SCB Group

Basis of Preparation 2012-2019

CO2 Emissions Abatement Calculation

Introduction

PricewaterhouseCoopers AG (PwC) has been selected to provide limited assurance on SCB Group (SCB)'s CO2 emissions abatement calculation procedures. The methodology summarized below is intended to ensure that our procedures are carried out in a systematic manner, using data whose sources are documented, and all practices are recorded and consistent. This Basis of Preparation document sets out how the quantification procedures have been prepared and reported.

Scope

The performance data includes all brokerage transactions in the biodiesel, ethanol, and carbon markets, including riskless principal transactions of renewable energy certificates, during the calendar years 2012 to 2019.

All SCB entity locations were considered in compiling the performance data. Locations exist in Puerto Rico, Singapore, Switzerland, the United Kingdom and in the United States. Where new SCB entities were formed during the relevant period, the data begins the first day a brokerage transaction in one of the above markets took place at that entity. For any SCB mergers, the data measures up to the date of merger for the non-surviving entity. Excluded SCB entities include those where no biodiesel, ethanol or carbon brokerage transactions took place during the relevant period.

Data Sources

With operations throughout the world, we felt it most appropriate to utilize two separate legislative bodies located in our largest geographical areas, the United States and Europe, as the framework of our CO2 emissions abatement calculation.

All transactions outside of the U.S. and the U.S. territory of Puerto Rico, shall follow the criteria as published by the European Union's Renewable Energy Directive (RED). The RED documents a number of sustainability criteria that fuels must meet in order to be considered a biofuel, including the minimum greenhouse gas (GHG) savings rate from using a biofuel versus a traditional fuel source.[1]

Unlike Europe, the U.S., has no such policy as it relates to renewable energy. Each state however has its own regulations and guidelines. As California is known for having some of the most extensive guidelines, we have elected to follow the publications set forth by the Low Carbon Fuel Standards (LCFS) program, as governed by the California Air Resource Board (CARB). The program is designed to reduce greenhouse gas emissions associated with the life cycle of transportation fuels. As part of its program, the LCFS determines the emissions of each baselicne fuel and the corresponding alternative fuel sources, referred to as the carbon intensity (CI).[2]

[1] European Commission, https://ec.europa.eu/energy/topics/renewable-energy/renewable-energy-directive/overview_en

[2] California Air Resources Board, https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about

Data Preparation

A. *Extraction of product volumes*

All brokerage transactions, which include volumes, are exported from SCB's deal management system. The information contained in the deal management system has been subject to annual audits during the years included in our scope, calendar years 2012-2019. Transactions are classified into the appropriate product group, such as biodiesel, ethanol, carbon, etc. Volumes have been converted to a single unit of measurement, which for purposes of this analysis is metric tonnes.

As there are two sides in a brokerage transaction, a buyer and a seller, only the total quantity transacted, and the corresponding spread quantity, if applicable, has been included in the calculation.

B. *Determining the CO2 emitted from non-renewable fuel sources on a per metric tonne basis*

SCB's mission is to promote the adoption of a low carbon future. As such our aim is to broker products that will assist in achieving this goal and therefore displace the use of 100% gasoline and diesel. In determining the GHG emissions from each non-renewable source, SCB utilized the common CO2 conversion factors as published and agreed upon by the U.S. Environmental Protection Agency (EPA), along with the Department of Transportation[3] below:

.008887 metric tonnes of CO2 emitted per gallon of gasoline consumed
.010180 metric tonnes of CO2 emitted per gallon of diesel consumed

As the CO2 conversion factors above are calculated on a "***per gallon***" basis, the factors were further converted into a "***metric tonnes"*** basis using the liquid fuel measurements and conversion interpreted by Iowa State University:

Gasoline:
Where 1 gallon of gasoline = .002791[4] metric tonnes, this equates to 3.1842 metric tonnes of CO2 per tonne consumed

Diesel:
Where 1 gallon of diesel = .003192[5] metric tonnes, this equates to 3.1892 metric tonnes of CO2 emitted per tonne consumed

[3] United States Environmental Protection Agency, https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
[4] Iowa State University Extension & Outreach, https://www.extension.iastate.edu/agdm/wholefarm/html/c6-87.html
[5] Iowa State University Extension & Outreach, https://www.extension.iastate.edu/agdm/wholefarm/html/c6-87.html

C. *Determining the CO2 reduction rate of using renewable fuel sources on a per metric tonne basis*

Using the referenced legislative sources discussed under the Data Sources section of this document, RED and LCFS, SCB obtained the appropriate GHG[6] reduction rate or CI[7] for each renewable fuel source brokered during calendar years 2012 – 2019.

The LCFS's CI will vary by product depending feedstock and how the fuel is produced or manufactured.

Note that in regard to the CI published by the LCFS, only the direct emissions factor has been utilized in the emissions abatement calculation for U.S. products. The purpose of our calculation is to quantify the emissions that were abated (by substituting 100% gasoline or diesel with renewable fuel sources) as a result of assisting our clients close transactions. Indirect emissions factors were excluded as it refers to the carbon emitted in getting products into the state of California, which occurs after the deal is closed or potentially not at all if the product is going elsewhere or remains stationary.

Further note that as the U.S. brokers Midwest ethanol blends, we have elected to utilize the direct CI of Midwest ethanol corn blends only, excluding all coal and California blended CI factors.

D. *Determining the CO2 abated, as adjusted for the CO2 reduction rate, on a per metric tonne basis (B*C)*

The CO2 displaced from using renewable fuel sources, such as the ones SCB brokers, is determined by multiplying the CO2 emitted per metric tonne of non-renewable fuel by the GHG savings rate or CI of using a renewable fuel source.

E. *Total metric tonnes of CO2 abated as a result of brokering a renewable fuel source (A*D)*

Lastly, the total metric tonnes of CO2 emissions abated is calculated. The abated emissions are those that would have occurred, had SCB not assisted in brokering a renewable fuel source deal. This figure is determined by multiplying the total volume of product brokered during the period by the CO2 abated per metric tonne, as adjusted for the GHG reduction.

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[6] Official Journal of the European Union, Article 29, section 10, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L2001&from=EN#d1e3697-82-1

[7] California Air Resources Board, https://ww3.arb.ca.gov/regact/2009/lcfs09/finalfro.pdf