



March 10, 2020

Docket ID No. CEQ-2019-0003-0001. Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act. Notice of Proposed Rulemaking

Via www.regulations.gov

Thank you for the opportunity to comment on the Council on Environmental Quality's (CEQ) proposed update of National Environmental Policy Act (NEPA) procedural regulations.¹ The undersigned free-market organizations strongly support the proposal, which will expedite reviews of major agency actions with significant effects, minimize litigation, and roll back NEPA's misuse as an anti-development weapon.

This comment letter has two main parts. Part I responds to CEQ's request for comment on how to revise its June 2019 Draft Guidance on NEPA consideration of greenhouse gas (GHG)

¹ Council on Environmental Quality (CEQ), Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, Notice of Proposed Rulemaking, 85 FR 1684-1730, January 10, 2020, (hereafter, "Proposed Update" or "Proposed Updated regulations"), <https://www.govinfo.gov/content/pkg/FR-2020-01-10/pdf/2019-28106.pdf>

emissions to ensure consistency with the updated procedural regulations, and whether or how the regulations should codify or address aspects of the GHG guidance.²

The core argument of Part I may be summarized as follows. Numerous statements in both the Draft Guidance and Proposed Update imply that NEPA scrutiny of project-related GHG emissions is not required. The final Guidance should spell out those implications, which add up to a clear rejection of NEPA's use as a climate policy framework. To give that assessment legal weight, the final Guidance should quote or reference the supporting language in the final Updated regulations.

Part II examines the Proposed Update in light of the Trump administration's One Federal Decision goal and the Obama-era Environmental Protection Agency's (EPA) vetoes of Clean Water Act permits independently of the NEPA process—one a prospective veto before the NEPA process had commenced and another a retroactive veto after the NEPA process had been completed and the project approved.

The argument of Part II may be summarized as follows. The EPA's prospective and retroactive vetoes undercut NEPA and precluded the very possibility of achieving one federal decision with coordinated and concurrent deadlines. Allowing either the pre-emptive or retroactive veto to stand would create a highly dangerous precedent allowing EPA to bypass NEPA or override NEPA-informed agency actions at any time. The final Updated regulations should expressly state that EPA may commence a section 404(c) veto only as part of the NEPA process, not before or after it.

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Part I: NEPA Consideration of Greenhouse Gas Emissions

NEPA began to bog down project approvals in red tape and litigation long before climate change came to dominate environmental politics. However, the “climate crisis” narrative is clearly now at the forefront of both local and national opposition to the construction of pipelines, highways, airports, export terminals, and other critical infrastructure subject to NEPA scrutiny.

The Obama administration sought to institutionalize climate angst in NEPA proceedings by directing agencies to incorporate “climate change effects” in project reviews. It also orchestrated the controversy over the Keystone XL Pipeline, conducting multiple environmental analyses before finally rejecting the project as incompatible with U.S. climate “leadership.”

Although CEQ would prefer not to address a “single category” of environmental effects in a “procedural” rulemaking, it cannot ignore the elephant in the room. Accordingly, CEQ states that if it finalizes the proposal, it may revise its June 2019 Draft Guidance on NEPA consideration of

² Part I is similar to but more extensive than a free-market groups August 26, 2019 comment letter on CEQ's Draft GHG Guidance, available at https://cei.org/sites/default/files/CEI_CommentLetter_82619.pdf.

greenhouse gas (GHG) emissions³ to ensure consistency with the updated procedural regulations. In addition, “CEQ invites comments on whether it should codify any aspects of its proposed GHG guidance in the regulation, and if so, how CEQ should address them in the regulations.”⁴

In this comment letter, we clarify the logic of the Draft GHG Guidance and explain its consistency with the Proposed Updated procedural regulations. In a nutshell, project-specific greenhouse gas emissions are not “significant” environmental “effects” because such emissions are not large enough to “significantly affect [] the quality of the human environment.”⁵ Consequently, analysis of such emissions is not required in NEPA project reviews. Hence also, consideration of GHG-reducing alternatives and mitigation measures is not required.

Unfortunately, the Draft GHG Guidance directs agencies to consider such alternatives and measures. In addition, it allows agencies to treat project-level GHG emissions as “proxies” for assessing climate change effects. That was the methodological core of the rescinded Obama GHG Guidance, which instructed agencies to treat project-level GHG emissions as “proxies” for climate effects. Grant that premise, and CEQ will have no coherent basis for constraining NEPA’s application to GHG emissions.

Retaining the mitigation measures directive and proxy methodology in the final GHG Guidance will turn CEQ’s new policy architecture into a house divided. Climate litigants could cite those Obama-era elements to challenge the legality of CEQ’s departure from Obama-era NEPA policy. The good news is that the Draft Guidance’s retention of those elements was an unforced error and easily fixed, as we explain below.

The remainder of Part I is organized as follows.

- Section 1 reviews pertinent legislative background, emphasizing that NEPA does not authorize agencies to make climate policy.
- Section 2 shows that while the explicit argument of the Draft GHG Guidance differs from the Obama GHG Guidance only in emphasis and tone, the underlying logic precludes NEPA’s use as a climate policy framework.
- Section 3 explains why project-level GHG emissions are not, and should not be used as, “proxies” for climate change effects, and do not qualify as “significant” environmental effects.
- Section 4 shows that the Proposed Update’s regulatory definitions also imply NEPA’s inappropriateness as a climate policy framework.
- Section 5 explains why trying to solve the climate challenge one project at a time is a fool’s errand—an ineffectual waste of resources with costs vastly exceeding benefits.
- Section 6 explains why incorporating greenhouse gases into NEPA project reviews is bound to produce irrational decisions, not “better decisions,” as the Obama CEQ claimed.

³ CEQ, Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions, 84 FR 30097-30099, June 26, 2019, <https://www.govinfo.gov/content/pkg/FR-2019-06-26/pdf/2019-13576.pdf>

⁴ 85 FR 7010-11

⁵ The phrase comes from NEPA, Section 102(c), 42 USC 4332, https://www.fsa.usda.gov/Internet/FSA_File/nepa_statute.pdf

- Section 7 explains why consideration of alternatives and greenhouse gas mitigation measures is not required.
- Section 8 explains why social cost of carbon analysis would make NEPA reviews even more irrational by hiding raw political passions and ideological agendas behind a façade of knowledge and precision.
- Section 9 explains how to harmonize the GHG Guidance and Updated regulations.
- Section 10 offers concluding remarks.

Section 1. Introduction

Legislative Background

At the outset, it is useful to place the Proposed Update and Draft NEPA Guidance in their proper legislative context. With only a few limited exceptions,⁶ there currently are no federal restrictions on the use of fossil fuels (coal, oil, and natural gas) based on their contribution to climate change. Each of the many legislative attempts to target greenhouse gas emissions, including numerous “cap-and-trade” bills and carbon tax proposals, as well as the recent Green New Deal resolution, has been rejected by Congress.⁷ Nor has any President submitted the United Nations’ 1997 Kyoto Protocol or any subsequent climate-related treaty to the Senate for the constitutionally-required ratification vote.

In sum, the American people, through their elected representatives in Washington, have spoken on the matter of climate change measures, and their answer has repeatedly been no.

In the absence of any explicit legal mandate to target greenhouse gases, the Obama administration tried to derive such authority from environmental statutes that predate climate change as an issue and that were not intended to set climate policy. These attempts to pound a square peg into a round hole led to highly problematic Obama-era policies. Notable examples include New Source Review permitting for greenhouse gases that would produce “absurd results” absent unlawful “tailoring” (amending) of the Clean Air Act by the EPA,⁸ the so-called

⁶ Subsection 211(o) of Clean Air Act requires motor fuel refiners, blenders, and importers to sell specified volumes of “advanced” biofuels defined as having greenhouse gas emissions “at least 50 percent less than the baseline lifecycle greenhouse gas emissions” of petroleum-based fuels. However, the provision specifies that “Nothing in this subsection, or regulations issued pursuant to this subsection, shall affect or be construed to affect the regulatory status of carbon dioxide or any other greenhouse gas, or to expand or limit regulatory authority regarding carbon dioxide or any other greenhouse gas, for purposes of other provisions (including section 165) of this chapter.”

⁷ Arnold Reitze, *Air Pollution Control Law: Compliance and Enforcement* (Washington, D.C. Environmental Law Institute 2001) pp. 415-418; Marlo Lewis, “[Cap-and-trade] is not in my vocabulary,”—Harry Reid,” Open Market, July 13, 2010, <https://cei.org/blog/cap-and-trade-not-my-vocabulary-reid>; and Marlo Lewis, “The Environmental Protection Agency’s Breathtakingly Lawless Attempt to Regulate Greenhouse Gases,” *Forbes*, February 24, 2014, <https://www.forbes.com/sites/realspin/2014/02/25/the-environmental-protection-agencys-breathtakingly-lawless-attempt-to-regulate-greenhouse-gases/#33c38bd31490>

⁸ Marlo Lewis, “The Unbearable Lightness of UARG v. EPA,” GlobalWarming.Org, July 4, 2014, <http://www.globalwarming.org/2014/07/04/the-unbearable-lightness-of-uarg-v-epa/>

Clean Power Plan (CPP) elevating the EPA into a national electricity czar,⁹ and a “national” motor vehicle program empowering the California Air Resources Board to bypass express federal preemption of state laws or regulations “related to” fuel economy.¹⁰

Recognizing the damage from such costly and legally dubious climate measures inherited from the Obama administration, the Trump administration is in the process of withdrawing or substantially revising many of them. This includes the Affordable Clean Energy (ACE) rule to replace the CPP, the Safer Affordable Fuel-Efficient (SAFE) Vehicles rule to repeal California’s authority to regulate fuel economy,¹¹ and President Trump’s decision to withdraw from the Paris Climate Treaty.¹² The undersigned groups support the Trump administration in these reforms and encourages more of them.

NEPA Is Not a Climate Policy Tool.

Of all the longstanding environmental statutes drafted into the climate wars by the previous administration, perhaps the most problematic example is the 1969 National Environmental Policy Act (NEPA). NEPA requires federal agencies with jurisdiction over a major project (including energy development or infrastructure projects that require one or more federal permits) to analyze the potential environmental impacts and consider a range of reasonable alternatives.

The statute was originally intended to require an environmental checkup for such projects, not provide an anti-development platform. However, partly due to mission creep and judicial reinterpretation, the statute has become a major impediment. The required Environmental Impact Statements (EIS) often reach thousands of pages, cost millions (or even tens of millions) of dollars to compile and take an average of 4.5 years to complete.¹³ NEPA actions are also routinely subject to litigation from environmental organizations. NEPA’s costs, delays, and litigation are such that many proposed projects are thwarted—which was never the purpose of this procedural statute.

The Obama administration’s incorporation of greenhouse gas emissions in each project’s analysis creates additional regulatory risk for energy infrastructure projects like oil and natural gas pipelines, especially at a time when America’s fracking revolution increases the need for

⁹ Comments of the Competitive Enterprise Institute et al., Repeal of Carbon Emission Standards for Existing Stationary Sources, EPA–HQ–OAR–2017–0355, April 26, 2018, https://cei.org/sites/default/files/CEI_Comments_-_Proposed_Rule_-_Clean_Power_Plan_Repeal.pdf

¹⁰ Comments of the Competitive Enterprise Institute, Safer Affordable Fuel-Efficient Vehicles Rule, EPA-HQ-OAR-2018-0283/NHTSA2018-0067, October 26, 2018, https://cei.org/sites/default/files/CEI%20CAFE%20Comments%20Final_0.pdf

¹¹ Environmental Protection Agency and National Highway Traffic Safety Administration, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program; Withdrawal of Waiver, 84 FR 51310, September 27, 2019, <https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf>

¹² Michael R. Pompeo, Secretary of State, Press Statement, On the U.S. Withdrawal from the Paris Agreement, November 4, 2019, <https://www.state.gov/on-the-u-s-withdrawal-from-the-paris-agreement/>

¹³ Council on Environmental Quality, *Environmental Impact Statement Timelines (2010-2017)*, December 14, 2018, https://ceq.doe.gov/docs/nepa-practice/CEQ_EIS_Timelines_Report_2018-12-14.pdf

such projects.¹⁴ It similarly complicates approval of energy export facilities and thus jeopardizes the potential economic and geopolitical benefits associated with America’s newfound status as a major energy exporter.¹⁵ America’s growing energy dominance would be especially threatened if NEPA’s traditional focus on the project itself is expanded to encompass greenhouse gas emissions upstream and downstream of the project.

The Obama policy enabling a more expansive consideration of greenhouse gas emissions culminated in the August 1, 2016 “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews.”¹⁶ Fortunately, one of the Trump administration’s early energy policy actions, the March 28, 2017 “Presidential Executive Order on Promoting Energy Independence and Economic Growth,” rescinded the Obama GHG Guidance.¹⁷ This Executive Order was part of the new administration’s effort to “review existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources beyond the degree necessary to protect the public interest or otherwise comply with the law.” In its place, CEQ proposed its June 26, 2019 Draft GHG Guidance.

On the surface, the Draft GHG Guidance differs from the Obama GHG Guidance only in tone and emphasis. However, as explained in Section 2, several statements in the document implicitly make the case for placing strong constraints on climate considerations in the NEPA process.

Section 2. CEQ’s Draft GHG Guidance: Tone, Emphasis, Logic

The most obvious difference between the June 2019 Draft GHG Guidance and the 2016 Final GHG Guidance is the absence of climate angst. The Draft Guidance contains no warnings about “more frequent and intense heat waves, longer fire seasons and more severe wildfires, degraded air quality, more heavy downpours and flooding, increased drought, greater sea-level rise, more intense storms, harm to water resources, harm to agriculture, ocean acidification, and harm to wildlife and ecosystems.”¹⁸ It does not endorse the U.S. Global Change Research Program as an

¹⁴ See, e.g., “Shortage of Oil and Natural Gas Pipelines,” Institute for Energy Research, June 8, 2018, <https://www.instituteforenergyresearch.org/fossil-fuels/gas-and-oil/shortage-oil-natural-gas-pipelines/>; IHS Markit, “Feeling the Pinch: U.S. Midstream Capacity Constraints Put Chemical Producers Under Cost and Margin Pressure as Ethane Feedstock Demand Exceeds Supply Capability,” October 22, 2018, <https://www.marketwatch.com/press-release/feeling-the-pinch-us-midstream-capacity-constraints-put-chemical-producers-under-cost-and-margin-pressure-as-ethane-feedstock-demand-exceeds-supply-capability-ihs-markit-says-2018-10-22>; and Energy Information Administration, “Con Ed limits natural gas service due to pipeline constraints in New York City area,” May 22, 2019, <https://www.eia.gov/todayinenergy/detail.php?id=39572>.

¹⁵ Nick Loris, *Removing Restrictions on Liquid Natural Gas Exports: A Gift to the U.S. and Global Economies*, Heritage Foundation, Backgrounder No. 3232, July 27, 2017, <https://www.heritage.org/sites/default/files/2017-07/BG3232.pdf>

¹⁶ Council on Environmental Quality, Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, August 1, 2016 (hereafter, “2016 Final GHG Guidance”), https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf

¹⁷ The President, Promoting Energy Independence and Economic Growth, Executive Order 13783, 82 FR 16093-16097, March 28, 2017, <https://www.govinfo.gov/content/pkg/FR-2017-03-31/pdf/2017-06576.pdf>

¹⁸ 2016 Final GHG Guidance, p. 9

authoritative source.¹⁹ It does not claim that the Obama administration’s social cost of carbon estimates reflect “the best available science and methodologies” or provide a “harmonized, interagency metric that can give decision makers and the public useful information for their NEPA review.”²⁰

The Draft Guidance also states more bluntly, or spotlights more clearly, certain caveats or limitations²¹ agencies should keep in mind when reviewing proposed projects in NEPA proceedings:

- NEPA analyses should focus on “foreseeable environmental consequences of major Federal actions” and “should not consider those that are remote or speculative.”
- Impacts of a proposed action should be discussed “in proportion to their significance, and there should only be brief discussion of issues that are not significant.”
- NEPA analyses “need not give greater consideration to potential effects from GHG emissions than to other potential effects on the human environment.”
- There must be a “close causal connection” between a proposed agency action and an environmental effect to merit analysis under NEPA.
- “NEPA does not require agencies to adopt mitigation measures.”
- Agencies should not quantify a proposed action’s greenhouse gas emissions when those are “overly speculative” or not “substantial enough to warrant quantification.”
- NEPA does not require agencies “to monetize costs and benefits of a proposed action”; hence agency analysts “need not” use “any monetized Social Cost of Carbon (SCC) estimates . . . or other similar cost metrics.”
- Because “the potential effects of GHG emissions are inherently a global cumulative effect,” no individual project measurably increases cumulative impact; hence a “separate cumulative effects analysis is not required.”

Although the points above are helpful, the Draft GHG Guidance does not draw out their implications. At least five points imply that NEPA does not require analysis of project-level GHG emissions.

1. NEPA analyses should not consider environmental consequences that are “remote or speculative.”

Implication: Climate change impacts in 2050 and beyond are inherently remote and speculative. Indeed, estimates of such impacts often derive from overheated models run with inflated emission scenarios under unreasonably pessimistic assumptions about

¹⁹ For exposés of the junk science peddled by the USGCRP in its 2000, 2009, 2014, and 2018 National Climate Assessment reports, see Patrick J. Michaels and Paul C. Knappenberger, *Lukewarming: The New Climate Science that Changes Everything* (Washington, D.C.: Cato Institute, 2016), chapter 21; Patrick J. Michaels, Comments on the Fourth National Climate Assessment, Cato Institute, February 1, 2018, <https://www.cato.org/publications/public-comments/comments-fourth-national-climate-assessment>, and “Time to Cool It: The U.N.’s Moribund High-End Emissions Scenario,” Cato at Liberty, February 28, 2018, <https://www.cato.org/blog/time-cool-it-uns-moribund-high-end-global-warming-emissions-scenario>

²⁰ 2016 Final GHG Guidance, p. 33

²¹ 84 FR 30098

human adaptive capability.²² Thus, such impacts need not be considered in NEPA analyses.

2. Impacts should be discussed “in proportion to their significance.”

Implication: As explained below, the climatic impacts of project-related greenhouse gas emissions are too small to be observed, verified, or even understood. Agencies should therefore devote little or no time to analyzing them.

3. There must be a “close causal connection” between a proposed agency action and an environmental effect to merit analysis under NEPA.

Implication: There is no discernible causal connection between approving an individual project and climate change effects, so NEPA analysis of project GHG emissions is not required.

4. Agencies should not quantify a proposed action’s greenhouse gas emissions when those are not “substantial enough to warrant quantification.”

Implication: No project’s emissions are “substantial enough” to produce identifiable climate change effects; hence, such emissions are not significant enough to warrant quantification.

5. Because “the potential effects of GHG emissions are inherently a global cumulative effect,” no individual project measurably increases cumulative impact; hence a “separate cumulative effects analysis is not required.”

Implication: What makes GHG emissions climatically significant is their “cumulative impact.” Because no individual project measurably increases cumulative impact, a separate analysis of the project’s *individual* emissions is not required.

The final GHG Guidance should make those implications explicit.

Section 3. Project-Related GHG Emissions Are Not “Proxies” for Climate Effects and Do Not Qualify as “Significant Effects.”

A question that leaps to mind is why the Draft GHG Guidance does not already embrace the logic of its own reasoning. The answer, we suspect, is that the document retains a core methodological premise of the Obama-era CEQ,²³ namely, that “projection of a proposed

²² Marlo Lewis, A Citizen’s Guide to Climate Change, Competitive Enterprise Institute, On Point, No. 255, June 11, 2019, https://cei.org/sites/default/files/Marlo_Lewis_-_A_Citizen_s_Guide_to_Climate_Change.pdf

²³ CEQ, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions February 18, 2010, p. 3, <https://obamawhitehouse.archives.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>; CEQ, Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, 77 FR

action’s direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.”²⁴ That premise is incorrect and inconsistent with the implications elucidated above.

The theory of anthropogenic global warming holds that cumulative global GHG emissions over decades to centuries will have climate change effects. It does not postulate that incremental emissions have identifiable climate impacts. Incremental emissions attributable to specific projects are nowhere near large enough to have foreseeable, traceable, or verifiable climate effects.

A proxy voter can cast a real, countable, ballot for an absent voter. Data from tree rings, ice cores, fossil pollen, ocean sediments, and corals can be calibrated to instrumental data and then serve (albeit imperfectly) as proxies for climatic conditions in pre-industrial times.

In contrast, no testable, measurable, or otherwise observable relationship exists between project-level greenhouse gas emissions and climate change effects. To call the former a “proxy” for the latter is inaccurate and misleading. It allows agencies—and climate campaigners—to maintain the pretense that climatically-insignificant project-level GHG emissions are “significant effects.”

Illusory Thresholds of Meaning and Significance

Both the Obama and Trump CEQs acknowledge that individual projects do not discernibly influence global climate change. As the Obama CEQ’s initial Draft NEPA Guidance in 2010 observed, “From a quantitative perspective, there are no dominating sources and fewer sources that would even be close to dominating total GHG emissions.”²⁵

The 2010 Draft NEPA Guidance proposed that 25,000 tons or more of annual carbon dioxide-equivalent emissions could provide “an indicator that a quantitative and qualitative assessment may be meaningful to decision makers and the public.”²⁶ However, the document immediately clarified that CEQ was not making a claim about climatic impact: “CEQ does not propose this as an indicator of a threshold of significant effects, but rather as an indicator of a minimum level of GHG emissions that may warrant some description in the appropriate NEPA analysis for agency actions involving direct emissions of GHGs.”²⁷

The 2010 Draft Guidance further clarified: “CEQ does not propose this [25,000 ton] reference point as an indicator of a level of GHG emissions that may significantly affect the quality of the human environment.” Lest anyone mistakenly infer climatological significance, CEQ stated: “However, it is not currently useful for the NEPA analysis to attempt to link [proposed projects

77825, December 24, 2014, <https://www.govinfo.gov/content/pkg/FR-2014-12-24/pdf/2014-30035.pdf>; 2016 Final GHG Guidance, pp. 4, 10.

²⁴ 84 FR 30098

²⁵ CEQ, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions February 18, 2010, p. 2, <https://obamawhitehouse.archives.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>

²⁶ 2010 CEQ Draft NEPA Guidance, p. 2

²⁷ 2010 CEQ Draft NEPA Guidance, p. 2

to] specific climatological changes, as such direct linkage is difficult to isolate and to understand.”²⁸

Nonetheless, stakeholders were confused. How can NEPA analysis of a project emitting 25,000 tons of greenhouse gases per year be “meaningful” if that quantity of emissions is not climatically “significant”?²⁹

CEQ’s 2014 Draft NEPA Guidance devoted several pages to the issue without resolving it. CEQ again proposed a 25,000 metric reference point while disclaiming an intent to make a “determination of significance.”³⁰ Rather, the significance of an agency action depends on multiple factors, such as “the degree to which the proposal affects public health or safety, the degree to which its effects on the quality of the human environment are likely to be highly controversial, and the degree to which its possible effects on the human environment are highly uncertain or involve unique unknown risks.”³¹

However, that restates rather than removes the perplexity. The degree to which GHG emissions from an individual project affect public health and safety is for all practical purposes zero. The climatic insignificance of individual projects is non-controversial and highly certain. Greenhouse gas emissions from individual projects are not suspected of posing unique unknown risks.

The 2014 Draft NEPA Guidance notes that many commenters called for raising the disclosure threshold from 25,000 tons to 75,000-100,000 tons per year—the permitting thresholds set forth in EPA’s 2010 greenhouse gas Tailoring Rule.³² The commentators noted that 25,000 metric tons represents only 5/100,000ths of 1 percent of global annual GHG emissions. “Some commentators went so far as to say that there should be no analysis of GHG emissions in the NEPA context.”³³ That sounds reasonable to us. Predictably, other commenters claimed climate change is too important for any GHG source to be exempt from NEPA scrutiny.³⁴

The 2014 Draft NEPA Guidance decided to stick with the 25,000 ton-threshold, citing EPA’s Mandatory Reporting of Greenhouse Gases Rule³⁵ and “administrative necessity.” The EPA judged that a 25,000 ton disclosure threshold is “1) low enough to pull in the majority of large stationary sources of greenhouse gas emissions, but also 2) high enough to limit the number of sources covered that state and local air pollution permitting agencies could feasibly handle.”³⁶

²⁸ 2010 Draft NEPA Guidance, p. 3

²⁹ 77 FR 77809-77810

³⁰ 77 FR 77810

³¹ 77 FR 77810

³² EPA, Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 FR 31514-31608, June 3, 2010, <https://www.govinfo.gov/content/pkg/FR-2010-06-03/pdf/2010-11974.pdf>. The Supreme Court vacated the Tailoring Rule in *Utility Air Regulatory Group v. EPA* (2014), <https://supreme.justia.com/cases/federal/us/573/12-1146/#tab-opinion-1970957>

³³ 77 FR 77810

³⁴ 77 FR 77811

³⁵ EPA, Mandatory Reporting of Greenhouse Gases; Final Rule, 74 FR 56260-56519, October 30, 2009, <https://www.govinfo.gov/content/pkg/FR-2009-10-30/pdf/E9-23315.pdf>

³⁶ 77 FR 77818

However, the relevance of Clean Air Act reporting thresholds to NEPA project reviews is unclear. Section 114 of the Clean Air Act authorizes EPA to require emissions data from stationary sources regulated under sections 110, 111, and 112, and section 208 authorizes EPA to require emissions rate data from manufacturers of engines and vehicles regulated under Title II. NEPA has no similar provisions, presumably because CEQ does not regulate emissions.

More importantly, EPA’s greenhouse gas reporting rule already covers “all sectors of the economy” with specific reporting requirements for dozens of industrial categories and subcategories.³⁷ It is not clear what additional policy-relevant GHG emissions data NEPA reviews would provide, or what authority CEQ has to require such data from infrastructure projects, which are not among EPA’s source categories.

In any event, the Final 2016 GHG Guidance dropped the 25,000 ton without a word of explanation or comment. Perhaps CEQ just gave up trying to explain how analyzing emissions that are not “significant” could still be “meaningful.”

The Draft GHG Guidance similarly declines to define a “meaningful” numerical threshold justifying inclusion of GHG emissions in project reviews—again, perhaps, because it cannot be done.

CEQ’s final GHG Guidance should plainly state that project-level GHG emissions are not “significant” environmental effects for NEPA purposes. Doing so would help deter future administrations from claiming emission tonnage thresholds are “meaningful” indicators of climate-change risk.

Section 4. The Proposed Updated Definitions Imply NEPA Scrutiny Is Not Required for Project-Level GHG emissions.

The proposed updated regulatory definitions state that NEPA reviews apply to “major agency actions . . . with effects that may be significant.”³⁸ As CEQ has acknowledged since 2010, no project can have GHG emissions large enough to be climatically “significant.” Consequently, the updated definitions imply that analysis of project-level GHG emissions is not germane to NEPA proceedings and is not required.³⁹

Five other statements in the Proposed Update make similar or complementary points. We excerpt and italicize them below, commenting on each in turn.

“In considering the potentially affected environment, agencies may consider, as appropriate, the affected area (national, regional, or local). Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the Nation as a whole.”⁴⁰

³⁷ 74 FR 56260, 56266-67

³⁸ 1508.1(q), 85 FR 1729

³⁹ This would not preclude assessments of how changing local or regional climatic conditions may affect resources also potentially affected by the project.

⁴⁰ 85 FR 1713

Comment: Site-specific actions would have even less significance for the world as a whole—the “area” potentially affected by cumulative GHG emissions.

“Effects or impacts means effects of the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives.”⁴¹

Comment: The climate change effects of even the largest project are too small and remote in time to be reasonably foreseeable. Unforeseeable, immeasurably small effects also lack a close causal connection to specific agency actions. Hence, such effects are not a proper subject of NEPA review.

“Effects do not include effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action.”⁴²

Comment: Climate change effects derive from myriad sinks and sources, located all over the world, over periods of decades to centuries. No agency can prevent such impacts, which would occur regardless of the proposed action. Hence, again, climate change effects are not a proper subject of NEPA review.

“Agencies are not expected to conduct exhaustive research on identifying and categorizing actions beyond the agency’s control.”⁴³

Comment: No agency reviewing a proposed bridge, pipeline, highway, runway, or other infrastructure project has the power to “act globally.” Trying to use NEPA review of project-level emissions as a platform for shaping national or international climate policy is not a sensible use of agency resources.

“In addition, CEQ proposes a change in position to state that analysis of cumulative effects, as defined in CEQ’s current regulations, is not required under NEPA. While CEQ has issued detailed guidance on considering cumulative effects, categorizing and determining the geographic and temporal scope of such effects has been difficult and can divert agencies from focusing their time and resources on the most significant effects.”⁴⁴

Comment: The anthropogenic greenhouse effect is the epitome of a cumulative effect. An individual project’s GHG emissions adds essentially nothing to the global greenhouse effect. Hence agencies should not focus time or resources analyzing project-level emissions.

Section 5. “Solving” Climate Change One Project at a Time Is a Fool’s Errand.

⁴¹ 1508.1(g) 85 FR 1729

⁴² 85 FR 1729

⁴³ 85 FR 1708

⁴⁴ 85 FR 1708

While abandoning a numerical “reference point” for “meaningful” GHG analysis, the Obama GHG Guidance nonetheless insists that NEPA is an appropriate framework for analyzing climate effects:

Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but are exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. Therefore, a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA.⁴⁵

That is a non sequitur. If climate change results from the “incremental addition of GHG emissions from millions of individual sources,” and “emissions from a proposed federal action represent only a small fraction of global emissions” (perhaps no more than a few hundred thousandths of 1 percent), then the GHG emissions from any individual action are climatically inconsequential. Attempting to solve the “climate change challenge” one project at a time is like trying to drain a swimming pool one thimbleful at a time. It is a fool’s errand.⁴⁶ An individual project’s GHG emissions is an inappropriate basis for approving or rejecting the project, especially in the absence of a clear congressional directive to do so.

The Obama CEQ Guidance continues:

Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact.⁴⁷

On the contrary, comparisons revealing the climatological insignificance of project-level GHG emissions clearly imply that such emissions are too miniscule to serve as “proxies” for assessing climate change impacts.

It should be noted that, in an apparent effort to inflate GHG emissions and expand the scope of NEPA review, the Obama administration initially proposed including emissions upstream of a fossil fuel infrastructure project (the emissions attributable to fossil fuel production) as well as those downstream (the combustion of the fuel by end users).⁴⁸ This highly problematic expansion

⁴⁵ 2016 Final GHG Guidance, p. 10

⁴⁶ Unless, of course, the real objective is “to keep the populace alarmed (and hence clamorous to be led to safety) by menacing it with an endless series of hobgoblins, all of them imaginary.” Mark J. Perry, “12 H.L. Mencken Quotes on Government, Democracy, and Politicians,” Foundation for Economic Education, September 12, 2018, <https://fee.org/articles/12-hl-mencken-quotes-on-government-democracy-and-politicians/>

⁴⁷ 2016 Final GHG Guidance, pp. 10-11

⁴⁸ 79 FR 77814

of NEPA beyond its statutory focus on the project itself proved so controversial that it was dropped in the Final Obama CEQ Guidance.⁴⁹ In any event, even the inclusion of these other emissions would not have made any individual action climatically consequential.

Keystone XL Pipeline Controversy: Climatological Insignificance

A prime case in point is the Keystone XL Pipeline, perhaps the largest project to receive NEPA scrutiny for greenhouse gases. Even under the unrealistic assumptions that the KXL runs at full capacity (800,000 barrels per day) year-round and each barrel is additional oil produced solely to meet demand induced by the pipeline, the project would add less than 0.01°C of warming to global temperatures between now and 2100, according to MAGICC, EPA’s climate change impact calculator.⁵⁰

That vanishingly small and unverifiable change⁵¹ in average global temperatures 80 years from now would have no discernible impact on weather patterns, crop yields, polar bear populations, or any other environmental condition people care about. Contrary to activist and media spin, the Keystone XL Pipeline is climatologically irrelevant. Yet NEPA-based reviews of the KXL’s climate change implications continued over a 10-year period, from July 2008⁵² to June 2019.⁵³

Clearly, there was no “proportionality” between the resources and time devoted to analyzing the Keystone XL Pipeline’s direct and indirect emissions and the speculative, remote, undetectable climate impacts the project might entail.

Moreover, there was no proportionality between the KXL’s potential economic benefits and its potential climate damages in the remote future. For example, during its 17 months of construction, the southern leg of the KXL (the “Gulf Coast Pipeline”) injected an estimated \$5.7

⁴⁹ See, e.g., James Coleman, *Beyond the Pipeline Wars: Reforming Environmental Assessment of Energy Transport Infrastructure*, (Utah Law Review 2018), pp. 129-131,

<https://dc.law.utah.edu/cgi/viewcontent.cgi?article=1142&context=ulr>.

⁵⁰ Testimony of Paul C. “Chip” Knappenberger before the Subcommittees on Energy and Environment of the House Committee on Science, Space, and Technology, hearing on “Keystone XL Pipeline: Examination of the Scientific and Environmental Issues,” May 7, 2013, <http://www.cato.org/publications/testimony/keystone-xl-pipeline-examination-scientific-environmental-issues>

⁵¹ According to NOAA, 0.08°C is the margin of error in estimates of average annual global temperature, or eight times the increase from the KXL under the aforementioned unrealistic assumptions. See NOAA, “Global Temperature Uncertainty,” <https://www.ncdc.noaa.gov/monitoring-references/faq/global-precision.php>

⁵² The Associated Press, A Timeline of the Keystone XL oil pipeline, January 24, 2017,

<https://apnews.com/5831ea1867454124aa4a97bc8d72e48b>

⁵³ In November 2018, U.S. District Judge Brian Morris enjoined the State Department and TransCanada Corporation from engaging in any activities in furtherance of the KXL pending a “completed supplement” to the 2014 supplemental environmental impact statement that “complies with the requirements of NEPA and the APA.” The Judge’s order is available here: <https://assets.documentcloud.org/documents/5031466/Keystone-XL-pipeline-order-issued-by-U-S.pdf>. In June 2019, a panel of federal judges for the 9th U.S. Circuit vacated Judge Morris’s injunction. See Pamela King, “Judges: Keystone XL construction can begin,” E&E News, June 9, 2019, <https://www.eenews.net/stories/1060504725>.

billion into the Texas and Oklahoma economies, created thousands of jobs, and generated tens of millions of dollars in state and local tax revenues.⁵⁴

The protracted struggle over the Keystone XL Pipeline shows how easily applying NEPA to greenhouse gases fuels anti-development activism. In such a political climate, economic rationality in the form of cost-benefit analysis counts for nothing. We turn to that problem next.

Section 6. Promoting Irrationality

The rescinded 2016 GHG Guidance claims that incorporating GHG emissions and climate change effects in NEPA review would lead to “better decisions.”⁵⁵ The Keystone XL Pipeline controversy shows that incorporating climate concerns leads to irrational decisions.

The State Department’s NEPA review concluded that the KXL is the ‘climate friendly’ option. What chiefly determines international oil flows is global demand, not particular infrastructure projects. Accordingly, State concluded that U.S. refiners would import about the same quantity of Canadian crude whether permission to build the KXL is granted or denied. However, the alternative modes of transport—trains, smaller pipelines, and barges—are less energy efficient than a large pipeline. Consequently, blocking the KXL would increase net carbon dioxide emissions by 28 to 42 percent relative to the pipeline approval scenario.⁵⁶ That finding plus the negligible amount of warming attributable to the KXL even under unrealistic worst-case assumptions should have ended the controversy.

However, the mere fact that State’s NEPA analysis considered greenhouse gas emissions and climate change effects helped opponents organize years of protests, mobilize thousands of activists, and demonize a single infrastructure project as a planet wrecker.⁵⁷

Although Canada is our closest ally, biggest trading partner, and largest supplier of imported oil, and even though pipelines are more efficient, less liable to oil spill risk, and safer than alternative routes of delivery,⁵⁸ President Obama reduced the “national interest determination” to a single factor: Whether the Keystone XL Pipeline would “significantly exacerbate the problem of carbon pollution.”⁵⁹ That litmus test ensured that climate politics rather than climate science and cost-benefit analysis would carry the day.

Shortly before the Paris climate summit, President Obama concluded that the KXL is not in the U.S. national interest. He explained: “America is now a global leader when it comes to taking

⁵⁴ Institute for Energy Research, “States Already Benefiting from Southern Leg of Keystone,” July 8, 2014, <https://www.instituteforenergyresearch.org/fossil-fuels/gas-and-oil/states-benefitting-southern-leg-keystone-bakken-gets-pipelines/>

⁵⁵ 2016 Final GHG Guidance, p. 6

⁵⁶ State Department, *Final Supplemental Environmental Impact Assessment for the Keystone XL Pipeline Project*, Executive Summary (ES), January 2014, Errata Sheet, 34, <http://keystonepipeline-xl.state.gov/documents/organization/221135.pdf>

⁵⁷ Marlo Lewis, “Keystone XL: Does Hatred Blind Peace Prize Winners?” GlobalWarming.Org, April 18, 2018, <http://www.globalwarming.org/2014/04/18/keystone-xl-does-hatred-blind-peace-prize-winners/>

⁵⁸ State, FSEIS, ES

⁵⁹ Remarks by the President on Climate Change, Georgetown University, June 25, 2013, <http://www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change>

serious action to fight climate change, and frankly, approving this project would have undercut that leadership.”⁶⁰ In other words, political optics would determine whether a multi-billion dollar private investment in U.S. energy infrastructure is in the U.S. national interest.

For the Obama administration, the point of State’s multiple NEPA reviews was not to gather more data about the pipeline’s climate impacts but to keep the political pot boiling, recruit activists, and spread fear and loathing of “dirty” fuels.

CEQ should ponder the lessons of this recent history. Using NEPA as a climate policy framework is a proven method to embroil energy infrastructure in ideological controversy, block or delay actions whose economic benefits vastly outweigh any associated climate damages, and feed the hubris of those who believe government exists to bankrupt industries they don’t like.

Section 7. Consideration of GHG-Reducing Alternatives and Mitigation Measures Is Not Required.

The rescinded 2016 Final GHG Guidance states that agencies “should consider reasonable alternatives and mitigation measures to reduce action-related GHG emissions or increase carbon sequestration in the same fashion as they consider alternatives and mitigation measures for any other environmental effects.”⁶¹ The Draft GHG Guidance similarly directs agencies to consider “reasonable alternatives to the proposed action and discuss the short- and long-term effects and benefits of those alternatives,” with the comparison of alternatives based partly on their respective GHG emissions.⁶² That ignores the central problem that project-related GHG emissions are not environmentally “significant.”

In the case of conventional pollutants or landscape alterations, considering alternatives and mitigation measures may help conserve resources or safeguard the health of identifiable communities. In contrast, no detectable benefits accrue to communities or local resources from alternatives or mitigation measures that infinitesimally reduce global GHG concentrations.

The only discernible value of such analyses is political. Consideration of GHG-reducing alternatives and mitigation measures prompts activists to “think globally and act locally” against affordable energy while projects remain in NEPA limbo for years.

Section 8. Social Cost of Carbon: Too Subjective to Inform Project Reviews

We applaud the Draft GHG Guidance’s clarification that NEPA does not require agencies to use “any monetized Social Cost of Carbon (SCC) estimates . . . or other similar cost metrics.” However, CEQ’s final Guidance should go further and explain why the social cost of carbon is too subjective to inform NEPA project reviews.

Incorporating SCC analysis would turn environmental impact statements into pseudo-science. Most infrastructure projects subject to NEPA review are built to last for decades or longer. By multiplying the presumed social cost of carbon by some estimate of the project’s direct and

⁶⁰ Elise Labott and Dan Berman, CNN, “Obama rejects Keystone XL Pipeline,” CNN Politics, November 6, 2015, <https://www.cnn.com/2015/11/06/politics/keystone-xl-pipeline-decision-rejection-kerry/index.html>

⁶¹ 2016 Final GHG Guidance, p. 15

⁶² 84 FR 30098

indirect emissions over the next 280 years, opponents can fool people into believing the project's social costs, although utterly unverifiable, outweigh its manifest economic benefits.

SCC Basics

Before elaborating those points, it is useful to review how SCC estimation works. The following discussion borrows freely from the Obama EPA's 2016 Social Cost of Carbon Fact Sheet.⁶³

The social cost of carbon is an estimate in dollars of the cumulative long-term damage done by a ton of CO₂ emitted in a specific year. That dollar figure also represents an estimate of the benefit of avoiding or reducing one ton of CO₂ emissions.

The computer programs used to project SCC values are called integrated assessment models (IAMs) because they combine a climate model, which estimates the physical impacts of CO₂ emissions, with an economic model, which estimates the dollar value of climate change effects on agricultural productivity, property values, and other economic variables.

In federal agency analyses, the cumulative damage of an incremental ton of CO₂ emissions is estimated from the year of the emission's release until 2300. SCC estimates are highly sensitive to the discount rates chosen to calculate the present value of future emissions and reductions. The lower the discount rate, the higher the present value of future climate damages and emission reductions, and vice versa.

Federal agencies average the results of three IAMs to estimate SCC values. For any given year, the Obama administration's Interagency Working Group (IWG) provided four SCC estimates. The first three values presented the SCC at discount rates of 5, 3, and 2.5 percent. The IWG also estimated a fourth value to represent potential damages associated with "lower-probability, higher-impact" events such as ice sheet collapse.

In the Regulatory Impact Analysis for the Final Affordable Clean Energy (ACE) rule, the Trump administration discontinued certain Obama-era accounting gimmicks that inflate the benefit-cost ratios of climate policy regulations.⁶⁴ Specifically, as required for regulatory accounting by OMB Circular A-4, EPA now uses discount rates of 7 percent and 3 percent to estimate present value.⁶⁵ EPA also now compares regulatory costs to domestic SCC benefits rather than the much larger global SCC benefits.

Although helpful, the Trump-era reforms do not challenge agencies' reliance on dated (and likely overheated) climate sensitivity assumptions.⁶⁶ Nor do the reforms discontinue the use of two

⁶³ EPA Fact Sheet: Social Cost of Carbon, 2016, https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf

⁶⁴ EPA, Regulatory Impact Analysis for Repeal of the Clean Power Plan, and Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, EPA-452/R-19-003, June 2019, Chapter 7, https://www.epa.gov/sites/production/files/2019-06/documents/utilities_ria_final_cpp_repeal_and_ace_2019-06.pdf

⁶⁵ Office of Management and Budget, Circular A-4, Regulatory Analysis, September 17, 2003, https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/

⁶⁶ Marlo Lewis, "Posting Updated List of Studies Finding Low Climate Sensitivity," March 6, 2019, GlobalWarming.Org, <http://www.globalwarming.org/2019/03/06/posting-updated-list-of-recent-studies-finding-low-climate-sensitivity/>

structurally-biased IAMs⁶⁷ that do not include robust carbon dioxide fertilization benefits.⁶⁸ Social cost continues to be calculated from damages projected out to the year 2300, which is far beyond the range of informed speculation about global economic and energy trends.

Pretense of Knowledge and Precision

IAMs have a role in academic research, allowing analysts to see how different physical and economic assumptions drive estimates of climate-related impacts and regulatory benefits. However, using IAMs to make policy “suggests a level of knowledge and precision that is simply illusory, and can be highly misleading,” MIT professor Robert Pindyck cautions.⁶⁹ He explains:

The modeler has a great deal of freedom in choosing functional forms, parameter values, and other inputs, and different choices can give wildly different estimates of the SCC and the optimal amount of abatement. You might think that some input choices are more reasonable or defensible than others, but no, “reasonable” is very much in the eye of the modeler. Thus these models can be used to obtain almost any result one desires.⁷⁰

What climate campaigners and their agency allies typically desire is to sustain the narrative that climate change is “worse than we thought.” Unsurprisingly, the central SCC estimates in the Obama administration’s 2013 technical support document (TSD) were about 60 percent higher than the corresponding estimates in the administration’s 2010 TSD.⁷¹ As if in four short years, cumulative climate change impacts from 2000 to 2300 became almost 60 percent worse!

Table 1: Central Values for the Social Cost of Carbon Estimates Issued by the Interagency Working Group on Social Cost of Carbon in 2010 and 2013

Dollars are 2007 dollars per metric ton of carbon dioxide

Year	2010 central values	2013 central values
2010	\$21	\$32
2020	26	43
2030	33	52
2040	39	61
2050	\$45	\$71

Source: Interagency Working Group on Social Cost of Carbon’s Technical Support Document and 2013 update. | GAO-14-663

⁶⁷ The DICE (Dynamically Integrated Climate and Economy) model developed by William Nordhaus and PAGE (Policy Analysis of the Greenhouse Effect) model developed by Chris Hope contain no significant CO₂ fertilization function. The FUND (Climate Framework for Uncertainty, Negotiation, and Development) developed by Richard Tol contains a strong CO₂ fertilization function. Apparently, however, the model’s CO₂ benefit estimates have not been updated in 20 years.

⁶⁸ For further discussion of CO₂ fertilization benefits, see Kevin D. Dayaratna, Ross McKittrick & Patrick J. Michaels, Climate sensitivity, agricultural productivity and the social cost of carbon in FUND, *Environmental Economics and Policy Studies*, January 18, 2020, <https://link.springer.com/content/pdf/10.1007/s10018-020-00263-w.pdf>

⁶⁹ Robert Pindyck, Climate Change Policy: What Do Models Tell Us? Working Paper 19244, July 2013, <http://www.nber.org/papers/w19244>

⁷⁰ Ibid., p. 5

⁷¹ U.S. Government Accountability Office, Regulatory Impact Analysis: Development of Social Cost of Carbon Estimates, July 2014, p. 7, <https://www.gao.gov/assets/670/665016.pdf>

Raise SCC estimates high enough, and modelers can make fossil fuels look unaffordable no matter how cheap and renewable energy look like a bargain at any price. Consider a study co-authored by Chris Hope, creator of the PAGE (Policy Analysis of the Greenhouse Effect) model, one of the three IAMs used in federal agency SCC estimation.

Selecting a 1 percent discount rate, Hope and his colleagues estimate that in 2010, the SCC was already \$266/ton—830 percent larger than the Obama administration’s central SCC estimate. They conclude that new renewable generation is more “efficient” than either new gas or existing coal generation.⁷²

Such computer-aided sophistry could easily be deployed in NEPA project reviews. Invoking high-end SCC estimates, and toting up direct and indirect emissions out to 2300, opponents of fossil fuel infrastructure could claim that any project is economically “inefficient” regardless of its expected return on investment.

SCC modelers are free to select below-market discount rates because discounting involves ethical judgments about intergenerational equity. How much material well-being should the poorer present generation be willing to sacrifice to enhance the welfare of wealthier future generations? That is primarily a philosophic rather than a technical or scientific question, which in political practice means it is an ideological or partisan question.

Modelers also have great freedom in selecting other critical IAM inputs because the physical and economic variables affecting carbon’s social cost are so uncertain. SCC estimates are intractably conjectural because:

- No one can forecast the baseline emission trajectory of the global economy out to 2300, but it is only in relation to some assumed baseline that the incremental effects of the next ton of CO₂ might be estimated.
- SCC modelers are free to use any “no action” scenario published in the literature, including the increasingly obsolete RCP 8.5,⁷³ which assumes coal generation scales up to provide nearly half of global energy by 2100—a level not seen since 1940 (see images below).⁷⁴
- Scientists do not know the relative strength of the positive and negative feedbacks that amplify or constrain the climate’s response to rising CO₂ concentrations, which is why

⁷² Laurie Johnson, Starla Yeh, and Chris Hope, “The Social Cost of Carbon: Implications for Modernizing Our Electricity,” *Journal of Environmental Studies and Sciences*, December 2013, Volume 3, Issue 4, pp. 369–375, <https://link.springer.com/article/10.1007/s13412-013-0149-5>

⁷³ Zeke Hausfather, “Explainer: The high emissions ‘RCP8.5’ global warming scenario, Carbon Brief, 21 August 2019, <https://www.carbonbrief.org/explainer-the-high-emissions-rcp8-5-global-warming-scenario>; Kevin Murphy, “Reassessing the RCPs,” *Climate Etc.*, January 28, 2019, <https://judithcurry.com/2019/01/28/reassessing-the-rcps/>

⁷⁴ Riahi et al. RCP 8.5—A scenario of comparative high greenhouse gas emissions, *Climate Change* (2011) 109: 33–57, <https://link.springer.com/article/10.1007/s10584-011-0149-y>; Hannah Ritchie and Max Roser, “Energy Production & Changing Energy Sources,” *Our World in Data*, <https://ourworldindata.org/energy-production-and-changing-energy-sources>

the “likely” range of climate sensitivity is 1.5°C—4.5°C in both the IPCC’s first (1990) assessment report⁷⁵ and fifth (2013) assessment report.⁷⁶

- To guesstimate climate damages, IAMs must also make non-validated assumptions about how rising temperatures will affect weather patterns, ice-sheet dynamics, and other natural phenomena, and how such physical changes will affect agriculture, other climate-sensitive industries, and consumption absent adaptive responses.
- Human beings use technology to adapt to environmental conditions. Consequently, the “damage functions” in IAMs—the projected impacts of climate change on consumption, climate-sensitive industries, and human health—depend on assumptions about how technology will develop as the world warms. Nothing is harder to forecast than long-term technological change.

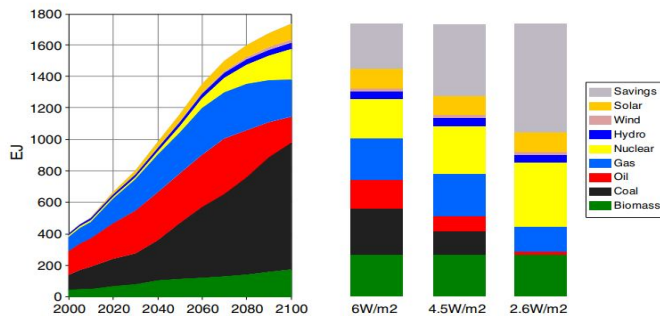
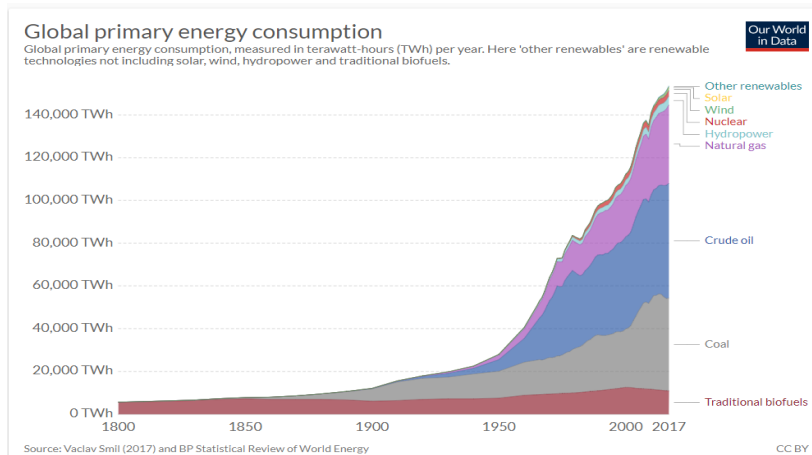


Fig. 5 Development of global primary energy supply in RCP8.5 (*left-hand panel*) and global primary energy supply in 2100 in the associated mitigation cases stabilizing radiative forcing at levels of 6, 4.5, and 2.6 W/m² (*right-hand bars*). Note that primary energy is accounted using the direct equivalent method



⁷⁵ IPCC, First Assessment Report (FAR), *Climate Change: The IPCC Scientific Assessment* (1990), Chapter 5, Equilibrium Climate Change, p. 139, https://www.ipcc.ch/ipccreports/far/wg_i/ipcc_far_wg_i_chapter_05.pdf

⁷⁶ IPCC, *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Summary for Policymakers, p. 16, http://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_SPM_FINAL.pdf

As noted, the Draft GHG Guidance states that agencies are not required to use SCC estimates in project reviews. However, given the serious limitations with the social cost of carbon, CEQ should go further. The final GHG Guidance should advise agencies not to use SCC analysis in NEPA reviews.

Section 9. Harmonizing the GHG Guidance and Updated Procedural Regulations

We appreciate CEQ's reluctance to address a "single category" of environmental effects in procedural regulations applying to environmental effects in general. However, it would be entirely appropriate for CEQ to explain in general terms how the Updated regulations limit the scope of NEPA review.

For example, the Final Updated regulations could include a summary statement that NEPA analysis is not merited for potential environmental effects that:

- Are not significant (because they do not discernibly "affect the quality of the human environment");
- Are not reasonably foreseeable;
- Lack a close causal connection to the proposed action; or
- Are beyond agency's ability to prevent and would occur regardless of the agency's action.

The final Updated regulations need not spell out how those determinations constrain NEPA's role in climate policy. The attentive public will surely get the point.

In addition, CEQ can and should cite such generic language in the final GHG Guidance. The policy constraints articulated in the GHG Guidance would then be visibly anchored in the Updated regulations.

Section 10. Conclusion

Mitigating climate change one project at a time is a fool's errand akin to draining a swimming pool one thimbleful at a time. Worse, the economic losses from blocking individual projects based on greenhouse gas considerations are bound to vastly exceed the speculative climate benefits. Moreover, because affordable energy and economic growth are critical to human mastery of climate-related risks,⁷⁷ and because the climatological significance of any infrastructure project is for all practical purposes nil, blocking energy infrastructure or other private investment requiring federal agency approvals in the name of climate protection is bound to do more harm than good.

Congress did not direct CEQ to make climate policy, and NEPA review is unsuited for addressing climate change concerns. Accordingly, GHG emissions should not be a factor determining whether agencies approve or reject project proposals.

⁷⁷ Indur M. Goklany, *Wealth and Safety: The Amazing Decline in Deaths from Extreme Weather in an Era of Global Warming*, Reason Policy Study 393, September 2011, https://reason.org/wp-content/uploads/files/deaths_from_extreme_weather_1900_2010.pdf

The rejoinder, conveniently furnished by the rescinded Final 2016 GHG Guidance, is that although “individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations,” the myriad diverse sources “collectively have large impact.”⁷⁸ The political implication is obvious: To mitigate “large impact,” permission should be denied to as many sources as possible—ideally to all.

The chief problem with that policy—aside from the enormous economic losses and suffering it would entail—is that Congress has not authorized it.

CEQ should take great care not to encourage agencies to do piecemeal what they clearly lack authority to do at the pace and scale desired by activist groups. Those who wish to make climate policy should do so through the proper venue—new legislation specifically addressing the subject—rather than by the reinterpretation of a 50-year old statute never intended and completely inappropriate for the purpose.

Several statements in both the Draft GHG Guidance and the Proposed Update implicitly affirm that NEPA is not a climate policy tool, as this comment letter shows.

The final GHG Guidance should make those implications explicit and cite or quote the generic language in the final Updated regulations that support those judgments. Doing so will give the GHG Guidance legal weight.

The final GHG Guidance should repudiate the mischievous analytic premise it inherited from the Obama-era CEQ. Allowing agencies to treat project-related GHG emissions as “proxies” for climate effects is incompatible with the constraints CEQ seeks to place on the scope of NEPA review. It implies, despite other statements to the contrary, that project-level GHG emissions are “meaningful” enough to be included in NEPA reviews, hence should inform agency decisions to approve or deny project permits.

Similarly, the Guidance should drop the requirement that GHG reducing alternatives and mitigation measures should be considered, as that, too, falsely implies that project-related GHG emissions are environmentally significant.

Part II. Implementing the One Federal Decision Goal

The undersigned groups strongly support the goal of “One Federal Decision,” first sketched out in Executive Order 13807⁷⁹ and further detailed in the Proposed Updated regulations. To that end, one area in need of correction is EPA’s flouting of the NEPA process in major Clean Water Act (CWA) permitting decisions.

Section 404 of the CWA specifies that the Secretary of the Army is responsible for issuing any required permits to discharge dredged or fill material into navigable waters that are associated with a project.⁸⁰ This task is undertaken by the Army Corps of Engineers as part of the EIS under

⁷⁸ 2016 Final GHG Guidance, p. 10

⁷⁹ Executive Order 13807, “Presidential Executive Order on Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure,” August 24, 2017, <https://www.federalregister.gov/documents/2017/08/24/2017-18134/establishing-discipline-and-accountability-in-the-environmental-review-and-permitting-process-for>.

⁸⁰ Clean Water Act, Section 404, <https://www.law.cornell.edu/uscode/text/33/1344>.

NEPA. The statute also authorizes the EPA, pursuant to subsection 404(c), to deny any such permit for any defined area as a disposal site based on criteria set out in statute.⁸¹

It has long been understood that the 404 permit process, including the EPA's permit veto authority, would be exercised concurrently with the larger NEPA process and not as something outside of it, and that the process would begin after a permit application had been submitted and before the NEPA process is complete and a permit has been issued.

Section 1. EPA Circumvention of the NEPA Process

This decades-long precedent was upset by the Obama administration EPA. In two instances, the agency effectively vetoed CWA permits independently of the NEPA process—one a prospective veto before the NEPA process had commenced, and another a retroactive veto after the NEPA process had been completed and the project approved.⁸² Both types of extra-NEPA actions are highly problematic and seriously undercut the role and proper functioning of NEPA. In addition, they are perhaps the most egregious departure from the administration's goal of having one federal decision with coordinated and concurrent deadlines.

In the case of the project subject to a pre-emptive veto, the Pebble Mine in Alaska, the analysis on which the EPA relied was deficient, and was so precisely because it was done outside of the NEPA process. For one thing, no mine permit application had yet been submitted, thus EPA was analyzing its own hypothetical mine scenarios without knowing the actual specifics of the Pebble Mine proposal, including measures to mitigate potential environmental impacts. In addition, the detailed analysis that goes along with the development of a section 404 permit and EIS had not yet been completed, and thus the EPA had to rely on its own, much more limited assessment (the agency also ignored the extensive data and analysis conducted in anticipation of the NEPA process).

Section 404(c) requires EPA to consult with the Secretary of the Army (through the Corps of Engineers) prior to making a determination. Here, the Army Corps informed EPA that no such consultation is possible because “at this time, the Corps has not received a permit application for this project and is therefore unable to evaluate the impacts of potential discharges associated with the Pebble Deposit.”⁸³

Nowhere has EPA adequately explained why it could not consider the exercise of its veto authority as part of the NEPA process, and in so doing base its decision upon a specific mine proposal and a much larger and more thoroughly vetted body of evidence, rather than proceed with a pre-emptive shot in the dark.

⁸¹ Environmental Protection Agency, Section 404 Permit Program, <https://www.epa.gov/cwa-404/section-404-permit-program>.

⁸² House Energy and Commerce Committee, Major Projects Major Problems, September 14, 2014, pp. 6-7, <https://archives-energycommerce.house.gov/sites/repUBLICANS.energycommerce.house.gov/files/analysis/20140915MajorProjectsMajorProblems.pdf>.

⁸³ Letter, Col. Christopher Lestochi, Commander, Army Corps of Engineers Alaska District, to Dennis McLerran, Regional Administrator, EPA Region 10, March 14, 2014.

Compounding matters is the broad scope of the EPA's veto. The agency did not (and without a permit application, could not) reject a particular mine in a particular location, so it effectively did so for virtually any mine project in the vast Bristol Bay region, which at 42,000 square miles is about the size of Ohio.⁸⁴ Indeed, any such agency action that predates a specific permit application will tend to be overly broad.

It is also important to remember that one of the hallmarks of the NEPA process is its interactive nature, in that it allows multiple opportunities for all interested parties to weigh in. This was considerably less so during EPA's 404(c) veto process in the Pebble Mine case. Among the interested parties is the State of Alaska, which asserted at the time that it was largely bypassed during the EPA's Pebble Mine deliberations, despite the fact that state-owned mineral rights were at issue.⁸⁵ The CWA is designed to protect the "primary responsibilities of States."⁸⁶ The EPA's pre-emptive veto made impossible any meaningful input from the state of Alaska, along with other interested parties.

To its credit, EPA withdrew its pre-emptive veto of the Pebble Mine on July 30, 2019 and promised to work with the Army Corps in its NEPA review currently underway.⁸⁷ Nonetheless, the CEQ's final Updated Regulations should make explicit that any such future attempts by EPA to act on its own prior to commencement of the NEPA process are prohibited.

Just as problematic as EPA exercising its 404(c) authority before the NEPA process is doing so after it. In the case of the retroactively rejected project, the Spruce coal mine in West Virginia, the extensive NEPA process was rendered irrelevant by the EPA's after-the-fact reversal.⁸⁸ The chilling effect of this precedent is especially troublesome, as the project's investors had undertaken the considerable expense of successfully navigating the NEPA process and meeting all of its requirements, only to have this effort negated afterwards by the EPA.

Allowing either the pre-emptive or retroactive example to stand would create a highly dangerous precedent of making NEPA effectively meaningless and subject to an EPA override at any time.

Section 2. Aligning EPA's Actions with the NEPA Process

On June 26, 2018, EPA announced that it will conduct a rulemaking to restrict the prospective and retroactive use of the CWA 404(c) veto authority, but to date the agency has not proposed a

⁸⁴ Environmental Protection Agency, "An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska," January 2014, <https://cfpub.epa.gov/ncea/bristolbay/recordisplay.cfm?deid=253500>.

⁸⁵ Major Projects Major Problems, p. 7.

⁸⁶ Clean Water Act, Section 101(b).

⁸⁷ Environmental Protection Agency, "Notification of Decision to Withdraw Proposed Determination to Restrict the Use of an Area as a Disposal Site; Pebble Deposit Area, Southwest Alaska," 84 FR 45749, August 30, 2019, at <https://www.federalregister.gov/documents/2019/08/30/2019-18596/notification-of-decision-to-withdraw-proposed-determination-to-restrict-the-use-of-an-area-as-a>.

⁸⁸ Environmental Protection Agency, Spruce No. 1 Surface Mine, <https://www.epa.gov/cwa-404/spruce-no-1-surface-mine>.

rule.⁸⁹ According to the agency, these new regulations “should reflect today’s permitting process and modern-day methods and protections, including the robust existing processes under the National Environmental Policy Act that already require federal agencies to consider the environmental and related social and economic effects of their proposed actions while providing opportunities for public review and comment on those evaluations.” The new regulations “should seek to address significant concerns surrounding the EPA’s prior use of its veto authority before a permit application has been filed or after a permit has been issued.”⁹⁰

Whether or not EPA promulgates such a rule, CEQ should do so in the final Updated NEPA regulations. It would be valuable for CEQ to clarify the specific requirements and timetables for the Army Corps of Engineers and the EPA regarding current and future section 404 permits under the CWA. CEQ should delineate that EPA may commence a section 404(c) veto only as part of the NEPA process, not before or after it. Doing so would advance the goal of creating one federal decision with each participating agency providing input in a coordinated and concurrent fashion.

CEQ’s Proposed Updated NEPA regulations strongly suggest but do not explicitly specify that the actions of coordinating agencies relating to permits must be conducted in concert with the development of the EIS.⁹¹ Given the EPA’s problematic precedent of initiating prospective and retrospective permit denials under section 404(c), we respectfully request that CEQ’s final rule make clear that such actions are required to be integrated with NEPA.

Respectfully Submitted,

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⁸⁹ E. Scott Pruitt, Administrator, Environmental Protection Agency, Memorandum, “Updating the EPA’s Regulations Implementing Clean Water Act Section 404(c),” June 26, 2018, https://www.epa.gov/sites/production/files/2018-06/documents/memo_cwa_section_404c_regs_06-26-2018_0.pdf.

⁹⁰ Ibid.

⁹¹ Council on Environmental Quality, “Regulations For Implementing the Procedural Provisions of the National Environmental Policy Act,” 2005, https://www.energy.gov/sites/prod/files/NEPA-40CFR1500_1508.pdf.

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