliance period, European nations may no longer be allowed to voluntarily include or omit emissions from LULUCF activities like forest management.

At the UNFCCC's 16th Conference of Parties held last year in Cancun, Mexico, climate negotiators agreed that developed country participants will submit forest management reference levels to the Secretariat – as a possible first step to capping any emissions from this source.

If nations *don't* extend the scheme or if there's a gap in international trading as we know it (one or the other scenario is likely) land-based activities like forest management that were once included in some national accounting frameworks could be fair game for project development until or unless a new framework is in place.

The EU ETS, however, will continue to operate in a third phase through 2020. It remains to be seen whether or not nations will continue to include forest carbon activities in their national EU ETS accounts as currently included under Kyoto Protocol articles 3.3 and 3.4 – even if there is no longer a Kyoto commitment in place.

Under current Kyoto rules, once a nation "opts in" to include managed forests in its national accounts, it is required to do so for every subsequent commitment period. But if the only commitment that remains is the EU ETS, will nations continue to count all types of forestry in the sum total of their national emissions?

For nations that face a long-term decline in forest cover and sequestration, there could be a disincentive to do so – but the rules have not yet been discussed or defined within the framework of international to regional negotiations and remain a big question.

While forestry remains in question under the EU ETS, CO_2 emissions from energy generation, combustion plants, oil refineries, iron and steel works, airline emissions and some factory operations will continue to engage in international allowance and offset trading.

All of the double counting restrictions that apply to AAUs also adhere to internationally traded EU ETS allowances (EUAs) and so the same challenges remain for voluntary projects within these sectors.

What are the implications for the voluntary carbon marketplace?

Presently, the chief concern of voluntary carbon offset suppliers is that corporate interest in EU-based voluntary carbon reduction projects will draw CSR resources away from truly unique, non-double-counted offsets.

EU-based suppliers like the CarbonNeutral Company's Jonathan Shopley are keeping an eye on government agencies that reward domestic initiatives – like DEFRA's decision allowing corporates to count the estimated reductions from woodlands projects against emissions in their annual Co_2 reporting.

"When this kind of program becomes an allowable solution under a government-backed scheme and people give real rewards to those who are investing in these projects, that becomes an issue," he says.

Rather than recognizing these actions as offsets or even reductions, Shopley adds that there are alternative ways to recognize these otherwise worthwhile endeavors – through government tax incentives, grants and subsidies.

For VCS CEO David Antonioli, the concern is one of corporate stewardship – ensuring that corporates understand the environmental benefits of their support. "At the end of the day, I would think everybody would want the CSR dollars that are out there to be used for activities that generate environmental benefits and are accounted for properly."

Speaking to buyers' fixed CSR budgets, he also points out that "if in the future, half of that budget goes to domestic projects, they're certainly not going to spend even *more* on legitimate reductions elsewhere."

Add to that the fact that, even if double counting were not an issue, the climate mitigation effect of reforestation in the northern hemisphere is much less than in tropical forest countries – and the higher costs of domestic projects impact their profitability.

Still, no one in the voluntary carbon market can deny the spell that domestic projects have cast on over EU-based buyers.

"Our customers… believe that they are making a contribution to the environment that wouldn't have happened without them," said Forest Carbon's Steve Prior in an interview with Environmental Leader.[13] Forest Carbon develops and sells credits under the Woodland Carbon Code.

"If they are not allowed to call it an offset, they will still do it anyway."

If European domestic demand is more than a passing phase, the challenge to the voluntary carbon market will be to make domestic projects work within the market's existing rulebook – or perhaps spin off a new chapter that accounts for project benefits beyond carbon in capped countries.

This report only addresses the topic of double monetization in developed countries that have taken on emissions targets through an international regime. In parallel with these developments, currently "uncapped" developing countries around the world are adopting their own emissions reduction targets.

It remains to be seen what measures will be put in place to prevent "double claiming" (see Box 2) in countries that have traditionally approached the marketplace as offset suppliers – but may soon be required to reconcile their conventional project-based approach with a national accounting framework.

[13] More information about the Woodland Carbon Code launch: http://www.environmental-finance.com/news/view/1887

Addendum A

"Certificate of non double counting with respect of the accounting rules for absorption units generated within the framework of Article 3.4"

The Ministry of Ecology, Sustainable Development, Transportation, and Housing recalls that France, under its engagement in Annex B of the Kyoto Protocol, has voluntarily chosen to include forest management activities. The French sink under the forest management activity in Article 3.4 of the Kyoto Protocol is approximately 78.2 $MtCo_2e$ for 2008. However, the use of emission reductions obtained under forest management activities (Article 3.4 of the Kyoto Protocol) is subject to specific constraints, the totality of these reductions being unable to add to the quantities attributed/issued to France.

Decision 16/CMP.1 of the UNFCCC COP, that acts as a meeting of the Parties at the Kyoto Protocol, imposes a double ceiling *["double cap"]* in accounting for emission reductions to meet France's commitments. On the one hand, the transformation of these reductions in absorption units issued to France is capped at 3.2 $MtCo_2e$ per year. This cap was set ex-ante for the whole first engagement period (2008-2012) and based on the inventory of French emissions in 1990. On the other hand, the sink obtained under Article 3.4 of the Kyoto Protocol can be mobilized up to 33 $MtCo_2e$ per year to offset, if any, emissions of Article 3.3 of the Kyoto Protocol in case these activities would generate additional emissions. Thus, for the year 2008, at least 42 $MtCo_2e$ of achieved emission reductions cannot be taken into account for meeting France's commitments.

The Ministry of Ecology, Sustainable Development, Transportation and Housing affirms that it does not value these sequestrated emissions which cannot be used in the Kyoto Protocol framework.

Therefore, there will be no double counting of at least 42 $MtCo_2e$ of emission reductions in respect of the accounting rules for absorption units generated within the framework of Article 3.4. This number must be considered as a low threshold to be adjusted according to the actual annual offset needs under Article 3.3 of the Kyoto Protocol[14]. This value will be re-evaluated every year between 2009 and 2012 according to the evolution of the French inventory.

This document certifying the absence of double counting does not prejudice in any way the additionality of emissions reduction projects submitted to voluntary standards for validation. The additionality of each individual project must be evaluated according to the practices and methodologies specific to the GHG emission reduction voluntary standards. It is also recalled that each standard is responsible for the environmental quality of its projects.

This certificate is valid for reductions generated between January 1st, 2008 and December 31st, 2012.

Pierre-Franck CHEVET, General Director of Energy and Climate

[14] France chose an annual accounting of its emissions under Article 3.3 and 3.4 of the Kyoto Protocol. It thus obtains its absorption units every year, unlike other parties who haven't chosen this option and who will only obtain their absorption units at the end of the Kyoto period.

Addendum B

Figure 3: EUA / AAU Retirement to enable Voluntary Action