

Q1: On #1, can you provide more information on the requested “carbon budget”?

A1: Generally speaking, the Climate Council will want to understand the net emissions associated with the state’s natural landscapes, working forest and agricultural lands and other land uses. We assume this information will be necessary in crafting the mitigation scenarios necessary to reach the emission reduction requirements of the GWSA. Through the RFI we are interested in your opinion of whether that assumption is true, the cost and complexity with developing a carbon budget, and a sense of whether changes to the state’s existing emissions inventory methodology will need to change to track the carbon budget going forward.

Q2: On #3 you request modeling. Are you interested in a discrete number of scenarios or in a dynamic tool to adjust for multiple options? Similar question for #6 on Policy Models.

A2: Through the RFI we’re largely interested in your recommendation on which approach will best serve the Council, given their obligation to develop a Climate Plan on a very aggressive timeline. Considering the size of the Council and their tight timeline, an analytic or modelling framework that quickly narrows scenarios to a short list of viable options may be necessary, but we welcome your thoughts on that. The longer term policy models references in question six may benefit from a different approach, and we would be interested in your recommendation there as well.

Q3: On the forthcoming RFP:

Will a consultant contributing to this planning effort be precluded from implementing any programs that result from the plan?

A3: I would answer the question this way: If you respond to the RFI, you are certainly welcome to respond to the eventual Vermont Climate Council modelling and analysis RFP if and when it’s issued. If the VCC ultimately issues a Climate Plan calls for actions and strategies that require additional contractor support to implement, I suspect yet another RFP would be issued for that work and I don’t believe you would be precluded from making a proposed if you were involved in the previous planning work. This is certainly something we nail down before the VCC modelling and analysis RFP is issued following this RFI.

Q4: Do you have an estimated budget range for the planning RFP?

A4: We don’t have set budget yet and intend to use the RFI responses to inform the level of funding allocated. The Governor recently requested a \$1million allocation through the state’s budget adjustment act to support the planning work of the Council. If the legislature supports that request, we anticipate up to \$850,000 would be available for technical support.

Q5: On page 1 of the RFI, you state that included in “identifying, analyzing and evaluating strategies and programs to reduce greenhouse gas emissions [and} achieve the State’s reduction requirements...,” is “analyzing each source or category of sources of greenhouse gas emissions and identifying which strategies and programs will result in the largest greenhouse gas emissions reductions in the most cost-effective manner.” We were hoping you might be able to provide guidance on how cost-effectiveness should be determined and calculated for economic modeling and cost-benefit analysis.

A5: The state’s overarching goal is to meet our emissions reduction targets through strategies with the least economic burden on Vermonters, especially the most vulnerable, and ideally deploy strategies that result in economic development opportunities and gain for the state. With the RFI we welcome input on whether this goal is reasonable and, if so, on how cost-effectiveness should be determined and calculated for economic modeling and cost-benefit analysis. At this point we do not have a pre-

determined methodology for this work and hope to use the RFI to inform the state on this and other questions, as we work to develop a final RFP.

Q6: Does the Agency of Natural Resources have specific programs they will plan on requesting contractor evaluation and analysis of?

A6: As part of the eventual RFP, I expect we'll want contractors to evaluate the state's existing programs to reduce emissions, and an additional suite of programs that will likely be necessary to meet the emission reduction goals found in the Global Warming Solutions Act. For purposes of the RFI, we welcome input on how best to approach the evaluation and analysis of programs given the stated goals of the Act and the timeline the Climate Council must operate under.

Q7: In Vermont's currently existing emissions inventory, why are land use change and biogenic CO₂ (such as from wood burning and forest carbon sequestration) not included in Vermont's gross emissions totals?

A7: Biogenic CO₂ is not included in the gross totals in the inventory because it is theoretically re-sequestered over time by the regrowth of the material that decomposed, or was combusted, to generate it. There are a lot of nuances to this and factors to consider, in terms of timeframes for re-sequestration and the differences between the release of carbon in shorter term storage versus that stored on a geologic time frame (fossil fuels). It is a complicated issue and sector and also relates to the Land Use, Land-use Change, and Forestry sector. Technically the biogenic CO₂ emissions should be captured in the emissions associated by the changes within in the land use sector, however data to inform the land use sector (especially on an annual basis) is not incredibly developed or available. The decision has been made to work to continue to develop the land use sector, as well as emissions of biogenic CO₂, and to track those separately from the gross annual inventory emissions. These are an important piece to consider, but we don't have enough confidence in the available data to include them in the gross annual totals. We welcome suggestions on how best to address this issue in your RFI response.

Q8: Does the Agency of Natural Resources have greenhouse gas monitoring technology of their own, or do all current emissions data come from the EPA State Inventory Tool?

A8: The Agency of Natural Resources doesn't monitor greenhouse gas emissions. The current emissions inventory data comes in part from the EPA State Inventory Tools (SIT), and in part from additional methodologies that have been developed where it was deemed that they could produce more accurate or complete emissions estimates than the SIT tools.

Q9: To help in model emission control scenarios, would the Agency of Natural Resources allow contractors access to previous modeling data, including data used to generate Vermont's current Greenhouse Gas Emissions Inventory?

A9: Yes I believe the data used to calculate emissions will be available the contractor once a contract has been awarded. I don't anticipate this information being provided in advance of a contract, but if that is advisable, please indicate so in your RFI response.

Q10: As the Vermont Climate Action Plan will be enacted by December 1, 2021, what will be the expected timeline a contractor would have to develop a plan for these initiatives, and then to enact them? The expected timeframe may impact the responses we give.

A10: The Act calls for the Climate Council to adopt the plan by 12/1/21, we anticipate needing to complete a draft plan for public comment by around October 1, 2021. With the RFI we are looking for information regarding the feasibility of this timeline given the other requirements of Act and recommendations on how to sequence and structure modelling and analysis work to meet this timeline.

Q11: Would desired policy models be directed at the Vermont Agency of Natural Resources, or the Vermont State Government as a whole?

A11: The Agency of Natural Resources will likely be the entity managing contracts, but emission reduction policy models could consider all applicable strategies, including those executed by other state agencies. If you have a recommendation on this, please feel free to share it as part of any RFI response.

Q12: What is the Department of Natural Resources looking for in response to the items laid out in the questionnaire? As the questions are written currently it is unclear what the department is looking to have submitted.

A12: This is a request for information. We are looking for information that will inform an eventual request for proposals (RFP) to conduct the modelling and analysis necessary for the Climate Council to complete their work. With this RFI we are seeking to improve the Agency's understanding of the level of effort and attendant cost in engaging contractor support for the anticipated tasks set forth in the questionnaire.

Q13: What support does the Vermont Climate Council or State expect to provide to the contractor, in terms of resources, meeting time, and data gathering and connections?

A13: Through the RFI, we are interested in what level of support you believe would be necessary to conduct the necessary modeling and analysis associated with the act. We have not yet determined or established exactly how the VCC or State agencies will engage with contractors and hope to use the RFI to inform that relationship. That said, the state will have dedicated staff – including a GWSA Project Manger - assigned to this work and my expectation is that we would provide all reasonable resources, information and connections necessary to conduct the work.

Q14: Will the data and electronic versions of calculations (e.g., Excel spreadsheets, CSV files, scripts) used to develop the most recent statewide emissions inventory be provided to the contractor?

A14: Yes I believe this information will be available the contractor once a contract has been awarded. I don't anticipate this information being provided in advance of a contract, but if that is advisable, please indicate so in your RFI response.

Q15: What level of modeling is expected for the existing and proposed emission control scenarios? How much emphasis is desired for quantitative analysis of non-GHG-reductions (co-benefits, etc)?

A15: Those parameters have not yet been established and we hope to use the RFI responses to inform the eventual scope of work. Generally speaking state's overarching goal is to meet our emissions reduction targets through strategies with the least economic burden on Vermonters, especially the most vulnerable, and ideally deploy strategies that result in economic development opportunities and gain for the state. With the RFI we welcome input on whether this goal is reasonable and, if so, on the recommended level of modeling and emphasis for quantitative analysis of co-benefits. At this point we do not have a pre-determined methodology for this work and hope to use the RFI to inform the state on this and other questions, as we work to develop a final RFP.

Q16: Does the State have preferred computer software or cloud computing providers?

A16: Microsoft Azure for cloud computing. Microsoft SQL for enterprise database, And we use Microsoft Office 365. Salesforce is the state's CRM.

Q17: Can the State provide example(s) of existing Climate Action Plans from other jurisdictions/states that they feel demonstrate deliverables and outcomes similar to what they are looking for here?

A17: I am not aware of states that have existing climate action plans that have the same scope and effect as the plan required in Vermont by the GWSA. We have been in contact with representatives in ME, NY and MA state government regarding their resnet panning efforts, all of which have similarities, but do not entirely align with Vermont's effort.

Q18: Will Counties and/or jurisdictions be responsible for providing data needed to inform modeling?

A18: Vermont does not have county government. We do have regional planning commissions that provide some services at the county level. If direct participation by municipalities or regional planning commission is advisable for the anticipating modelling work, please recommend that as part of the RFI response.

Q19: Are there specific expectations for stakeholder outreach?

A19: Stakeholder outreach isn't an explicit focus of this RFI. The state anticipates issuing a separate RFP for facilitation and stakeholder outreach. If a more direct connection between stakeholder outreach and the modelling and analysis work contemplated in this RIF is advisable, please make that recommendation as part of your RFI response.

Q20: Can the State provide expected Contract terms that the contractor would be required to meet or negotiate?

A20: The contract terms will be specified if an when a RFP is issued for a specific scope of work, but generally speaking state bulletin 3.5 applies: <https://aoa.vermont.gov/bulletins/3point5>