Renewable Fuels

Terms of Reference

Green-e® Renewable Fuels Standard

Version 1.1
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Introduction

Center for Resource Solutions ("CRS"), which administers the Green-e® certification programs, has developed this Terms of Reference ("TOR") document for the Green-e® Renewable Fuels Standard ("Green-e® Standard"). This TOR describes the key issues that the Green-e® Standard will address, including market need, sustainability, comparison to and compatibility with other existing relevant standards, implementation risks, and pathways to address such risks.

Scope of Work

Objective

The purpose of this Green-e® Standard is to establish criteria and processes for the purchase, sale, and use of renewable fuels and associated environmental attributes in the voluntary market[1]. These requirements will be implemented through the subsequent Green-e® certification program that will provide assurances of accuracy, transparency, and environmental quality. The ultimate objective is to accelerate the replacement of fossil fuels with renewable fuels, while ensuring that such fuels come from sustainable renewable resources, meet the highest environmental standards, and that users are protected in their purchase and ability to make verifiable usage claims. Through the creation of a multi-stakeholder driven standard, producers, buyers, and sellers can be confident in their transactions, and that their activities contribute to a voluntary market that is more trustworthy and stable for future investment, and that creates environmental benefits including greenhouse gas reductions.

End Use

This independent, third-party administered Green-e® Standard will be the basis for a new Green-e® certification program that will accompany and complement the existing Green-e® certification programs by addressing the production, sale, and use of renewable fuels for non-electricity end uses in the voluntary market. This Green-e® program will be available to producers, buyers, and sellers of renewable fuels products, including large consumers purchasing renewable fuels products directly from producers. The Green-e® Standard and certification program may also be used to guide the creation of renewable fuels product offerings and to support marketing claims related to their use.

As part of this future certification program, CRS will establish auditing requirements to verify the chain of custody of renewable fuels products, ownership, use, and eligibility under the Green-e® Standard, and to ensure that what was promised to the customer is what was delivered. Verifying the production and chain of custody of renewable fuels may include the use of Renewable Fuel Certificates (RFCs) , which

[1] The Voluntary Market refers to purchases of renewable energy that are made above and beyond the minimum amounts required by law.

will be determined during the standard development process. The program will also require that marketing materials meet accuracy and transparency rules.

Market and Geographic Scope

This standard and certification program include renewable natural gas (RNG / biomethane), with the potential to expand to include other renewable fuels (e.g. hydrogen) and sources of renewable thermal energy in the future.

Renewable fuels are increasingly becoming a solution for commercial and residential customers who want an effective way to use fuels with lower lifecycle greenhouse gas emissions, and offer pathways to accelerate the transition to a clean energy economy. This program is one of the firsts renewable thermal industry's voluntary-market focused standard and certification program.

The initial geographic footprint will be the U.S. and Canadian, though there is the potential for additional international and/or regional market expansion and the addition of corresponding certification criteria based on stakeholder feedback and further assessment.

Summary of Criteria and Indicators

The standard development process include determining renewable fuel (initially RNG) eligibility criteria. Criteria development address:

A. Project/Feedstock Type: Identification of project types and eligible feedstocks (e.g. Landfill, Livestock, Wastewater Treatment, etc.) and specific any facility verification requirements including environmental, carbon intensity and other criteria for each fuel type, as needed.
B. New Renewables: It may be determined that facilities used must be built relatively recently to incentivize the development of new renewables.
C. Regulatory Surplus: Any supply used toward Green-e® certification must be above and beyond state or federal mandates.
D. The standard development process will also address other issues including, but not limited to:
    a. Physical interconnection and fuel transport and distribution
    b. RFCs and RFC tracking systems
    c. Time -based requirements addressing fuel production and use (vintage rules)
    d. Carbon claims

Certified renewable fuels products will be required to use the output of eligible projects (see above), and also must meet additional criteria, which include:

E. Products must be marketed and disclosed accurately and clearly.
F. Products must undergo a verification audit of supply and sales

Implementation Risk Assessment

The following factors could have a negative impact on the ability of the Green-e® Standard to achieve one or more of its desired outcomes:

A. Development of a similar program by national, state, or provincial authorities or another body in Canada or the U.S.
B. Lack of consumer interest in third party certification of renewable fuels products. Consumers not valuing the benefits that Green-e® certification would offer (additional to existing and emerging Renewable Fuels tracking systems), such as providing market support, definition and verification of preferable sources of feedstocks for fuel production, preservation of purchase impact through scrutiny of Canada and U.S. policy, disclosure and consumer protection, claims review, and consumer education.
C. Development of specific policies or laws by Canadian or U.S. national, state, provincial or other government authorities that would conflict with a consumer's ability to purchase or claim the use of renewable fuels.
D. Difficulty in enforcing the ownership of environmental attributes.

The following unintended consequences could arise from implementation of the Green-e® Standard and certification program in Canada and the United States.

A. Supply could shift between the voluntary and compliance sectors as well as transportation and thermal end-uses, with the potential to cause confusion and/or double counting.
B. New data could reveal that certain feedstocks or technology types used in the standard and certification program have a worse environmental impact than previously thought, which would lead to the promotion and possible growth of environmentally inferior supply types in the market.
C. Supporting the renewable fuels industry could inadvertently extend the lifetime of the fossil fuel industry by supporting continued use of the natural gas pipeline infrastructure.

The following possible corrective actions could be taken to address these potential risks:

A. Continuous communication with government, tracking systems, and administrators of programs in the transportation industry will ensure a specific unit of production is not double counted.
B. Continuous monitoring of new environmental studies and scientific data will ensure the highest environmental standards are upheld in Green-e® certified programs; Green-e® Standard will be revised as best practices evolve over time.
C. Discussion with government and other stakeholders, continuous monitoring of the natural gas industry, and revising the Green-e® Standard according to market needs, including the potential for future regional certification criteria and regional markets for renewable fuels energy attribute certificates.

Desired Outcomes

Consumer Protection and Expanded Consumer Options

Consumers have the option to use renewable fuels in place of their standard gas/fuel service and can make an informed choice. Consumers have expanded choice that includes a renewable option, gain trust in green purchasing and ecolabels, and seek green products in other aspects of their lives as well.

Environmental

Renewable capacity is added in Canada and the United States more quickly than it would without increased voluntary purchasing of renewable fuels, leading to lower overall carbon emissions from the various sectors such as agriculture and solid waste sectors, and potentially others. Renewable fuels will also typically be purchased in place of fossil fuels for various applications.

Economic

Demand for renewable fuels increases more than it would without voluntary purchasing, leading to faster development and better economic outcomes. The sector is seen as more stable and attracts more investment, growing further.

Standard-Setting Process

The Green-e® program's general standard-setting process is available online at http://green-e.org/about_standards.shtml. Development of the Green-e® Standard will follow this process, and details on how to comment will be posted on the same page.

Timeline and Opportunities to Comment

- First 60-Day Stakeholder Comment Period: Fall 2019.
    - All stakeholders are welcome to comment
- Internal review of comments and follow-up with stakeholders as needed: 2 months following
- Discussion with advisors and Green-e® Governance Board: 2 months following
- Updated draft of the Green-e® Standard created based on stakeholder and Board feedback: Winter 2019
- Second 60-Day Stakeholder Comment Period: Winter 2019
    - All stakeholders are welcome to comment
- Review of comments and follow-up with stakeholders as needed: 2 months following
- Discussion with advisors and vote by Green-e® Governance Board: 2 months following
- Final Green-e® Standard created and published: Spring 2020

Needs Justification

Determination of the Need for a Green-e® Renewable Fuels Standard for Canada and the U.S.

Current scientific and policy approaches agree that the best path forward to achieve global climate goals and energy-related emissions reductions is through deep electrification powered by renewables. However, the ease and duration of the transition to a decarbonized energy economy will differ for every country based on various economic, political, and systemic barriers. In North America, the natural gas industry accounts for the largest share of U.S. energy production, and uses more than 3 million miles of natural gas pipelines to serve 75 million customers. The current infrastructure will last for decades. RNG is a renewable energy substitute for natural gas that can use that same infrastructure while including ancillary benefits, such as capturing fugitive emissions from waste and diverting organic material from landfills. The goal of this standard is to accelerate the substitution of renewable fuels for fossil fuels to expedite the transition to a sustainable energy system. RNG (and other renewable fuels) as a climate strategy can be complementary to electrification and offers a near term, interim solution for consumers to reduce their immediate environmental impact.

The Green-e® program's consumer protection and product disclosure rules, in addition to its environmental criteria, will help consumers understand their options and make informed choices, increasing trust and stability in the renewable energy market, leading to more ongoing market demand assurances for projects and more investor confidence.

An active and dependable voluntary market will direct more voluntary investments toward renewable fuels to make them more competitive with non-renewable resources, which is especially important if governments do not subsidize renewable fuels development. This also helps drive more renewable capacity to be built sooner, and a quicker pace to avoiding long-lived greenhouse gas emissions.

Companies that have made commitments to using renewable fuels will be able to meaningfully meet those goals sooner, allowing them to serve as role models and move forward with addressing other sustainability issues sooner.

There are currently no programs that address all of these needs in Canada and the United States. Those that address some of them can be used to make the Green-e® Standard function more efficiently and without duplication (Renewable Fuels tracking systems in particular). Other programs (e.g. Renewable Fuels Standard [RFS] and the Low Carbon Fuels Standard [LCFS]) will be parallel drivers of new renewable fuels to further incentivize renewable fuels purchasing and the sustainability of the participating users.

Other Relevant Standards and Programs in Canada and the United States

This section evaluates current relevant standards in existence in a similar market or space in Canada and the United States and compares them to the Green-e® Standard under development.

There are no standards or programs that exist or are known to be in development in Canada and the United States that already offer the same collected benefits as Green-e® certification for voluntary purchasers outside of the transportation market. However, there are existing standards and programs that could either be used to accelerate the implementation of the Green-e® program or would benefit from the presence of a Green-e® Standard in Canada and the U.S.

Renewable Fuels Tracking Systems

Tracking systems use (or will use) pipeline injection meter data to issue a RFC as proof of production of 1 agreed upon unit of renewable fuel from a variety of resources. Units are likely to be measured in dekatherms (Dth) or million British thermal units (MMBtu). Examples of tracking systems that are accessible in Canada and the United States are M-RETS, WREGIS and NEPOOL. The RFCs can be traded to an end-user as proof that the end-user is consuming the renewable fuel injected into the pipeline, and that no other user is consuming that same Dth or MMBtu.

Green-e® certification includes a verification audit of supply and sales that can make use of certain tracking systems for a part of the process. Only a subset of the supply tracked by a tracking system would meet the Green-e® Standard, as it contains rules on environmental quality, consumer disclosure/protection and market development impact that tracking systems do not capture. Therefore, tracking systems assist the Green-e® program with its mission and function, but do not serve as a substitute for certification of renewable fuel programs and RFCs.

Carbon Offset Standards

The Green-e® Standard will address projects that also produce carbon offsets.

U.S. EPA's Renewable Fuel Standard and the Low Carbon Fuel Standard Program of the CA Air Resources Board

The U.S. federal Renewable Fuel Standard is a program that allows for the issuance of certificates called Renewable Identification Numbers (or "RINs") related to renewable fuel sold into the transportation sector. Similarly, the California Air Resources Board issues Low Carbon Fuel Standard credits for renewable fuel sold into the California transportation sector. These regulatory standards create the equivalent of a "regulated market" for renewable fuels, and the supply used to meet these federal and CA state objectives will be excluded from the Green-e® program.

Environmental Pledges, Such as Kyoto and Paris
Such pledges seek to reduce total carbon emissions across all sectors of a country's economy. All carbon emissions are typically captured, and the effects of all programs and emissions reductions are counted toward the overall goal.

Counting emissions from production of renewable fuels toward such a goal does not inherently result in any one user being able to say that their use of renewable fuel is cleaner / lower-carbon. Claims and emissions per dekatherm are still related to laws and rules specific to the Canada and the United States renewable fuels market.

CRS would be able to provide aggregated data on voluntary usage to relevant Canadian and U.S. national and provincial/state agencies in order to support the calculation and publication of data used to understand and disclose the actual resources used to generate their energy. In this way, certification helps to further clarify the allocation of emissions under the overall Paris goal, and helps to avoid consumer confusion and double counting.

Other Standards
There are currently some RNG certifications and standards in Europe that do not impact the current scope of this Program.

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