

Québec's method for creating permanent offset credits based on climate benefits resulting from CO₂ removals

As part of Québec's cap-and-trade system, which has been linked to that of California for over 10 years, the Québec government has developed and adopted an innovative method for issuing offset credits for CO_2 removal projects in the land use, land-use change and forestry (LULUCF) sector. This method is flexible and can be applied to all CO_2 removal activities, whatever the sector.

According to the Québec method, the offset credit issued does not anticipate the offsetting of a GHG emission and unconditionally cancels out 100 years of future warming caused by the emission of one tonne of CO₂ equivalent into the atmosphere.

The method aims at ensuring that offset credits cancel out the impact of the emission of a given amount of GHG as soon as they are issued. This method enables offset credits to be generated not only on the basis of the CO₂ removed from the atmosphere, but also on the real and past climate benefits resulting from that removal. Another special feature of this method is that credits can only be issued when the GHG gains meet all the essential elements or criteria of the offset program. The gains must be permanent, real, additional and verifiable.

This distinguishes the Québec method from other methods used in voluntary or regulated carbon markets around the world.

When issuing a credit, adopting the Québec method makes it possible to:



Ensure environmental integrity

- It guarantees the environmental integrity of credits upon delivery, in the spirit of Article 6 of the Paris Agreement.
- It ensures the equivalence between climate benefits resulting from the use of a credit generated from a removal project and climate benefits resulting from the use of a credit generated from a reduction project.
- It scientifically demonstrates the offsetting potential of the credits generated on the basis of the equivalence between the real and past climatic benefit of an atmospheric CO₂ removal and the future climatic impact of a CO₂ emission on radiative forcing, quantified over a 100-year period.





- It significantly reduces the burden of managing the reversibility of sequestered carbon, as it becomes no longer necessary to invalidate and replace credits whose carbon has been returned to the atmosphere, and thus to put in place carbon reversibility mechanisms (buffer pools, insurance, governmental guarantees, etc.).
- It significantly reduces the financial, administrative and operational burden associated with monitoring and accountability obligations as well as the verification of gains by offset credits, as there is no long-term commitment to each atmospheric CO₂ removal.
- It ensures that a project's financial profitability increases over time, as offset credits are issued progressively.



- It respects the sovereignty of the territories involved in a project.
- It combines the temporary nature of carbon storage with a community's need to use the land and its resources.
- It guarantees intergenerational equity in the actions to be taken to tackle climate change.

It should be noted that this method was developed primarily for removal projects resulting in atmospheric gains that are not by definition, permanent, but it can also be used to quantify the gains associated with GHG emission reduction projects more accurately.

For more information on this innovative methodology, visit the following web pages:

Carbon Sequestration
 Through Afforestation or Reforestation on Private Lands



2. Regulation respecting afforestation and reforestation projects eligible for the issuance of offset credits on privately owned land



Questions and requests can also be sent to the following email address: dmc.creditscompensatoires@environnement.gouv.qc.ca

