

Tax Policy for Renewable Thermal Solutions

Summary of roundtable discussion on June 8, 2022

The Renewable Thermal Collaborative (RTC) held a roundtable discussion on a tax policy proposal aimed at accelerating deployment of renewable fuels and technologies to meet the thermal energy needs of the manufacturing and buildings sectors. The proposal, which was finalized in fall of 2021, would make a range of renewable thermal technologies eligible for a 30% investment tax credit (ITC): biogas (including landfill gas), renewable natural gas (or biomethane), geothermal, beneficial electrification, green hydrogen, solar thermal, and thermal storage. The credit would provide a direct pay or refundability option with no phase down.

The roundtable discussion included RTC members and sponsors as well as a select group of external organizations ranging from tax experts, to trade associations for specific fuels and technologies, to think tanks and policy advocacy organizations that are engaged on similar issues as the RTC. As the RTC's tax policy proposal was developed as a high-level framework, the roundtable aimed to gather input to further sharpen and refine the proposal, gather views on the evidence base and groundwork needed to advocate for the tax policy proposal, and to build a shared foundation among key stakeholders on the prospects and design of tax policy to advance renewable thermal technologies and fuels. Accordingly, after the RTC presented the proposal to participants, discussion centered around the overarching rationale for engaging in tax policy to advance renewable thermal deployments, input on policy design, and discussion on what other organizations are doing in the common area of industrial decarbonization and the groundwork needed to advocate for the tax policy to advocate for the tax policy design, and the groundwork needed to advocate for the tax policy to advocate for the tax policy.

Rationale for pursuing tax policy to advance renewable thermal solutions

The RTC centers its rationale for pursuing tax policy around the higher cost of renewable thermal solutions relative to incumbent fuels, namely natural gas. Both the ITC and production tax credits (PTC) supporting renewable electricity have helped bridge the cost gap between those technologies and fossil fuels, and it is the RTC's contention that tax incentives could similarly help renewable thermal solutions reach scale and compete on price terms. While the Build Back Better Act includes some provisions that are beneficial to renewable thermal – such as a PTC for hydrogen – it is not sufficiently expansive on renewable thermal, meaning even if some version of the law passes more will be needed to advance renewable thermal solutions. Participants expressed agreement with key facets of the rationale, particularly taking an inclusive approach on technologies and fuels to provide end users a full menu of options, though some also encouraged the RTC to continue looking more broadly to other policy levers.

Issues of policy design

The main topics of design that emerged during discussion are highlighted below.



- <u>Pursuing an ITC versus a PTC</u> Participants with significant tax policy expertise confirmed that a PTC for a variety of thermal solutions would be methodologically challenging and urged the RTC to press forward on an ITC approach.
- <u>Direct pay (refundability)</u> Participants expressed support for full refundability of a thermal ITC, with one noting that direct pay is essential for reaping the benefits of a tax credit for more nascent technologies that face more challenges securing tax equity deals. However, direct pay is likely less viable among Republican lawmakers as well as some key Democrats.
- <u>Refining the applicability of the ITC</u> RTC envisions a thermal-focused ITC to reward investments in equipment used in the generation or production of thermal energy, but exactly which types of equipment for each renewable thermal technology or fuel will qualify requires further discussion. Participants stressed that ideally the ITC is benefitting both end users and producers, but the direct benefits may vary by technology or fuel. Aiming for a broad for each technology or fuel will likely significantly increase the estimated costs of the proposal.
- <u>Ensuring technology neutrality/inclusivity</u> While the RTC aims for a technology-neutral approach, participants stressed that the term is likely to take on a broader meaning in Republican circles and require compromise to win bipartisan support. This could be done through an approach that applies a carbon-intensity standard or explicitly naming a broader set of technologies and fuels that may not be considered renewable. Technology neutrality based on carbon intensity only may neglect other environmental and social impacts.
- <u>Treating renewable thermal solutions as emerging or nascent technologies</u> Some participants suggested it could be beneficial to establish either a subset or all the renewable thermal solutions that RTC supports as nascent or emerging technologies in its proposal. While this term is not a formal designation in the tax code, recent Senate legislation provide frameworks for promoting nascent technologies, which receive different tiers of support or bonus rates based on levels of market penetration, along with phase-out rates tied to future market penetration or emissions levels in certain sectors.</u>

Developing an evidence base for advocacy and support from other organizations

Many of the external organizations that participated in the roundtable said that the RTC's ITC proposal would dovetail well with their focuses on RDD&D for decarbonization technologies or complement other tax incentives they are pursuing, such as a PTC for clean hydrogen. One participant suggested that the RTC could serve a valuable role as a convener on thermal tax policy and ensuring alignment among like-minded groups. Part of a successful advocacy push will include more basic education and establishing a clear rationale for the tax policy proposal. Issues that were highlighted as crucial for advocacy included:

• Providing a baseline and emissions reduction potential over a clear time horizon to demonstrate a distinct need for a renewable thermal ITC. End users and RTC sponsors will be important voices in promoting the need for a thermal ITC to policymakers.



- Showing that the proposal does not "double dip" by establishing duplicate or overly similar credits. This will likely prove harder with the passage of some version of the Build Back Better Act. Solar thermal and geothermal also receive some support from the existing Section 48 ITC.
- Modulating the messaging to appeal to Republicans in what is likely a divided or Republicancontrolled Congress.
- RTC will need to actively engage with Congress' Joint Committee on Taxation (JCT), which is charged with determining the costs of tax policy proposals, to ensure the committee does not face information gaps that potentially result in an unfavorable score. This process may also require having ideas in mind to offset the cost of the tax credits.

Next steps

RTC staff will now refine the ITC proposal based on feedback during the roundtable and with additional consultations with RTC members and sponsors as well as external experts. These additional consultations will focus on specific technologies or fuels to establish common understandings of how relevant energy properties will be defined for the purpose of the ITC and its scope of applicability for each technology or fuel. This step will be critical to reaching a level of detail that allows the proposal to be analyzed in terms of its emissions-reduction potential and take-up rates of the renewable thermal solutions that it targets. Reaching this point will also make the proposal more easily translatable to legislative language. Deeper analytical work of the existing energy tax code may also be required during this stage.

The RTC will continue to seek external views from tax policy experts and those with expertise in particular renewable thermal solutions to refine the proposal. Additionally, the RTC will continue to convene external organizations for their expertise and to build a wider coalition of groups to support the policy proposal.