

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued September 11, 2014

Decided March 6, 2015

No. 12-1431

CENTER FOR SUSTAINABLE ECONOMY,
PETITIONER

v.

SALLY JEWELL AND BUREAU OF OCEAN ENERGY
MANAGEMENT,
RESPONDENTS

AMERICAN PETROLEUM INSTITUTE, ET AL.,
INTERVENORS

On Petition for Review of Final Decision
of the United States Department of Interior

Michael A. Livermore argued the cause for petitioner.
With him on the briefs was *Steven Sugarman*.

David C. Shilton, Attorney, U.S. Department of Justice,
argued the cause for respondents. With him on the brief were
Robert G. Dreher, Acting Assistant Attorney General, and
John E. Arbab, Attorney.

Steven J. Rosenbaum, *Bradley K. Ervin*, *Harry M. Ng*,
and *Stacy R. Linden* were on the brief for intervenors
American Petroleum Institute, et al. in support of respondents.

Before: GARLAND, *Chief Judge*, PILLARD, *Circuit Judge*,
and SENTELLE, *Senior Circuit Judge*.

Opinion for the Court filed by *Circuit Judge* PILLARD.

Dissenting opinion filed by *Circuit Judge* SENTELLE.

PILLARD, *Circuit Judge*: The Outer Continental Shelf (OCS) of the United States is a vast underwater expanse nearly equal in size to the Australian continent. Beginning a few miles from the U.S. coast, where states' jurisdiction ends, the OCS extends roughly two hundred miles into the ocean to the seaward limit of the international-law jurisdiction of the United States.¹ Billions of barrels of oil and trillions of cubic feet of natural gas lie beneath the OCS.² There is enough oil beneath the OCS to replace America's oil imports for 30 years and enough natural gas to supply all of America's households for more than 80 years.³ But drilling on the OCS can have

¹ Federal law formally defines the OCS as the submerged lands, subsoil, and seabed lying between the seaward extent of a state's jurisdiction (between three and nine miles, depending on the state) and the seaward limits of the United States' jurisdiction under international law (roughly 200 miles). See 43 U.S.C. § 1331(a); *id.* § 1301(a).

² Marc Humphries, Cong. Research Serv., RL33493, *Outer Continental Shelf: Debate Over Oil and Gas Leasing and Revenue Sharing* 14 (2008).

³ See U.S. Energy Info. Admin., DOE/EIA-0383, *Annual Energy Outlook 2012 with Projections to 2035* 62 (June 2012) (predicting residential natural gas consumption will remain nearly 5 trillion cubic feet per year through 2035); *id.* at 131 (predicting the United States will continue to import 3-3.5 billion barrels of oil annually through 2035). The OCS is estimated to contain as much as 94.5

potentially devastating effects on the environment. Concerns about the OCS's ecological vulnerability and potential harm to coastal tourism led to moratoriums on OCS drilling in the Atlantic, the Pacific, parts of the Gulf of Mexico, and parts of Alaska for more than a quarter of a century, from 1982 until the moratoriums were partially lifted in 2009.⁴ In 2010, the disaster on the *Deepwater Horizon* oil rig on the OCS renewed debate about the safety of offshore drilling. BP was drilling in mile-deep water 52 miles from shore when the subsea well ruptured and caused an oil spill spreading over thousands of square miles, damaging local economies, sensitive coastlines, and valuable wildlife throughout the region.⁵ Multinational energy companies remain interested in offshore drilling on the OCS, and the Department of the Interior determined that additional leases for such drilling may be appropriate.

The Outer Continental Shelf Lands Act (OCSLA) created a framework to facilitate the orderly and environmentally responsible exploration and extraction of oil and gas deposits on the OCS. It charges the Secretary of the Interior with preparing a program every five years containing a schedule of proposed leases for OCS resource exploration and development.⁶ In light of the potential benefits and costs of

billion barrels of oil and 449 trillion cubic feet of natural gas. See Humphries, *supra* note 2, at 14.

⁴ See Humphries, *supra* note 2, at 2, 8-9.

⁵ Dep't of Interior, *Increased Safety Measures for Energy Development on the Outer Continental Shelf* 1 (2010).

⁶ A leasing program consists of a schedule of proposed lease sales and related planning steps for those sales. See 43 U.S.C. § 1344(a). It serves as the template for the Government's leasing of drilling rights on the OCS for the five-year period following its preparation. Drilling on the OCS requires a lease that is included in the

OCS development, the Secretary's program must balance competing economic, social, and environmental values in determining when and where to make leases available. Those obligations are set forth in Section 18 of OCSLA, 43 U.S.C. § 1344.

The Center for Sustainable Economy (CSE), an Oregon-based nonprofit organization working to “speed the transition to a sustainable economy,” Pet. Br. 23, challenges the Department of the Interior's latest leasing program on the ground that the 2012-2017 leasing schedule fails to comply with the provisions of Section 18(a), which governs how Interior is to balance competing economic, social, and environmental values, *id.* § 1344(a)(1), (3), quantify and assess environmental and ecological impact, *id.* § 1344(a)(2)(A), (H), and ensure an equitable distribution of benefits and costs between OCS regions and stakeholders, *id.* § 1344(a)(2)(B)-(G). CSE argues that Interior's economic analysis violates OCSLA's express terms by failing properly to consider environmental and market effects that the agency is required to address at the planning stage, and arbitrarily and irrationally fails to quantify many of the Program's costs and benefits. CSE also argues that, in preparing its Final Programmatic Environmental Impact Statement (“Final EIS”), Interior violated the National Environmental Policy Act's (NEPA) procedural requirements by using a biased analytic methodology and providing inadequate opportunities for public comment at the Draft EIS stage.

Interior and Intervenor American Petroleum Institute (API) defend the Program as compliant with Section 18(a). They contend that, in opening up new areas of the OCS for

approved leasing program, and the lease must contain provisions consistent with the approved program. *See id.* § 1344(d)(3).

leasing, the Program rationally and appropriately balances the environmental, social, and economic values at stake. Interior and API also challenge CSE's standing to petition this Court for relief, and API further argues that CSE's NEPA claims are unripe. Both argue that CSE failed to preserve at least some of its arguments by failing to raise them in its comments to the agency.

We deny CSE's petition and conclude that: (1) CSE has associational standing to petition for review, (2) CSE's NEPA claims are unripe, (3) two of CSE's Program challenges are forfeited, and (4) CSE's remaining challenges to Interior's adoption of the 2012-2017 leasing schedule fail on their merits.

I.

Congress enacted OCSLA in 1953 to authorize the Secretary of the Interior to administer exploration and development of the OCS's mineral resources. Pub. L. No. 83-212, 67 Stat. 462 (1953) (codified as amended at 43 U.S.C. § 1331 *et seq.*). The 1953 Act empowered the Secretary to grant leases, but it did not establish statutory standards or guidelines to govern the Secretary's decisions. *California v. Watt* ("Watt I"), 668 F.2d 1290, 1295 (D.C. Cir. 1981). A quarter of a century later, Congress amended OCSLA in response to growing concerns about the United States' dependence on foreign energy sources and intensifying awareness of the need for environmental safeguards. The 1978 Amendment sought to promote "expedited exploration and development of the Outer Continental Shelf in order to achieve national economic and energy policy goals, assure national security, reduce dependence on foreign sources, and maintain a favorable balance of payments in world trade," while also ensuring

“protection of the human, marine, and coastal environments.” Pub. L. No. 95-372, 92 Stat. 629 (1978) codified at 43 U.S.C. § 1802(1)-(2)).⁷ The Amendment transformed OCSLA from “essentially a carte blanche delegation of authority to the Secretary of Interior,” *Watt I*, 668 F.2d at 1295 (quoting H.R. Rep. No. 95-590, at 54 (1977) (Comm. Rep.)), into a statute with a “structure for every conceivable step to be taken” on the path to development of an OCS leasing site. *Id.* at 1297.

OCSLA now establishes both a procedural framework and a set of substantive requirements to govern how Interior opens up areas of the OCS for resource development. *See* 43 U.S.C. §§ 1334, 1337; *Ctr. for Biological Diversity v. U.S. Dep’t of Interior* (“*CBD*”), 563 F.3d 466, 472 (D.C. Cir. 2009). Procedurally, Interior must undertake a four-stage process before allowing development of an offshore well, with each stage more specific than the last and more attentive to the potential benefits and costs of a particular drilling project. *See CBD*, 563 F.3d at 473; *Watt I*, 668 F.2d at 1297. In the first stage—the most general—Interior prepares a five-year program of proposed lease sales across the whole OCS. 43 U.S.C. § 1344. In the second stage, Interior issues leases in accordance with the program. *Id.* § 1337(a). In the third stage, Interior reviews lessees’ exploration plans. *Id.* § 1340. In the fourth stage, Interior and affected state and local governments review lessees’ development plans. *Id.* § 1351.

Rigorous substantive requirements accompany each procedural stage. Congress calls on Interior to strike an appropriate balance at each stage between local and national environmental, economic, and social needs. In reviewing a

⁷ *See* H.R. Rep. No. 95-590, at 53-57, 89 (1977) (Comm. Rep.).

lessee's exploration plans at the third stage, for example, Interior must ensure that, among other things, such plans "will not be unduly harmful to aquatic life in the area, result in pollution, create hazardous or unsafe conditions, unreasonably interfere with other uses of the area, or disturb any site, structure, or object of historical or archeological significance." *Id.* § 1340(g)(3). Similarly, in analyzing a lessee's development plans at the fourth stage, Interior must ensure, among other things, that such development will not "probably cause serious harm or damage . . . to the marine, coastal or human environments." *Id.* § 1351(h)(1)(D)(i).

CSE challenges the first stage of the 2012-2017 Leasing Program: Interior's preparation of a five-year schedule of proposed leases and related planning steps under Section 18 of OCSLA. *See id.* § 1344. A program is required to "indicat[e], as precisely as possible, the size, timing, and location of leasing activity . . . for the five-year period following its approval," *id.* § 1344(a), and is to be prepared in a manner consistent with four principles set out in numbered paragraphs in Section 18(a). Briefly stated, those four principles are that Interior must: (1) account for all relevant "economic, social, and environmental values," *id.* § 1344(a)(1); (2) use "existing" and "predictive" information to account for the interests of all relevant regions and stakeholders, *id.* § 1344(a)(2); (3) strike a "proper balance" between resource potential and environmental impact, *id.* § 1344(a)(3), and (4) assure that the Federal

Government receives “fair market value for the lands leased and the rights conveyed,” *id.* § 1344(a)(4).⁸

⁸ 43 U.S.C. § 1344(a) specifically provides that:

[. . .]

- (1) Management of the outer Continental Shelf shall be conducted in a manner which considers economic, social, and environmental values of the renewable and nonrenewable resources contained in the outer Continental Shelf, and the potential impact of oil and gas exploration on other resource values of the outer Continental Shelf and the marine, coastal, and human environments.
- (2) Timing and location of exploration, development, and production of oil and gas among the oil- and gas-bearing physiographic regions of the outer Continental Shelf shall be based on a consideration of—
 - (A) existing information concerning the geographical, geological, and ecological characteristics of such regions;
 - (B) an equitable sharing of developmental benefits and environmental risks among the various regions;
 - (C) the location of such regions with respect to, and the relative needs of, regional and national energy markets;
 - (D) the location of such regions with respect to other uses of the sea and seabed, including fisheries, navigation, existing or proposed

This first stage, involving approval of a leasing program, carries enormous “practical and legal significance.” *Watt I*, 668 F.2d at 1299. The key national decisions as to the size, timing, and location of OCS leasing—as well as the basic

sealanes, potential sites of deepwater ports, and other anticipated uses of the resources and space of the outer Continental Shelf;

- (E) the interest of potential oil and gas producers in the development of oil and gas resources as indicated by exploration or nomination;
 - (F) laws, goals, and policies of affected States which have been specifically identified by the Governors of such States as relevant matters for the Secretary’s consideration;
 - (G) the relative environmental sensitivity and marine productivity of different areas of the outer Continental Shelf; and
 - (H) relevant environmental and predictive information for different areas of the outer Continental Shelf.
- (3) The Secretary shall select the timing and location of leasing, to the maximum extent practicable, so as to obtain a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone.
- (4) Leasing activities shall be conducted to assure receipt of fair market value for the lands leased and the rights conveyed by the Federal Government.

economic analyses and justifications for such decisions—are made at this first stage. *See* 43 U.S.C. § 1344(d)(3). The Program also creates important reliance interests. Federal, state, and local governments, and the companies that participate in national and international energy markets, form long-term plans on the basis of the leasing program. The leasing schedule is therefore “extremely important to the expeditious but orderly exploitation of OCS resources.” *Watt I*, 668 F.2d at 1299.

At issue here is the 2012-2017 Program, the eighth five-year program Interior has prepared pursuant to the 1978 Amendment. That Program includes 15 potential lease sales in six OCS planning areas: the Western and Central Gulf of Mexico, the portion of the Eastern Gulf of Mexico not currently under congressional moratorium, and the Chukchi Sea, Beaufort Sea, and Cook Inlet planning areas off the coast of Alaska. Twelve of the sales are planned for the Gulf of Mexico, and one sale each is planned for the three Alaskan areas.

On October 26, 2012, CSE timely petitioned for review of Interior’s approval of the 2012-2017 Program. This Court has exclusive jurisdiction. *See* 43 U.S.C. § 1349(c)(1). Our analysis of the most recent Program is informed and guided by our four prior decisions regarding earlier leasing-program challenges. *See CBD*, 563 F.3d 466 (challenging the 2007-2012 Program); *Natural Res. Def. Council, Inc. v. Hodel* (“*Hodel*”), 865 F.2d 288 (D.C. Cir. 1988) (challenging the 1987-1992 Program); *California v. Watt* (“*Watt II*”), 712 F.2d 584 (D.C. Cir. 1983) (challenging the 1982-1987 Program); *Watt I*, 668 F.2d 1290 (challenging the 1980-1985 Program).

II.

We must address standing and ripeness issues at the threshold. *See, e.g., CBD*, 563 F.3d at 475. Interior and API argue that CSE lacks standing to petition this Court, and API contends that CSE’s NEPA claims are unripe. For the reasons that follow, we hold that CSE has associational standing (also referred to as representational standing) to institute this petition, but that its NEPA claims are unripe.

A.

CSE has associational standing. An association has standing to bring suit on behalf of its members when: (1) “its members would otherwise have standing to sue in their own right;” (2) “the interests it seeks to protect are germane to the organization’s purpose;” and (3) “neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 343 (1977).

At the threshold, CSE submitted with its opening brief a declaration of its President averring that CSE is (and has been since its founding) a membership organization, and declarations of two members describing their concrete interests and confirming that CSE speaks for them in this litigation. *See* Talberth 3d Decl. ¶¶ 3-6; Wilson 2d Decl.; Shavelson 2d Decl. Once we determine that CSE is an organization eligible to assert standing on behalf of its members, we must inquire whether CSE meets all three of the *Hunt* requirements for associational standing.

First, we consider the standing of the members who came forward. An individual has Article III standing to sue when she can show: (1) she has suffered an “injury in fact” that is concrete and particularized, and actual or imminent rather

than conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

Two of CSE's members, Diane Wilson and Bob Shavelson have standing to sue in their own right. Wilson is a commercial shrimper in the Gulf of Mexico who also makes significant recreational use of Gulf waters and coastlines. Wilson 2d Decl. ¶¶ 3-8, 19. Shavelson, an employee at an environmental nonprofit organization in south-central Alaska, makes significant recreational use of Cook Inlet and other Alaskan waters. Shavelson 2d Decl. ¶¶ 3-5. Their declarations state that their economic and aesthetic interests would be harmed by additional leasing in the Gulf of Mexico and the Beaufort and Chukchi Seas off the Alaskan coast. Wilson 2d Decl. ¶¶ 15-17, 22-23; Shavelson 2d Decl. ¶¶ 4-5, 7-11. Those harms are not conjectural or hypothetical: both individuals plan to continue using those specific marine and coastal ecosystems for commercial and recreational purposes during the years covered by the Program. Wilson 2d Decl. ¶¶ 3-4, 8, 16, 22, 24; Shavelson 2d Decl. ¶¶ 5, 9, 11. Wilson and Shavelson each also meet the requirements of causation and redressability. A leasing program that used incomplete economic analyses that failed rationally to account for leasing's impact on the environment would harm their concrete economic and aesthetic interests, and their alleged harm would be redressed were we to invalidate the Program. *See CBD*, 563 F.3d at 479. We are satisfied that CSE has at least two members with standing to sue in their own right.

Second, the interests CSE seeks to protect are germane to its purpose. The germaneness requirement mandates "pertinence between litigation subject and organizational

purpose.” *Humane Soc. of the United States v. Hodel*, 840 F.2d 45, 58 (D.C. Cir. 1988); *see also id.* at 56-57. Germaneness is required for “the modest yet important” purpose of “preventing litigious organizations from forcing the federal courts to resolve numerous issues as to which the organizations themselves enjoy little expertise and about which few of their members demonstrably care.” *Id.* at 57.

CSE readily meets the germaneness requirement. CSE’s bylaws state that a purpose of the organization is “[t]o work through administrative and legal processes to promote public policies, plans, and programs that are grounded on ecologically sound and economically sustainable principles.” CSE Bylaws Art. I, § 1. CSE advocates in favor of natural resource preservation by, among other things, urging decision makers to “incorporat[e] non-market goods and services in benefit-cost analyses performed for economic policy making and government decisions” and to adopt alternative metrics, such as the “Genuine Progress Indicator,” that better account for environmental externalities than do traditional measures of GNP. *See Talberth 3d Decl.* ¶ 6.

CSE’s specific goal in this litigation—to ensure that new offshore leasing is authorized only if necessary, economically justified, and environmentally safe—is unquestionably pertinent to CSE’s core organizational mission of “speed[ing] the transition to a sustainable economy” and “to a renewable energy platform.” *Id.* And achieving that goal would advance CSE members Wilson and Shavelson’s concrete interests in the preservation of marine and coastal wildlife and ecosystems. This is not a case in which an organization seeks to litigate an issue about which it has little expertise and does not much care. CSE’s specific expertise is in evaluating the environmental costs and benefits of pursuing various energy alternatives, with the objective of making sure that agencies’

decisions accurately and rationally assess those alternatives' effects on natural resources. *Id.* ¶¶ 3, 6.⁹

Third, neither the claim asserted nor the relief requested requires the participation of CSE's members in the lawsuit. Member participation is not required where a "suit raises a pure question of law" and neither the claims pursued nor the relief sought require the consideration of the individual circumstances of any aggrieved member of the organization. *See Int'l Union, United Auto., Aerospace & Agric. Implement Workers of Am. v. Brock*, 477 U.S. 274, 287-88 (1986); *see also Warth v. Seldin*, 422 U.S. 490, 515 (1975). CSE's petition turns entirely on whether Interior complied with its statutory obligations, and the relief it seeks is invalidation of agency action. Neither the claims nor the relief require the participation of CSE's members.

Interior and API protest that CSE is not the kind of membership organization the Supreme Court identified in *Hunt* as capable of obtaining associational standing. They contend that CSE is a "think tank" with a "broadly defined mission" that "serves no discrete, stable group of persons with a definable set of common interests." Resp. Br. 22-24 (quoting *Am. Legal Found. v. FCC*, 808 F.2d 84, 90 (D.C.

⁹ Germaneness requires "pertinence between litigation subject and organizational purpose" not, as the dissent contends, germaneness of members' injuries to organizational purpose. *Humane Soc. of the United States v. Hodel*, 840 F.2d at 58-59. The difference is a significant one. The dissent correctly notes that "[a] book club could not assert associational standing to bring a tort action on behalf of one of its members bitten by a stranger's dog." Dissent at 4. But that is because the litigation subject (a dog bite) would not be pertinent to the organization's purpose (reading and discussing books).

Cir. 1987)). As already noted, however, CSE has established that it is a traditional membership organization with a defined mission that serves a discrete, stable membership with a definable set of common interests. *See Am. Legal Found.*, 808 F.2d at 90; *Brady Campaign to Prevent Gun Violence v. Salazar*, 612 F. Supp. 2d 1, 29 (D.D.C. 2009).

CSE's bylaws, along with the declarations of CSE's members and its President, adequately demonstrate that it is an organization eligible to assert associational standing. CSE's mission is "to promote public policies, plans, and programs that are grounded on ecologically sound and economically sustainable principles" through "administrative and legal processes." CSE Bylaws Art. I, § 1; *see Talberth 3d Decl.* ¶ 6; *Wilson 2d Decl.* ¶ 2; *Shavelson 2d Decl.* ¶ 2. CSE is structured to serve the interests of its members: Formally, all of CSE's current members are voting members entitled to elect its Board, no new voting members may join the organization unless approved by the present voting membership, and Board membership is limited to individuals who "have demonstrated a commitment to the mission and purposes of [CSE]." CSE Bylaws Art. IV, § 2; *see id.* Art. III, § 1; *id.* Art. IV, § 5; *Talberth 4th Decl.* ¶ 3; *Talberth 3d Decl.* ¶¶ 4-5. Functionally, CSE's members and its President aver that they participate actively in CSE's operations, and that CSE serves as a vehicle for the vindication of their interests. *Talberth 3d Decl.* ¶¶ 5-8; *Wilson 2d Decl.* ¶ 2; *Shavelson 2d Decl.* ¶ 2. In sum, CSE's submissions suffice to establish that CSE is a traditional membership organization with standing to challenge Interior's OCS Leasing Program.

Our dissenting colleague contends that it is "inappropriate for the court to rely on [the petitioner's] post-argument submission" of its bylaws and other evidence regarding standing, Dissent at 2, maintaining that to do so is

inconsistent with circuit rules. That is simply not the case. It is true that dissenting judges have repeatedly objected to such post-argument submissions, making many of the same arguments that our colleague makes today. *See Americans for Safe Access v. Drug Enforcement Admin.*, 706 F.3d 438, 452-56 (D.C. Cir. 2013) (Henderson, J., dissenting); *Public Citizen, Inc. v. Nat’l Highway Traffic Safety Admin.*, 489 F.3d 1279, 1298-99 (D.C. Cir. 2007) (Sentelle, J., dissenting); *Am. Library Ass’n v. FCC*, 401 F.3d 489, 496-97 (D.C. Cir. 2005) (Sentelle, J., dissenting). At the same time, however, panel majorities have consistently rejected those arguments. *See Americans for Safe Access*, 706 F.3d at 444-45 (“The point here is simple: under the law of this circuit, the members of a panel retain discretion to seek supplemental submissions on standing to fulfill the obligation of the court to determine whether the requirements of Article III have been met. Circuit Rule 28(a)(7) does not preclude this, nor does the law of the circuit.”); *Public Citizen*, 489 F.3d at 1296 (“This Court ‘retains the discretion to seek supplemental submissions from the parties if it decides that more information is necessary to determine whether petitioners, in fact, have standing.’” (quoting *Am. Library Ass’n*, 401 F.3d at 494)); *see also, e.g., Am. Chemistry Council v. Dep’t of Transp.*, 468 F.3d 810, 815 (D.C. Cir. 2006).

We believe it was appropriate to rely on the petitioner’s post-argument submission of its bylaws and other evidence regarding standing. As we said in *Americans for Safe Access*, “[i]f the parties reasonably, but mistakenly, believed that the initial filings before the court had sufficiently demonstrated standing, the court may—as it did here—request supplemental affidavits and briefing to determine whether the parties have met the requirements for standing.” 706 F.3d at 443 (citation omitted). That is also the situation in this case. Promptly in response to API’s motion to dismiss the petition for lack of

standing, CSE submitted declarations of its President and two of its members. Those declarations describe CSE's mission and bylaws, and set forth how CSE operates. CSE sought to use those declarations to establish that it is a traditional membership organization eligible to invoke associational standing under *Hunt*. See Talberth 3d Decl. ¶¶ 1-6; Wilson 2d Decl. ¶¶ 1-2; Shavelson 2d Decl. ¶¶ 1-2. At oral argument, the Court requested a copy of CSE's bylaws to aid it in reaching a decision on the standing issue. Oral Arg. Rec. at 3:25-6:25. CSE provided its bylaws to the Court shortly thereafter, and they, too, are a proper ground for our analysis here. This case thus presents a familiar mode of compliance with our rules: "Although Petitioner[] made a reasonable effort to satisfy the command of Circuit Rule 28(a)(7) in [its] opening [filing] by advancing evidence and arguments in support of standing, the court still had questions regarding whether the facts asserted by Petitioner[] were sufficient to satisfy the requirements of Article III standing. Therefore, the panel majority, adhering to well-established circuit law, requested supplemental [filings] after oral arguments. Nothing in the text of the rule bars the court from requesting such filings." *Americans for Safe Access*, 706 F.3d at 444.

B.

CSE's NEPA claims are unripe. Interior violated NEPA in the Program's Final EIS, CSE contends, by presenting a biased analysis of the so-called "no-action alternative" that undervalued OCS non-mineral resources in their natural and unaltered state. CSE sees a further NEPA violation insofar as Interior denied a meaningful opportunity for comment at the Draft EIS stage on Interior's economic analyses, which CSE contends appeared for the first time when Interior simultaneously released the Final EIS and Final Economic Analysis Methodology, with "a wealth of new assumptions

and conclusions,” after the opportunity for comment on the draft documents had closed. Pet. Br. 59.

As we recognized in *CBD*, “[i]n the context of multiple-stage leasing programs . . . [the] obligation to fully comply with NEPA do[es] not mature until leases are issued,” because only at that point has there been an “irreversible and irretrievable commitment of resources.” 563 F.3d at 480 (internal quotation marks omitted). Here, as in *CBD*, we confront a challenge to a multiple-stage program under which no lease sale has yet occurred and no irreversible and irretrievable commitment of resources has been made. As we reasoned in *CBD*, allowing NEPA challenges to be brought at this early stage, “when no rights have yet been implicated, or actions taken, would essentially create an additional procedural requirement for all agencies adopting any segmented program,” that “would impose too onerous an obligation, and would require an agency to divert too many of its resources at too early a stage in the decision-making process.” *Id.* at 480-81. A petitioner “suffer[s] little by having to wait until the leasing stage has commenced in order to receive the information it requires. In the meantime . . . no drilling will have occurred, and consequently, no harm will yet have occurred to the animals or their environment.” *Id.* at 481. In light of our holding in *CBD*, CSE’s NEPA claims must be dismissed as unripe.

CSE and Interior argue, each for a different reason, that CSE’s NEPA challenges are ripe. Interior contends that because “challenges to [Interior’s] cost-benefit analysis would not be cognizable at later stages of the OCS process,” they should be considered ripe now. Resp. Br. 52. Interior is incorrect. CSE will have an opportunity to raise its NEPA claims, including its cost-benefit claims, in response to specific lease sales. That holding is at least implicit in *CBD*

and *Wyoming Outdoor Council v. U.S. Forest Service*, 165 F.3d 43, 49-50 (D.C. Cir. 1999), a case on which *CBD* substantially relies. *See CBD*, 563 F.3d at 480 (explaining that Petitioners would merely “hav[e] to wait” to bring their claims); *Wyo. Outdoor Council*, 165 F.3d at 50 (holding that a NEPA challenge was “premature” but not “preclude[d]”; once leases issued, the petitioner “was free to challenge the Forest Service’s NEPA compliance”).

CSE contends that its NEPA claims are ripe because in *Hodel*, one of our prior decisions regarding an early OCS five-year leasing program, we addressed the merits of the petitioners’ NEPA challenges. *See* 865 F.2d at 294-300. In *Hodel*, however, the ripeness of the petitioners’ NEPA claims (as distinct from their OCSLA claims) was not raised, and the court did not address it. In contrast, in *CBD*, our most recent decision addressing an OCS leasing program, we examined the ripeness issue in detail before concluding that petitioners’ NEPA claims were unripe. *See CBD*, 563 F.3d at 480-82. We do not set jurisdictional precedents *sub silentio*. *See Ariz. Christian Sch. Tuition Org. v. Winn*, 131 S. Ct. 1436, 1448 (2011). Because *Hodel* did not consider the potential unripeness of the NEPA claims at issue in that case, we follow *CBD* to conclude that CSE’s NEPA claims are unripe.

III.

CSE raises six distinct challenges to Interior’s adoption of the 2012-2017 Program. All six are grounded in the same basic claims: that Interior either violated the dictates of Section 18(a) of OCSLA, or failed rationally to strike an appropriate balance between environmental costs and national energy needs as required under the Administrative Procedure Act, or both. Two of those challenges are forfeited because

they were not properly raised before the agency; the other four fail on their merits.

A.

Review of a five-year leasing program for compliance with OCSLA charts the typical contours of administrative review generally. We liberally defer to the agency's findings of fact, upholding facts supported by substantial evidence; we review the agency's policy judgments to ensure that they are neither arbitrary nor irrational; and we sustain the agency's interpretation of its authorizing statute so long as we find it to be legally permissible. *See CBD*, 563 F.3d at 484; *Hodel*, 865 F.2d at 300; *Watt II*, 712 F.2d at 590-91; *Watt I*, 668 F.2d at 1300-03. *Chevron's* two-step standard of review guides our deference to Interior's interpretation of OCSLA. *See Hodel*, 865 F.2d at 300 (citing *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-45 (1984)).

B.

Two of CSE's arguments were not preserved. OCSLA's provision for judicial review states that "[s]pecific objections to the action of the Secretary shall be considered by the court only if the issues upon which such objections are based have been submitted to the Secretary during the administrative proceedings related to the actions involved." 43 U.S.C. § 1349(c)(5). That provision embodies the general rule of administrative procedure that, "[t]o preserve a legal or factual argument, we require its proponent to have given the agency a 'fair opportunity' to entertain it in the administrative forum before raising it in the judicial one." *Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1290 (D.C. Cir. 2004) (citation omitted); *see also United States v. L.A. Tucker Truck Lines, Inc.*, 344 U.S. 33, 36-37 (1952).

1.

CSE argues that Interior violated Section 18(a)(3) by failing to quantify potential coastal and onshore impact from additional OCS leasing. *See* 43 U.S.C. § 1344(a)(3); *see also id.* § 1344(a)(1). CSE objects that Interior’s quantitative cost-benefit analysis assumes that coastal and onshore impact of OCS leasing can be mitigated to zero through “permit[-]related mitigation” at later program stages. J.A. 04675 (Bureau of Ocean Energy Mgmt., U.S. Dep’t of the Interior, BOEM 2012-025, *Forecasting Environmental and Social Externalities Associated with OCS Oil & Gas Development: The Revised Offshore Environmental Cost Model 95* (June 2012)). Assigning zero cost, CSE contends, is irrational and violates our precedents interpreting Section 18(a). *See Hodel*, 865 F.2d at 311 (valuing wetlands lost to OCS-related infrastructure); *Watt I*, 668 F.2d at 1317 (explaining that “consideration of environmental damage” may not be “postponed or foregone” to a later program stage). CSE contends that zeroing out at the initial, program stage important costs related to OCS leasing defers their consideration until a later program stage, in violation of Section 18(a)(3). Interior responds that it “specifically considered coastal and onshore impacts, including infrastructure issues”—albeit more qualitatively—“when performing the balancing required by Section 18(a)(3).” Resp. Br. 34.

We do not determine the adequacy of Interior’s consideration, however, because CSE forfeited that claim. CSE failed to put Interior fairly on notice of the objection that its particular cost-benefit methodology inadequately quantified the coastal and onshore impact of additional OCS leasing. A footnote in CSE’s reply brief points to CSE’s own comment as grounds to find the issue preserved, but only two

passages in that forty-page comment even obliquely refer to potential damage to ecosystems generally, and the feasibility of quantifying such costs. One passage asserts that Interior failed to account for the “benefits . . . generated by a diverse array of ecosystem services provided by marine and terrestrial ecosystems affected by OCS leasing activities” and that “the reduction in these ecosystem service benefits should be counted as a Program cost.” J.A. 4314 (Ctr. for Sustainable Econ., *Net Public Benefits Analysis of the Proposed Outer Continental Shelf Oil & Gas Leasing Program* 16 (Feb. 2012)). The second passage notes that “[s]uch losses can, and have been[,] quantified with peer-reviewed methods available to [Interior],” and provides one such estimate. *Id.* at 4314-15.

Those snippets did not fairly raise CSE’s objection. Read in the light most favorable to CSE, they suggest that Interior should have quantitatively accounted for the harms to marine and terrestrial ecosystems in its estimates of Program costs, and that such costs can be quantified. The question in determining whether an issue was preserved, however, is not simply whether it was raised in some fashion, but whether it was raised with sufficient precision, clarity, and emphasis to give the agency a fair opportunity to address it. *See, e.g., RI Consumers’ Council v. Fed. Power Comm’n*, 504 F.2d 203, 212 (D.C. Cir. 1974). With the benefit of hindsight and guided by petitioner’s briefing to the sentences on the specific pages where the issue was mentioned, we see a connection between the comment and the current objection. Interior did not have anything close to the kind of explanation we do now, however, nor the same opportunity to parse the record and decipher the claims arguably latent in only a few sentences. Even looking only at CSE’s own forty-page comment, it is hardly apparent in context that CSE was making what it now puts forward as an objection to the methodology by which Interior considered new leasing’s anticipated coastal and

onshore impacts. Interior received 280,189 comments on the 2012-2017 Program, some of them dense and lengthy. We cannot conclude on this record that CSE fairly raised the objection it now presses to Interior's method of assessing OCS drilling's coastal and onshore effects.

CSE does not attempt to explain how its two cited passages fairly raised its objections. When the government argues an issue is forfeited because it was not fairly raised, petitioners must explain why the issue was raised in a fashion sufficient to preserve it. Whether an objection is fairly raised depends on, among other things, the size of the record, the technical complexity of the subject, and the clarity of the objection. *See, e.g., Nat'l Ass'n of Mfrs. v. U.S. Dep't of Interior*, 134 F.3d 1095, 1111 (D.C. Cir. 1998). As we have previously explained, “[t]he fact that, buried in hundreds of pages of technical comments . . . some mention is made [of an argument related to a claim brought on judicial review] . . . is insufficient to preserve the issue for review on appeal.” *Id.* Because CSE's comment did not provide Interior a fair opportunity to address CSE's challenge, the argument is not preserved for our review.

2.

CSE also claims that Interior's cost-benefit analysis is flawed because it was based on “the irrational assumption that all OCS leases will be developed.” Pet. Br. 32. According to CSE, most leases are never developed or are substantially delayed in development. A cost-benefit analysis that predicts that every OCS lease granted under the 2012-2017 Program will be developed, and developed promptly, would thus fail to account accurately for Interior's experience with the leasing program. Any such assumption would, in CSE's view, significantly distort Interior's assessment of the benefits of

additional OCS leasing, and warrant vacating it as arbitrary and capricious.

That claim, too, was not preserved, because CSE has not identified anything in the administrative record that could be construed as fairly raising it before the agency. CSE concedes its own failure to raise the point, but contends in its reply brief that another organization publicly commented on it. *See* J.A. 4398 (*Oceana Comment on the Draft Programmatic EIS for 2012-2017 Leasing Program*, at 6). The comment CSE cites, however, did not address the adequacy of Interior’s cost-benefit analysis of projected lease development. It merely made the general point that no new leasing needed to be undertaken on the OCS for the next several years because lessees wanting to drill could instead develop inactive leases. *See id.* That comment does not even indirectly make the claim CSE now advances, and therefore did not give Interior a fair opportunity to address it. *See, e.g., Koretoff v. Vilsack*, 707 F.3d 394, 398 (D.C. Cir. 2013) (explaining that “[w]e require the argument petitioner advances to be raised before the agency, not merely the same general legal issue” (internal quotation marks and brackets omitted)).

C.

CSE’s first preserved challenge to the Leasing Program is that Interior’s cost-benefit methodology for evaluating new leasing on the OCS is irrational and violates Section 18. CSE particularly critiques Interior’s evaluation of the costs of forgoing drilling, *i.e.*, choosing a “no-leasing option,” in Alaska. We begin our review by describing the relevant aspects of Interior’s methodology.

The OCS is divided into four regions (Alaska, Pacific, Gulf of Mexico, and Atlantic) and, within those regions, 26

planning areas. Those regions and planning areas divide the OCS into discrete, though basically arbitrary, geographic sections. Pursuant to Section 18(a)(3), Interior conducts a cost-benefit analysis of offering each program area for drilling. Interior's cost-benefit analysis compared environmental and social costs of proposed OCS leasing in each program area with environmental and social costs of not authorizing additional leases on the OCS for the duration of the 2012-2017 Leasing Program. The agency sought to quantify "environmental costs (ecology and air quality) and social costs (recreation, property values, subsistence harvests, and commercial fishing[]), in addition to costs from activities associated with exploration, development, production and transportation that might occur with new OCS production *and its most likely replacement.*" J.A. 1872-73 (emphasis added). Interior makes clear that it used the replacement-cost methodology that CSE challenges in considering whether to propose additional OCS leasing: For each program area it considered, Interior determined that "the environmental and social costs of relying on substitute sources of energy are equal to or greater than the costs from producing area resources." J.A. 1873.

Interior's inclusion of replacement energy costs in its net-cost analysis rests on the somewhat counterintuitive notion that *not* drilling for fossil fuels on the OCS would harm the environment. Interior's premise is that, if the natural gas and oil obtainable from the OCS were not extracted, American energy users would turn to other sources to meet their energy needs. There are, in other words, opportunity costs of decisions not to drill. Interior's projected substitute sources for OCS oil and gas include renewable and alternative energy sources, and reduced consumption. Interior also reasonably assumed, however, that the principal substitutes for forgone oil and gas from OCS leasing would be increased oil, natural

gas (and some coal) extracted from onshore sites, and oil (and some gas) transported from overseas. Meeting national energy demands from those sources carries its own environmental risks and harms, distinct from the familiar risks associated with extraction from the OCS, which Interior determined should be taken into account in evaluating OCS leasing.

The dominant costs Interior attributed to obtaining energy from likely substitute fuel sources were air pollution from increased onshore extraction, and air pollution and potential near-shore oil spills from increased reliance on tankers to import substitute fuel, as well as other social and environmental disturbances. Interior reasonably assumed that the onshore natural gas extraction that would substitute for forgone OCS natural gas would occur nearer to domestic population centers, and so intensify such populations' pollution exposure. Similarly, Interior reasonably assumed that importation of substitute oil would increase tanker air emissions and near-shore oil spills along United States coastal and port areas. Interior concluded that, per unit of production, potential pollution from extracting oil and gas from the OCS many miles off shore would have less adverse impact on human health and property values than potential pollution on or near shore, close to densely populated and coastal areas.

Interior reasonably chose an analytical approach that captured what it concluded are two significant elements of environmental and social assessment. First, in accounting for national costs of obtaining substitute energy, Interior assessed such projected costs wherever in the United States they were likely physically to occur; it did not restrict its assessment to costs that would be felt within an OCS Region or area's geographic boundaries. Interior understood that the costs of forgoing leasing in favor of substitute sources—air pollution,

oil spills, and other disturbances—do not necessarily fall in any OCS Project Region, but are often experienced onshore, near shore, or in OCS areas not under consideration for leasing. If leasing on the OCS in Alaska were forgone, for example, environmental disturbances from any substitute source—such as fracking in Appalachia, drilling in Oklahoma, or importing Venezuelan oil or Trinidadian natural gas via tanker—would not be experienced in Alaska, but in Appalachia, Oklahoma, or along the coastal regions and ports trafficked by tankers from the source countries.

Second, Interior attributed to each OCS planning area a proportionate share of the aggregate nationwide environmental and social costs that it calculated would arise from forgoing exploitation of the energy in that OCS area. If Interior estimated that a particular program area could produce 25 percent of the natural gas under the leasing program as a whole, it assigned to that area, as costs of forgoing leasing, 25 percent of the total national environmental and social cost associated with forgoing all OCS gas leasing and instead obtaining substitutes. Interior's approach thereby sought to attribute to each OCS area a proportionate share of the national environmental costs of obtaining elsewhere the energy that the economy would demand if energy were not made available under an expanded OCS leasing program. The core idea of that economic attribution is that, if extracting natural gas from the Alaskan OCS would cause less net social and environmental harm nationwide than would obtaining natural gas from substitute sources, Interior's cost-benefit analysis should favor leasing on the Alaskan OCS over forgoing it.

CSE argues that Interior's attribution methodology is irrational and violates Section 18, which CSE reads to require that Interior only attribute costs to OCS areas if they

physically arise within those areas. CSE points to the statutory requirement that Interior assess the relative “developmental benefits and environmental risks among the various [OCS] regions,” 43 U.S.C. § 1344(a)(2)(B), as well as each OCS area’s “relative environmental sensitivity,” *id.* § 1344(a)(2)(G). According to CSE, Congress would not have worded the statute that way unless it meant to require Interior to attribute to a particular OCS area only those environmental benefits and costs of forgoing exploration and development that physically occur there.

Implicit in CSE’s position is that environmental effects that do not occur in any OCS area should be treated as irrelevant to Interior’s environmental calculus under OCSLA. For example, the costs of increased air pollution due to increased onshore natural gas extraction in the center of the country to substitute for forgone OCS drilling might not accrue within any OCS area and thus, under CSE’s methodology, would not be counted at all. CSE’s further implication is that inter-area comparisons should favor drilling in OCS areas that would be more harmed by resort to substitute sources, even if drilling in a different OCS area would equally reduce demand for the same substitute sources and their attendant harms, and would itself be less directly damaging.

CSE contends that limiting attribution of costs to the areas in which they physically occur would accurately recognize that forgoing new OCS production in Alaska is more socially and environmentally beneficial than forgoing production in the Gulf of Mexico. Looking at the Alaskan OCS areas, the benefits of forgoing leasing in the pristine Alaskan wilderness are significant, while its costs are, in CSE’s analysis, “miniscule compared to [the costs of forgoing leasing in] non-Alaskan OCS areas.” Pet. Br. 27. Alaska is

lightly populated, relatively rural, far from major oil shipping lanes, and not rich in non-OCS fossil fuels, so any policy switch to substitute sources of oil and gas would be unlikely to involve environmentally harmful energy extraction or transportation in the Alaskan OCS areas. Social and environmental costs physically felt on the Alaskan OCS would be quite low—rarely, if ever, outweighing the area-specific benefits of forgoing drilling there. In contrast, the Gulf’s OCS Region contains major shipping routes and ports that would receive added traffic from increased reliance on imported fuel, so significant risks and accompanying costs of oil spills from importing substitute oil would be physically experienced in the Gulf. Air pollution from onshore drilling in Texas also could affect the Gulf’s OCS Region. Thus, if attributed only where they occur, such substitute-source costs would tend to offset the area-specific benefits of forgoing leasing in the Gulf. CSE’s approach accordingly favors drilling in those areas that also happen to be where costs of substitute energy sources would be concentrated. The relative benefits of forgoing drilling in Alaska thus appear much greater under CSE’s methodology than under Interior’s.

Interior’s approach, however, was neither expressly proscribed by the statute nor unreasonable. As a statutory matter, under *Chevron*, (1) unless its view is contrary to Congress’s clear intent (2) we defer to an agency’s reasonable construction of its governing statute. 467 U.S. at 842-43. No clear congressional intent forecloses Interior’s construction of OCSLA. Section 18(a) requires consideration of the particular ecological characteristics and environmental sensitivities of the various program areas, but does not specify

precisely how they must be considered. 43 U.S.C. § 1344(a)(2)(B), (G).¹⁰

Interior's decision to tabulate costs nationally and allocate them proportionally was reasonable. Its national focus comports with Section 18(a)'s directive that the Secretary develop a leasing program "which [s]he determines will best meet national energy needs." 43 U.S.C. § 1344(a). It is also consistent with the statute's broader statement of congressional purpose to treat "the [OCS] [a]s a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs." *Id.* § 1332(3). Those provisions, with their national focus, can reasonably be interpreted to support Interior's understanding of Section 18(a). Nothing in Section 18(a) requires CSE's methodology over Interior's.

As a policy matter, Interior made a reasonable and considered judgment to allocate national social and environmental costs of substitute energy to OCS program areas in proportion to their energy-producing potential. If Interior had instead chosen to recognize only those costs of forgone production (e.g., those associated with increased imports) to the extent that they were physically experienced within the program area of the leasing under consideration, its analysis would have differed significantly. It could not have

¹⁰ We do not decide whether Section 18(a) would have permitted Interior, had it so chosen, to limit its substitute-energy cost considerations to OCS-harming costs, or whether, as CSE urges, the agency might permissibly have attributed costs only to the particular OCS area in which they physically would occur.

accounted for costs of an OCS area's no-lease option that would be felt outside that area, or outside the OCS. It would also have impeded Interior's ability to make cost-benefit comparisons between potential leasing in different program areas. It would have favored new leasing in the Gulf over new leasing in Alaska, for example, without regard for how little oil the Gulf of Mexico's OCS might contain, or how great might be the untapped energy potential of the Alaskan OCS.

Interior instead reasonably determined that the relative costs of leasing in various OCS program areas should take into account each area's potential to minimize total national environmental impact. Its methodology recognizes that the national social and environmental costs of substitute energy demanded by a no-lease option are largely unaffected by the location of the no-lease option; they are a function of the amount of energy extraction forgone, and can be avoided by drilling anywhere for a commensurate amount of energy. Interior recognizes that, if a methodology only takes account of the costs of substitute energy when those costs happen to fall within the OCS program area under consideration, the methodology will arbitrarily favor drilling there to avoid those costs—even though, separately considered, the costs of drilling itself might be lower elsewhere.

In sum, CSE's proposed methodology would effectively prioritize the cleanliness of remote Alaskan wilderness areas, whereas Interior's methodology also accounts for the harmfulness of onshore and near-shore pollution associated with substitute energy sources. Interior counts those costs wherever they occur within the United States, and attributes them to OCS areas in proportion to the area's potential energy reserves. Doing so means that Interior counts as more costly pollution affecting densely populated areas that impinges

more immediately on human health and welfare than pollution occurring far from most human life. Interior's judgments may be debatable. Some, like CSE, may reasonably conclude they are not the best judgments. But they are legally permissible.

We hold that Interior's decision to take a national perspective, and to attribute nationwide environmental and social costs to particular OCS areas in proportion to the amount of production expected from each area if leasing and production were allowed there, was both reasonable and consistent with Section 18(a) of OCSLA.

D.

CSE maintains that the economic analysis underlying the Program irrationally fails to track the proportion of OCS energy consumed by the American public. According to CSE, that failure means that Interior is not complying with the statutory mandate to develop OCS resources to meet "national energy needs." 43 U.S.C. § 1344(a); *See also id.* § 1344(a)(2)(C) (requiring Interior to consider "the relative needs of [] regional and national energy markets"); *id.* § 1332(3) ("the [OCS] is a vital national resource" to be developed to meet "national needs"); *id.* § 1802(2)(A) (a policy underlying OCSLA is "to meet the Nation's energy needs"). In CSE's view, any OCS energy sold in foreign markets cannot have been produced to meet America's "national needs." We reject that claim. Interior did not need to earmark where OCS fuel is finally consumed in order rationally to consider national energy needs. Interior's analyses of energy markets were reasonable on the facts before it.

OCSLA does not mandate that Interior track what proportion of OCS-derived fuels are consumed in the United States. CSE equates the statutory mandate that Interior

consider the nation's "energy needs" with only one potential element of those needs: meeting current demand for domestic consumption of finished energy products. The Act's mandate is not so confined. National energy needs may be addressed by Interior's consideration of total energy production capacity, without regard to where the energy would ordinarily be consumed. Any capacity that is developed domestically helps to ensure that the United States has available domestic sources of fuel for domestic consumption as needed, for example, in the event of international conflict, natural disaster, unexpected foreign fuel shortages, or price volatility in international markets. *See* 43 U.S.C. § 1802(1) (listing "assur[ing] national security, reduc[ing] dependence on foreign sources, and maintain[ing] a favorable balance of payments in world trade" among OCSLA's express purposes); *see also* J.A. 1849, 1853 (Bureau of Ocean Energy Mgmt., *U.S. Dep't of the Interior, Proposed Final Outer Continental Shelf Oil & Gas Leasing Program: 2012-2017* (June 2012)). OCSLA thus cannot be read, as CSE suggests, to require Interior to monitor the ultimate consumption point of OCS energy.

There is nothing irrational about Interior's choice in developing the 2012-2017 Program not to earmark the point of consumption of OCS-derived energy. In considering the impact of additional OCS leasing on domestic demand, Interior reasonably assessed additional leasing's impact on domestic and international fuel markets. Because oil and natural gas are fungible and traded on integrated global markets, it does not matter precisely where any particular barrel of oil or cubic foot of natural gas is consumed. A barrel of OCS fuel consumed abroad has a direct impact on America's domestic energy supply. If a barrel of Alaskan OCS-derived oil is consumed in northern Canada, freeing a barrel of southern Canadian oil for import into the United

States, the net effect on the United States' domestic fuel supply is the same as if the Alaskan oil were consumed in the United States. For that reason, Interior does not need to label and follow OCS oil from platform to port to consumer in order to find that it helps to meet the United States' national energy needs; it is enough for Interior to take into account OCS fuel's impact on national and international energy markets. *See* 43 U.S.C. § 1344(a)(2)(C) (requiring Interior to consider "the relative needs of [] regional and national energy markets" in determining the location and timing of new OCS leasing).

In the 2012-2017 Program, for example, Interior took careful account of future global and domestic oil and natural gas demand. Drawing on United States Energy Information Administration ("EIA") forecasts, Interior projected out to 2035 the demand for OCS fuel in national and international energy markets. J.A. 1848-62. Interior concluded that the United States would remain a net oil importer through 2035, J.A. 1851, 1853, but may become a net exporter of natural gas as early as 2016, J.A. 1851-52, 1855. Interior also expects that global energy demand will increase over the next several decades, leading to upward price pressure as "economies such as those of China and India" increase their crude oil consumption. J.A. 1854. Higher global prices would hinder American consumers' ability to meet their energy needs. OCS oil could help to mitigate those adverse price effects. Interior thus has rationally considered available projections of national energy needs.

CSE adds a wrinkle to its protest based on the fact that Interior only assessed the markets for unprocessed fuels, not markets for gasoline, diesel, and kerosene ("finished petroleum products") that are refined from unprocessed OCS fuel. CSE contends that demand in markets for unprocessed

fuels could reflect domestic refinery demand—*i.e.*, demand for crude oil to be refined in the United States for consumption abroad—rather than demand for American consumption. CSE claims that the market for unprocessed oil is a poor proxy for assessing the impact of additional OCS leasing on the nation’s “energy needs” because much of the energy derived from the OCS and temporarily “needed” in refineries here ends up exported as finished petroleum products consumed overseas.

CSE’s point is well taken in general, but Interior’s reliance on data regarding unprocessed fuels was in this case reasonable. Interior’s decision not to account separately for data on finished petroleum product markets did not significantly affect its assessment of the nation’s “energy needs” and “energy markets,” 43 U.S.C. §§ 1344(a)(2)(C), 1802(2)(A). The weight of the evidence is that American crude oil demand will primarily reflect domestic demand for finished petroleum products over the next half century. *See* U.S. Energy Info. Admin., DOE/EIA-0383, *Annual Energy Outlook 2012 with Projections to 2035* 131 (June 2012) (“Appendix A”) (projecting that the United States will consume ninety-eight percent of its “liquid fuels and other petroleum” through 2035) *cross-cited at* J.A. 1849. Interior is permitted, under *Chevron*, to use markets for crude oil and natural gas as proxies for the nation’s “energy markets” and “energy needs,” as long as doing so is reasonable. In light of the difficulty of predicting the behavior of energy markets over decades-long time horizons, we have long afforded Interior substantial latitude to attempt to predict long-term energy market demand. *See Watt I*, 668 F.2d at 1309. Given the latitude that *Watt I* affords, and the fact that the EIA estimates that the overwhelming majority of refined petroleum products will be consumed domestically over that time span, Interior’s 2012-2017 Leasing Program reasonably

uses markets for crude oil and natural gas (domestic and international) as proxies for the nation's energy needs.¹¹

Contrary to CSE's contentions, Interior reasonably concluded that what matters in determining whether OCS-derived fuel meets national needs is not whether the additional OCS fuel is consumed domestically, but whether it helps to satisfy domestic needs for fuel security and net supply, both in the aggregate and over time. Interior's consideration of the impact of OCS production on national energy needs was adequate without specific tracking of the final consumption point of finished OCS fuels.

E.

CSE argues that, in allowing new OCS leasing between 2012 and 2017, Interior irrationally assumed that all of the

¹¹ OCSLA does not make assessment of the impact of OCS leasing on markets for finished petroleum products mandatory under *Chevron* step one, but it also does not permit Interior to ignore those markets entirely. In *CBD*, we concluded that OCSLA was sufficiently ambiguous to permit Interior to forgo consideration of climate-related effects of burning OCS-derived fossil fuels, and to allow Interior to limit its consideration of the environmental impact of OCS leasing. 563 F.3d at 485. The statutory ambiguity in the words "energy markets," 43 U.S.C. § 1344(a)(2)(C), and "energy needs," *id.* § 1802(2)(A), is narrower. Interior is not required to map out the supply and demand in every downstream petroleum product market. Such markets and needs may be understood to encompass every type of energy and every type of energy market affected by OCS leasing, including markets for consumer fuels. The terms "energy markets" and "energy needs," however, do mandate that Interior reasonably assess the impact of additional OCS leasing on the nation's supply of *energy* when necessary, not just the effect on the national supply of unrefined fossil fuels.

energy produced by the new leases would be consumed domestically, thereby implying in its projections that any forgone OCS leasing would require a commensurate increase in either onshore domestic production or importation for domestic consumption. CSE contends that Interior failed to consider that the United States may soon become a net exporter of fossil fuels. It therefore irrationally failed, in CSE's view, to consider that forgone OCS production could merely lead to reduced fuel exports, with no need to increase imports or onshore excavation to meet domestic demand.

That claim, like the previous one, misapprehends Interior's analysis. CSE's contention that Interior irrationally assumed that all OCS-derived fuel would be consumed domestically is factually incorrect. In summarizing the results of its economic model in its Program and Economic Analysis Methodology, Interior recounted its predictions that forgoing additional leasing on the OCS would cause an increase in the use of substitute fuels such as renewables, coal, imported oil and natural gas, and a reduction in overall domestic energy consumption from greater efforts to conserve in the face of higher prices. J.A. 1859-60, 1976. Interior considered not only the potential need for substitute sources of fuel for the domestic market likely to result from deferral of additional OCS production, but also decreases in oil imports and natural gas exports. J.A. 4873 *cited at* J.A. 1859. As explained above, Interior sought to predict domestic and global energy demand over the life of the leasing program, *see supra* Part III.D, concluding that the United States would remain a net importer of oil through 2035, while shifting during the same period to net exportation of natural gas. J.A. 1851; *See generally* J.A. 1848-62. Interior predicted that net oil imports would increase to make up for the shortfall in domestic oil supply, J.A. 1857-59, and it specifically took account of reductions in natural gas exports, as well as

sharply lower domestic natural gas demand due to substitution effects, in the event of no new OCS leasing, *see* J.A. 4873 *cited at* J.A. 1859.

Because Interior carefully considered the impact that forgoing new OCS leasing would have on the nation's energy needs, and did not ignore the possibility that the United States could become a net exporter of some fuels over the next half century, CSE's challenge to Interior's domestic-needs analysis lacks merit.

F.

CSE argues that Section 18 of OCSLA required Interior explicitly to quantify the "informational value," also known as the "option value," of delaying OCS leasing. Section 18 requires Interior to schedule the leasing of OCS mineral resources at the time that best meets national energy needs. *See* 43 U.S.C. § 1344(a). Interior could authorize new leasing this year, next year, or in fifty years. Every day that Interior waits has a cost insofar as valuable fuel that could be used today instead lies dormant. *See Watt I*, 668 F.2d at 1320. But waiting also has benefits, including what is referred to as informational value. More is learned with the passage of time: Technology improves. Drilling becomes cheaper, safer, and less environmentally damaging. Better tanker technology renders oil tanker spills less likely and less damaging. The true costs of tapping OCS energy resources are better understood as more becomes known about the damaging effects of fossil fuel pollutants. Development of energy efficiencies and renewable energy sources reduces the need to rely on fossil fuels. As safer techniques and more effective technologies continue to be developed, the costs associated with drilling decline. There is therefore a tangible present economic benefit to delaying the decision to drill for fossil

fuels to preserve the opportunity to see what new technologies develop and what new information comes to light. Economists have crafted techniques for quantifying, in at least some situations, such informational value or option value of delaying decisions.¹²

CSE builds its informational-value claim out of two principles articulated in Section 18 and our prior opinions. First, Section 18 requires Interior to evaluate the advantages and disadvantages of delaying and forgoing leasing in determining when leases should issue. *See* 43 U.S.C. § 1344(a)(3), (a)(2)(H). Second, Interior must quantify costs when possible, especially where those costs are “not inherently insusceptible of quantitative analysis.” *Watt I*, 668 F.2d at 1319. CSE contends that, because the informational value of delay is a relevant cost and it is susceptible of quantification, Interior acted irrationally in failing to quantify it.

We are not persuaded that the informational value of delay is yet so readily quantifiable that Interior acted unreasonably in choosing not to quantify it in this planning cycle. Rather than assign a specific dollar value in the 2012-

¹² The informational value of delay is also the option value of delay because an effectively irreversible decision that can be made at the time of an actor’s choosing is, in economic terms, a kind of option. Financial options—the right to buy or sell a security at a specified price within a set time—are the most familiar options, but any decision in which one of the available choices is “delay the decision” behaves like an option. Such options are sometimes called “real options” to distinguish them from financial options. *See, e.g.*, Robert E. Scott & George G. Triantis, *Embedded Options and the Case Against Compensation in Contract Law*, 104 Colum. L. Rev. 1428, 1460 (2004).

2017 Program to delaying leasing on the OCS, Interior qualitatively considered the informational value of delay. In its evaluation of alternatives in the Programmatic EIS, for example, Interior considered whether to “[d]elay sales until further evaluation of oil spill response, drilling safety reform, and baseline environmental conditions [were] collected and analyzed,” “[d]efer deepwater leasing in the [Gulf of Mexico] planning areas,” and “[d]evelop alternative/renewable energy sources as a complete or partial substitute for oil and gas leasing on the OCS.” J.A. 2147-48. The Proposed Final Program also described the process Interior is developing to “continue to use incoming scientific information and stakeholder feedback to proactively determine, in advance of any potential sale, which specific areas offer the greatest resource potential while minimizing potential conflicts with environmental and subsistence considerations.” J.A. 1755. In part on the basis of its qualitative assessment of the informational value of delay, Interior chose to postpone leasing in the Chukchi and Beaufort Sea program areas until late in the Program to allow gathering of additional information. J.A. 1842.

CSE does not dispute that Interior qualitatively considered the informational value of delay; it argues that Interior’s failure to assess the informational value of delay quantitatively was irrational. We are persuaded, however, that the methodology for valuing the informational advantages of delaying offshore oil development is not sufficiently well established to render irrational Interior’s decision not to use it in the 2012-2017 Program. Our decisions afford greater leeway to Interior to evaluate qualitatively costs that are difficult to quantify. *See, e.g., Watt I*, 668 F.2d at 1317-18. “Where existing methodology or research in a new area of regulation is deficient, the agency necessarily enjoys broad discretion to attempt to formulate a

solution to the best of its ability on the basis of available information.” *Watt II*, 712 F.2d at 600 (quoting *Watt I*, 668 F.2d at 1301 n.18). To that end, in making timing decisions, Interior is generally “free to choose any methodology so long as it is not irrational.” *CBD*, 563 F.3d at 488 (internal quotation marks omitted).

CSE neither identifies in the record, nor itself puts forward, a methodology for pricing the informational value of delay in the context of offshore oil and gas leasing that is sufficiently established to render arbitrary or irrational Interior’s decision to opt instead for a qualitative analysis. When reviewing the rationality of Interior’s methodological selections, we have looked to, among other factors, whether the methodology has been “performed extensively in the past.” *Watt II*, 712 F.2d at 600. CSE acknowledges that there is no established practice of quantifying informational values stemming from environmental impacts in the petroleum industry, and that Interior has never before sought to undertake such an analysis. *See* Pet. R. Br. 23.

The difficulties in undertaking such a quantitative analysis are great. Pricing the value of delay would require Interior to make complex estimates of the pace and nature of likely future trends in the development of various technological and scientific fields affecting drilling, transportation, oceanography, and alternative energy. Interior would also be required to attempt to quantify the value of future, as-yet-unknown benefits and harms of OCS development, and the probability of countervailing developments that could enhance those benefits or mitigate those harms. Many difficult choices would need to be made and justified, and a “substantial amount of data” would need to be gathered. Michael A. Livermore, *Patience Is an Economic Virtue: Real Options, Natural Resources, and*

Offshore Oil, 84 U. Colo. L. Rev. 581, 639 (2013). Even if Interior had an adequate methodology in hand, it might rationally have viewed such an unprecedented analysis as unduly time-consuming and error-prone. As we have explained in prior opinions, “the final decision as to how much analysis is necessary in view of the available data must be the agency’s, subject to judicial review only for obviously incorrect results or methodology.” *Watt II*, 712 F.2d at 600 (quoting *Watt I*, 668 F.2d at 1317 n. 224); *see also Hodel*, 865 F.2d at 309. So, too, here. Interior acted reasonably in employing qualitative, rather than quantitative, measures of the informational value of delay.

Our holding is a narrow one. In preparing a five-year program, the agency is not permitted to substitute qualitative assessments for well-established quantitative methods whenever it deems such substitutions convenient. *See Hodel*, 865 F.2d at 308-09. But Interior permissibly concluded that Section 18 does not require it to employ methods of cost-benefit analysis at the “frontiers of scientific knowledge.” *See Watt II*, 712 F.2d at 600 (quoting *Watt I*, 668 F.2d at 1301). Had the path been well worn, it might have been irrational for Interior not to follow it. Under the circumstances it faced, Interior might permissibly have blazed a new trail. It was not, however, required to do so. We therefore reject CSE’s argument that Interior acted irrationally in failing to quantify the informational value of delay. We are satisfied that Interior’s qualitative analysis of the benefits of delaying leasing was adequate, and that methods for quantifying the time value of delaying leasing on the OCS are not yet so well established that Interior was required to use them in developing the 2012-2017 Leasing Program.

* * *

For the foregoing reasons, we deny the petition for review.

SENTELLE, *Senior Circuit Judge*, dissenting: I respectfully cannot join my colleagues' opinion and judgment denying the petition for review. I dissent, not because I disagree with my colleagues' reasoning, nor because I would sustain the petition. Rather, I would dismiss the petition for lack of standing. Therefore, I would not reach the merits of the case, and I express no disagreement with my colleagues' decision on the same.

As the majority rightly notes, we must address standing "at the threshold." Maj. Op. at 11 (citing *Center for Biological Diversity v. Dep't of Interior*, 563 F.3d 466, 475 (D.C. Cir. 2009)). "The party invoking federal jurisdiction," in this case petitioner, "bears the burden of establishing [standing]." *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992). Petitioner, Center for Sustainable Economy (CSE), has not borne that burden. CSE asserts that it has associational standing. To establish associational standing to bring an action on behalf of its members, an association must bear its burden with respect to three elements, showing that:

- (1) its members would otherwise have standing to sue in their own right;
- (2) the interests it seeks to protect are germane to the organization's purpose; and
- (3) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

Hunt v. Wash. State Apple Adver. Comm'n, 432 U.S. 333, 343 (1977). In its original filings, CSE failed to show even that it was a membership organization of the sort recognized in precedent as capable of asserting associational standing under *Hunt*. It was only after oral argument that CSE, at this court's

prompting, came forward to file its bylaws and other evidence purporting to show its standing to bring this action. Intervenor American Petroleum Institute objects that it would be inappropriate for the court to rely on that post-argument submission. I agree.

In 2002, this “court was compelled to remind all petitioners of first principles, namely, they must assure us that they meet Article III’s case or controversy requirement if their standing is not ‘self evident’ from the record.” *Americans for Safe Access v. Drug Enforcement Admin.*, 706 F.3d 438, 452 (D.C. Cir. 2013) (Henderson, J., dissenting) (quoting *Sierra Club v. EPA*, 292 F.3d 895, 900 (D.C. Cir. 2002)). Lest there be any question as to our own jurisdiction to create such a quasi-legislative rule in an opinion as the one announced in *Sierra Club*, we thereafter codified the mandate in D.C. Circuit Rule 28(a)(7):

In cases involving direct review in this court of administrative actions, the brief of the appellant or petitioner must set forth the basis for the claim of standing. This section, entitled “Standing,” must follow the summary of argument and immediately precede the argument. When the appellant’s or petitioner’s standing is not apparent from the administrative record, the brief must include arguments and evidence establishing the claim of standing. *See Sierra Club v. EPA*, 292 F.3d 895, 900-01 (D.C. Cir. 2002). If the evidence is lengthy, and not contained in the administrative record, it may be presented in a separate addendum to the brief. If it is bound with the brief, the addendum must be separated from the body of the brief (and from any other addendum) by a distinctly colored separation page. Any addendum exceeding 40 pages must be bound separately from the brief.

As Judge Henderson notes in her *Americans for Safe Access* dissent, “our precedent and our rules seem to have been honored more in the breach than in compliance,” 706 F.3d at 453, as we have repeatedly been forgiving of the obligation imposed on but unmet by litigants. *See, e.g., Americans for Safe Access, supra; Pub. Citizen, Inc. v. Nat’l Highway Traffic Safety Admin.*, 489 F.3d 1279, 1297 (D.C. Cir. 2007); *see also id.* at 1297-99 (Sentelle, J., dissenting).

I am particularly troubled by our departure from the rule in the present case, because I am not convinced that petitioner has established standing, even in the late-filed support.

As noted above, associational standing requires the association to show that

- (1) its members would otherwise have standing to sue in their own right;
- (2) the interests it seeks to protect are germane to the organization’s purpose; and
- (3) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

Maj. Op. at 11 (quoting *Hunt*, 432 U.S. at 343). It would appear to me that the current claim of associational standing founders on the relationship between the first and second elements. Petitioner asserts that two named members of the association have established “that their economic and aesthetic interests would be harmed by additional leasing in the Gulf of Mexico and the Beaufort and Chukchi Seas off the Alaskan coast.” Petitioner claims germaneness on the basis of CSE’s purpose, as stated in its bylaws, e.g., “[t]o work through administrative and

legal processes to promote public policies, plans, and programs that are grounded on ecologically sound and economically sustainable principles.” Maj. Op. at 13 (quoting CSE Bylaws Art. I, § 1). The majority may be correct that the members have standing based on their aesthetic and economic interest, but those are not the same interests claimed by petitioner in the germaneness assertion. The purpose claimed by petitioner does not represent the sort of interests which we normally hold protected in standing analysis. Political and philosophical interests are normally protected, if at all, by the political branches, not the courts. *See, e.g., Gettman v. Drug Enforcement Admin.*, 290 F.3d 430, 433 (D.C. Cir. 2002) (“Mere interest as an advocacy group is not enough [to establish standing].”). It would seem to me self-evident that for the first two elements to serve the function of establishing substitute standing, an Article III jurisdictional requirement, they must encompass the protection of the same interest. A book club could not assert associational standing to bring a tort action on behalf of one of its members bitten by a stranger’s dog. I question whether even the late-filed material establishes the standing element of jurisdiction.

Because I am unconvinced that standing was ever established, I respectfully dissent.