## MEMO

To:	Jialiang Zhang, AIEMA   Program Manager, VCS program
From:	Martin Clermont, CEO Will
Date:	August 28 <sup>th</sup> 2015
Subject:	Double counting issue for Quebec's first compliance period 2013-2014.

Following our email of July 21<sup>st</sup> concerning double counting issues for GHG reductions related to Quebec's Cap-and-Trade regulation (RSPEDE) and our VCS-929 project, we are pleased to send you the following complementary information regarding Quebec's double counting issue for the first compliance period 2013-2014.

The reduction of GHG emissions associated with Quebec's electricity grid (the grid) for the first compliance period (2013 and 2014) as well as those for the second compliance period beyond 2015 should be considered negligible mainly for the very low CEF associated with the grid and for the limited Hydro Quebec sites which are covered by the RSPEDE. See the detailed explanations in the following two items.

## A) Negligible GHG reductions associated to the Quebec electricity grid

- 1. The first verified monitoring report of our VCS registered Project 929 which covered the period 2010 to 2013 with a sub-total of 10 228 VCU's (for the 2013 year), were verified by a recognized VVB in 2013 and within Quebec's first compliance period.
- 2. Of this sub-total, an estimated 6 VCU's might be considered to be a reduction associated to the grid. This represents less than 0,05% of the verified VCU's for the year 2013 and might be considered as negligible. For integrity purposes and given that the amount of direct electricity offsets can be fairly accurately calculated, the 6 VCUs from the 2013 period would not be claimed.
- 3. Future calculations of post 2012 volumes up to 31<sup>th</sup> December 2019, will exclude grid electricity claims unless the project proponent obtain from **the** Quebec government authority which operate the RSPEDE, a derogation (cancellation) of allowances claims by the Quebec government under the RSPEDE for the same amount of VCU associated with the grid electricity and related to the VCS-929 project.
- 4. References:
  - a. Spread sheet including calculations of the reduction of GHG emissions for 2013 and the portion associated with the grid.
  - *b.* Spread sheet concerning the reductions of GHG emissions related to the grid for the recycling plastics industry.
  - c. US EPA WARM and Plastics; version 2012.
  - d. **<u>RTI International study</u>**, written in 2004, and given as reference by the USEPA WARM

## b) Quebec's electricity grid:

- An in depth analysis of GHG emissions from Hydro Quebec's (HQ) grid might conclude than no GHG emissions are generated from site connected to the HQ grid, (as a unique point of emission) and which are in the same time covered by the RSPEDE.
- 2. The Quebec grid is operated by Hydro Quebec: HERE
- 3. For the first and the second compliance period, a very conservative approach (for rigor and energy integrity) would be to use the official CEF. The official CEF's used for the Quebec electricity grid are those from official government documentation which today is 2,04 grams of CO<sub>2</sub>e./kwh.
- 4. In 2013, only 2 Hydro Quebec official sites are regulated and covered by the first Quebec compliance period with more than 25 000 tm of GHG emissions.

- One of these two sites is off grid. This thermal power plant with 128 512 t of GHG emissions in 2013 is dedicated to generate and serve its electricity to an offshore area; <u>the</u> <u>Madeleine Islands</u>, which is located in the <u>Gulf of St. Lawrence</u> with a population of around 13 000 people, <u>or about 0,16% of Quebec's total population.</u>
- b. Of the total of 220 098 t of GHG's generated by HQ's thermal operation, only 4 845 t of GHG emissions (2,2%) were <u>connected to the grid</u> (page 19 of the HQ sustainability report 2013)). The site covered by RSPEDE, is off grid, and is located in <u>the Madeleine Islands</u> and produces over 58% of all GHG's related to thermal production.
- c. The second HQ official site, with 291 919 t of GHG emissions, covered by the RSPEDE for 2013 is related to the entire HQ network and <u>is not associated with a unique site (point of emission)</u>. These 291 919 t of GHG emissions are associated with:
  - i. Electricity imports from outside of Quebec's territory (from thermal sources),
  - ii. Losses of insulating gases (SF6 and CF4), mainly linked with the operation of the transmission grid.
- d. The 2013 combined GHG emissions covered by the RSPEDE is less than 420 000 t of GHG's which represents:
  - i. less than 0,5% of Quebec's GHG' s total inventory
  - ii. Less than 2,3% of all GHG emissions covered by the first compliance period.

## 2. References:

- a. Hydro Quebec <u>Sustainability report 2013</u>, page 17-20.
- **b.** List produced by the MDDELCC about the *regulated sites covered by the RSPEDE for 2013*

Martin Court

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