



**INSTRUMENT NAME: 4.2 TRANSFER-BASED INSTRUMENTS:  
VOLUNTARY CARBON MARKETS**

**Pondscape-specific definition:** Where a pondscape landowner/manager provides a verified level of an ecosystem service (e.g. carbon sequestration) in return for tradeable certificates, which they can then sell to buyers either bilaterally or through a market. To earn certificates, landowner/managers generally must implement specific methodologies that specify monitoring, reporting, and verification guidelines, alongside other rules. Markets can be voluntary markets (where buyers voluntarily purchase certificates) or compliance markets (where buyers are obligated to purchase certificates to meet regulatory requirements).

**Voluntary carbon markets**<sup>1</sup> occur where landowners/managers (or other actors) voluntarily generate carbon credits by implementing a specific action and methodology to mitigate climate change, e.g. by reducing emissions or sequestering carbon through e.g. tree planting, where each carbon credit is equivalent to a tonne of carbon dioxide mitigation (Climate Focus, 2021). They then sell these certificates to buyers in the voluntary market, who use these to “offset” their own emissions (TSVCM, 2021). Voluntary carbon markets generally establish specific methodologies, which landowners/managers must implement to calculate and earn offset credits (Climate Focus, 2021). Examples of voluntary carbon markets include Verra VCS, Gold Standard, and MoorFutures, among others. Eligible voluntary carbon market activities include, e.g., afforestation, rewetting peatlands, among others.<sup>2</sup>

<b>CATEGORY</b>	Tradable rights/permits and payments for ecosystem services			
<b>ALSO-KNOWN-AS</b>				
<b>RELATED INSTRUMENTS</b>	Biodiversity offsets; habitat banking; voluntary beneficiary contribution; water quality trading systems			
<b>APPROPRIATE FOR:</b> Who can use this type of financing instrument?	<b>Pondscape developer</b>	<b>NGOs and non-profits</b>	Local/city/ regional govt. and agencies	National govt. and public agencies
<b>SOURCE OF FINANCE:</b> Who provides the finance?	Any actor who wants to voluntarily fund climate mitigation, e.g. a corporation with net zero targets, an individual offsetting their own emissions, etc.			
<b>PAYMENT FORM:</b> What form is the payment?	Carbon credit or certificate that is equivalent to 1t of carbon dioxide mitigated, which can then be sold for cash.			
<b>IN RETURN FOR WHAT?</b> What is the NBS project obliged to deliver in return?	Ecosystem-service provision - climate mitigation, as demonstrated by implementing the voluntary carbon market methodology and following their rules.			
<b>RECIPIENT REQUIREMENTS:</b> What requirements must recipients meet to receive finance?	Any landowner can participate. Some voluntary carbon markets have eligibility requirements; these will differ across different voluntary carbon markets.			
<b>PROJECT REQUIREMENTS:</b> What requirements must the pondscape project meet?	Only projects with activities that are eligible for the voluntary carbon market will be acceptable (e.g. peatland rewetting, afforestation, etc). The project must implement activities in line with the voluntary carbon market methodology, which will include specific instructions for calculating and monitoring the mitigation impact, verifying and validating impacts, among other rules. This can be complex and costly for NbS providers.			
<b>OTHER REQUIREMENTS:</b> What additional requirements are attached to the financing?	<ul style="list-style-type: none"> <li>- Existence of a voluntary carbon market and methodology that is pond-appropriate,</li> <li>- May require technical expertise in voluntary carbon market standards and certification processes.</li> </ul>			

<sup>1</sup> In compliance carbon markets, buyers are regulatorily required by governments to mitigate climate change or to offset their emissions by purchasing carbon credits from others. An example is the European Emissions Trading Scheme. We do not discuss compliance carbon markets in the inventory as they are less likely to be a source of funding for pondscape NBS projects than voluntary markets. This is because compliance markets often focus on reducing industrial emissions (rather than mitigation by incentivizing carbon removals by NbS) and often exclude the land sector.

<sup>2</sup> See for example the different methodologies approved for earning Verra VCS credits: <https://verra.org/methodologies/>





	- Landowners may have to finance the development of the project upfront (and verify results) before receiving offset credits or certificates that they can sell.			
<b>SPEED:</b> How quickly do recipients receive money?	<b>Fast (&lt;4months)</b> – <b>Medium(5-12months)</b> – <b>Slow (12months+)</b>			
<b>FUNDING TIMELINE:</b> When does the recipient receive the funding?	One-off or ongoing. Some PES payments occur only once, while others are structured to provide long-term annual payments for landowners.			
<b>NBS TYPE:</b> What types of NBS is the financing for?	<b>Pondscape creation</b>	<b>Pondscape restoration</b>		<b>Pondscape management</b>
<b>SCALES:</b> What scale of financing?	<b>Small (&lt;€10k)</b>	<b>Medium (€10k-€99k)</b>	<b>Large (€100k-€999k)</b>	<b>Very large (€1million+)</b>
<b>COMPLEXITY:</b> How complex is applying for the finance	<b>Simple</b>		<b>Medium</b>	<b>Complex</b>
<b>EXIST NOW IN EU?</b>	<b>Yes</b>		<b>No</b>	
<b>REFERENCES:</b>	Climate Focus (2021) VCM Primer. <a href="https://vcmprimer.org/">https://vcmprimer.org/</a> TSVCM (2021) Taskforce on Scaling Voluntary Carbon Markets Final Report. <a href="https://www.iif.com/Portals/1/Files/TSVCM_Report.pdf">https://www.iif.com/Portals/1/Files/TSVCM_Report.pdf</a> Verra (2022) Voluntary Carbon Markets (webpage) <a href="https://verra.org/voluntary-carbon-markets/">https://verra.org/voluntary-carbon-markets/</a>			





**Instrument: 4.2 Voluntary carbon market example**

**Example name: 4.2.1 MoorFutures**

**Example description:** MoorFutures is a voluntary carbon market whose methodology mitigates climate change by rewetting peatlands (and thus reducing carbon emissions). It is located in the German states of Schleswig-Holstein, Brandenburg and Mecklenburg Western Pomerania. The programme was established in 2011 by the Ministry for Agriculture, Environment and Consumer Protection of Mecklenburg Western Pomerania. The Ministry acts as an intermediary body and guarantees that the projects financed through the MoorFutures will be maintained at least for a period of 30 to 50 years. The projects cover about 140 ha in the three federal states. They provide benefits not only in terms of carbon storage, but also of biodiversity conservation. The programme is financed through a voluntary carbon credit scheme, where private citizens, companies and government bodies can buy carbon offsetting credits that finance the peatland restoration. One carbon credit corresponds to one tonne of saved CO<sub>2</sub>. This is calculated with support from external consultants, who estimate the reduction in carbon emissions in the future due to peatland rewetting. Landowners are required to ensure that carbon storage is permanent through 50+ year contracts. In return, they receive payments sufficient to cover costs, equivalent to between 35 and 67 Euro per certificate (i.e. per tonne of carbon emissions avoided). As of 2021, MoorFutures credits for three of the five projects are already sold out.

NBS DESCRIPTION	
LOCATION	Germany (Schleswig-Holstein, Brandenburg and Mecklenburg-Western Pomerania)
NBS TYPE	Creation <b>Restoration</b> Management
ECOSYSTEM TYPE	Peatland
NBS BENEFITS	Carbon capture and storage, biodiversity conservation
NBS DESCRIPTION	Peatland restoration at five sites: <ol style="list-style-type: none"> <li>Königsmoor (Schleswig-Holstein): 68 ha, ongoing since 2016, 39520 MoorFutures = 39520 t CO<sub>2</sub>e, 53,78 Euro</li> <li>Polder Kieve (Mecklenburg Western Pomerania): 65 ha, ongoing since 2012, 14325 MoorFutures = 14325 t CO<sub>2</sub>e, 35 Euro (sold out)</li> <li>Kamerunwiese (Mecklenburg Western Pomerania), 8 ha, since 2018, 3000 MoorFutures = 3000 t CO<sub>2</sub>e, price unknown (sold out, all credits have been purchased by the Hamburg Ministry of Environment and Energy)</li> <li>Gelliner Bruch (Mecklenburg Western Pomerania), 6,7 ha, since 2017, 5800 MoorFutures = 5800 t CO<sub>2</sub>e, 40 Euro (sold out)</li> <li>Rehwiese (Brandenburg), 9,7 ha, since 2015, 6744 MoorFutures = 6744 t CO<sub>2</sub>e, 67,23 Euro</li> </ol>
SCALE (SIZE)	Ca. 140 ha (four sites in total)
NBS PERFORMANCE CRITERIA	Based upon estimated mitigation (t carbon dioxide equivalent). This is estimated based upon difference between baseline emissions (i.e. current emissions) and emissions after rewetting.
NBS PERFORMANCE	See NbS description cell above for amount of mitigation achieved in each MoorFutures site.
FINANCING DESCRIPTION	
SOURCE OF FINANCING	Carbon credits purchased by private citizens and companies. The main buyers are companies (70% of credits sold), including Engbers, McDonald's, Commerzbank, with the remainder sold to individuals.
RECIPIENT	MoorFutures partner organisations, which implement the peatland restoration (i.e. landowners)
SCALE (FINANCING)	Large: from €90,000- €213,000 per project ( *assuming a price of 30 Euro per MoorFutures credit for the project Kamerunwiese)
TIMELINE	Ongoing restoration depending on the sale of credits, project should be maintained for at least 30-50 years





<b>FINANCING REQUIREMENTS</b>	Not reported
<b>FINANCING PERFORMANCE</b>	Not reported
<b>TRANSACTION COSTS</b>	Not reported
<b>REFERENCE</b>	<p><a href="https://www.moorfutures.de/projekte/">https://www.moorfutures.de/projekte/</a> (last accessed 17/01/2021)</p> <p>Illes, A., Russi, D., Kettunen, M. and Robertson M. (2017) Innovative mechanisms for financing biodiversity conservation: experiences from Europe, final report in the context of the project "Innovative financing mechanisms for biodiversity in Mexico / N°2015/368378". Brussels, Belgium, <a href="https://ieep.eu/uploads/articles/attachments/dcc74b53-6750-4ccd-99b9-dc9e9d659dd4/IFMs_for_biodiversity_EUROPE_Illes_et_al_2017.pdf?v=63664510044">https://ieep.eu/uploads/articles/attachments/dcc74b53-6750-4ccd-99b9-dc9e9d659dd4/IFMs_for_biodiversity_EUROPE_Illes_et_al_2017.pdf?v=63664510044</a></p> <p>McDonald, H.; Bey, N.; Duin, L.; Frelih-Larsen, A.; Maya-Drysdale, L.; Stewart, R.; Pätz, C.; Hornsleth, M.; Heller, C.; Zakkour, P. (2021): Certification of Carbon Removals: Part 2. A review of carbon removal certification mechanisms and methodologies. Prepared for European Commission DG CLIMA under contract no. 40201/2020/836974/SER/CLIMA.C.2 Environment Agency Austria, Wien, Reports, Band 0796. Available at: <a href="https://www.umweltbundesamt.at/fileadmin/site/publikationen/rep0796.pdf">https://www.umweltbundesamt.at/fileadmin/site/publikationen/rep0796.pdf</a>, last accessed 05.07.2022.</p>

