

	<b>Ministry of Energy, Mines and Petroleum Resources</b>  <i>Issued: November 2013</i> <i>Revised: February 2017</i>	Renewable and Low Carbon Fuel Requirements Regulation  <b>Approved GHGenius and Global Warming Potentials</b>  <b>Information Bulletin RLCF-011</b>
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## Background

The Renewable and Low Carbon Fuel Requirements Regulation (Regulation) requires that the carbon intensities for the components of a fuel’s lifecycle must be calculated using an “approved GHGenius”. Section 11.06 of the Regulation provides the Director with the authority to approve the version of GHGenius to be used to calculate the carbon intensity of a fuel supplied in a given compliance period. Section 1 (2) of the Regulation also provides the Director with the authority to identify the global warming potential (GWP) values for greenhouse gas emissions to be used in carbon intensity analyses.

## Approved versions of GHGenius

The Director approves the following versions of GHGenius\* :

Part 3 compliance period	Approved version of GHGenius
July 1, 2013 to December 31, 2014	GHGenius 4.01b
January 1 to December 31, 2015 and subsequent compliance periods	GHGenius 4.03a

GHGenius 4.03 contains significant improvements in the quality of data for the emissions from palm oil feedstock. Also, a review of the carbon intensity for hydroelectricity has determined that there is a higher volume of emissions emitted from hydroelectric reservoirs than previously calculated, resulting in an increase in the carbon intensity of electricity in British Columbia.

## Approved GWP values

The Director approves the GWP values published by the Intergovernmental Panel on Climate Change (IPCC), as follows:

Part 3 compliance period	Approved Global Warming Potential values
July 1, 2013 to December 31, 2014	<ul style="list-style-type: none"> <li>• 100-year GWPs published by the IPCC in 1995</li> </ul>
January 1 to December 31, 2015 and subsequent compliance periods	<ul style="list-style-type: none"> <li>• 100-year GWPs published by the IPCC in 2007, see <a href="#">Table 2.14</a> of the Fourth Assessment Report<sup>†</sup></li> </ul>

The IPCC 100-year GWPs (1995 and 2007) of carbon dioxide, methane, nitrous oxide, CFC-12, HFC-134a and sulphur hexafluoride can be accessed within the GHGenius model.

\* The GHGenius model is available for free download at <http://www.ghgenius.ca/>.

† Forster, P., V. Ramaswamy, P. Artaxo, T. Berntsen, R. Betts, D.W. Fahey, J. Haywood, J. Lean, D.C. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz and R. Van Dorland (2007) "Changes in Atmospheric Constituents and in Radiative Forcing". In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.



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### **Need more information?**

Please see the Renewable and Low Carbon Fuel website at <http://gov.bc.ca/lowcarbonfuels> or email us at [lcfr@gov.bc.ca](mailto:lcfr@gov.bc.ca)

This information is for your convenience and guidance only, and does not replace or constitute legal advice. It is recommended that parties who may be a Part 3 Fuel Supplier review the *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act* and the Renewable and Low Carbon Fuel Requirements Regulation seek independent legal advice to confirm their status, legal obligations and opportunities. The *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act* and the Renewable and Low Carbon Fuel Requirements Regulation can be found on the internet at: <http://www.bclaws.ca>.