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How law structures public participation in environmental decision making: A comparative law approach

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Abstract

Despite some skepticism regarding its effectiveness, public participation has become a central facet of environmental decision making, including governments' various decisions to address climate change. However, the existing literature tends to address the general benefits of environmental public participation rather than examine details of how such participation actually occurs and how it differs among nations-even among nations all purportedly pursuing similar public participation goals. This article begins to fill that knowledge gap by examining law's key role in structuring how the public in different countries may actually participate in environmental decision making, including in unfolding national agendas to reduce greenhouse gas emissions and adapt to climate change impacts. Both the United States and European Union member states have decades of experience in writing-and rewriting-public participation into their environmental laws. This article actively explores and compares how the laws of the United States, the European Union, and the Netherlands (as an exemplar of an EU member state) structure public participation in environmental decision making in order to assess how far along the scale of public participation categories each government has progressed. It concludes that, for the moment, United States environmental law more often allows for public collaboration and empowers the public to make certain kinds of environmental decisions—although a new law in the Netherlands may soon encourage more creative and collaborative forms of public participation there, as well.

KEYWORDS

comparative, law, administrative procedure, environmental decision making, European Union, law, Netherlands, public participation, United States

1 | INTRODUCTION

Public participation refers to the ability of citizens representing different perspectives to inform governmental decision making (Chess & Purcell, 1999; Wesselink et al., 2011); public participation rights in private decision making, such as within corporations, are far rarer. The perspectives that a participating public can bring to bear on governmental decision

making include both those of the affected public and those of experts and researchers in a variety of fields who operate outside the government itself. Given this spectrum, public participation serves a variety of purposes, from increasing the legitimacy of governmental decisions to ensuring that, substantively, the government has not missed or ignored an important aspect, impact, or unintended consequence of the decision under consideration (Momtaz & Gladstone, 2008; O'Faircheallaigh, 2010).

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Governmental decision making regarding environmental conditions and natural resource access and use—broadly, environmental governance, which includes climate change governance—has been a particularly fertile focus of public participation theorizing, scholarship, and policymaking. In part, this focus has arisen because environmental governance almost automatically implicates a variety of interests, concerns, and technical and scientific expertise, creating a distinct likelihood that the government will miss something or elide the views of some subset of the affected community. Without some form of public participation, in other words, the government runs a real risk that its decisions about environmental quality or natural resource use will be substantively problematic, viewed as an illegitimate exercise of governmental power, or both (Momtaz & Gladstone, 2008; O'Faircheallaigh, 2010).

As one example, consider a government's decision to regulate air pollution, including greenhouse gases (GHGs), coming from fossil fuelfired power plants. At a minimum, the government agency or authority involved must know what substances these power plants emit, which of those substances are GHGs or are otherwise harmful enough to qualify as "pollutants" subject to regulation, what kinds of harm those pollutants cause, at what concentrations those harms emerge. what technologies are available to alter production methods or capture pollutants and GHGs to reduce air emissions, and how power plants can deal with the pollutants and GHGs that they create but do not emit into the air. That agency or authority might also want to think about national commitments to GHG emission reduction and the cumulative impacts of other air pollutants in particular areas, on particularly sensitive members of the population, or in particularly disadvantaged communities. In addition, it will probably consider the economic, productivity, or energy consequences of its decision to regulate, as well as its own ability (in terms of budget, workforce, and technological capacity) to enforce its new regulations. The decision to regulate air emissions, in other words, implicates significantly diverse kinds of knowledge, from climate science to energy needs and cost tolerances to public health to engineering to social demographics and community values to economics to site-specific impact assessments. A single government agency or authority to have all of the information it will need, and it must always allow for the possibility that its own experts are consciously or unconsciously biased in favor of supporting its decision to regulate.

Given the need for many different kinds of information in and the multiplicity of interests affected by environmental decision making, the literatures of many academic fields broadly agree that public participation is essential to good environmental governance (Bulkeley & Mol, 2003; Chaffin et al., 2014; Du Plessis, 2008; Schachter & Kleinschmidt, 2011). Indeed, governmental guarantees of public participation in these are now considered one facet of good governance more generally (National Research Council, 2008; Pimbert & Wakeford, 2001), and public participation rights have been expanding significantly around the world over the last five decades (Bulkeley & Mol, 2003; Du Plessis, 2008; Pring & Noé, 2002). As Wesselink et al. observed (2011, p. 2688), "Participation has become a mantra in environmental governance. Reinforced by the Aarhus Convention and the US Negotiated Rulemaking Act, public or stakeholder involvement is

now part of environmental policy making in the United States, in most European countries, and at EU level." Indeed, both governments and representatives of the general public continue to promote public participation in environmental governance on multiple grounds, including that public participation allows a diversity of voices to be heard (Bulkeley & Mol, 2003; Cent et al., 2014; Chaffin et al., 2014), ensures that decisionmakers consider all facets of a problem and hence improves their final decisions (Bulkeley & Mol, 2003; Wesselink et al., 2011), increases both the legitimacy and the public's acceptance of the final decision (Bulkeley & Mol, 2003; Chaffin et al., 2014; Chess & Purcell, 1999) as well as acceptance of the process leading to the decision (Cohen, 1985); and helps to build trust in the government more generally (Tsang et al., 2009).

Nevertheless, public participation can take a variety of forms, not all of which are equally well-suited to every decision making context (O'Faircheallaigh, 2010). Thus, what qualifies as successful, effective, or appropriate public participation depends on the exact kind of environmental decision under consideration (Akerboom, 2018; Chess & Purcell, 1999; Wesselink et al., 2011). Continuing governmental failure to appropriately match the form of public participation to the decision being made helps to explain why researchers continue to debate whether public participation in environmental decision making actually achieves all that it is supposed to (Coglianese, 2003; Cooper & Elliott, 2000; Hoppe, 2011; Newig & Fritsch, 2009; Tewdwr-Jones & Allmendinger, 1998; Wesselink et al., 2011).

More to the point of this article, the fact that public participation can take a variety of forms has led to a knowledge gap in this facet of the environmental governance literature—namely, how exactly do nations *actually* provide for public participation in environmental decision making? How do public participation opportunities and requirements vary among nations—even those nations pursuing roughly similar public participation goals in their environmental governance? Moreover, how do individual nations adjust the kinds of public participation that they allow in different decision making contexts?

Comparative law is an important tool to fill this knowledge gap. Because public participation affects governmental decision making processes, law plays a key role in structuring how the public may participate in various forms of environmental decision making (Holley, 2010). For example, law often determines whether agencies and authorities must allow for public participation, what kind of public participation will be allowed for different kinds of decisions, how decisionmakers should incorporate the public's input into the final decision, and whether and how the participating public can challenge that final decision. In environmental governance, law most commonly provides for public participation in the formal or informal deliberation of government agencies in licensing, permitting, siting, and rulemaking (regulation promulgation), including environmental impact assessment (EIA) (Glucker et al., 2013; O'Faircheallaigh, 2009). In some countries, like the United States (US), direct public access to government agencies and courts-either to prompt environmental action, to claim environmental rights, or to challenge agency decisions-is also an important component of public participation in environmental governance.

Thus, law can make many choices about public participation in environmental decision making, creating a multitude of ways that the general public can influence on-the-ground environmental governance. This article explores how the European Union (EU), US, and the Netherlands have legally structured environmental public participation, with the Netherlands serving as an example of EU implementation at the national level. Both the US and the EU have relatively long histories of requiring public participation in governmental decision making in general and environmental decision making in particular. These histories have allowed for experimentation with increased levels of public participation, as assessed against the International Association for Public Participation's (IAPP's) five-stage spectrum of public participation. As a result, the similarities and differences that emerge from a comparison of their laws both offers insights to other nations considering new modes of environmental public participation both regarding potential or emerging public participation norms and regarding legal design choices.

After explaining its methodology in Section 2, this article explores the three essential elements to public participation and the way these have been regulated in the US, EU and the Netherlands: access to information (Section 3), public participation (Section 4), and access to justice/judicial review (discussed in both Sections 3 and 4 as a means of enforcing access and participation rights). Each section first explains why the element under examination is important, then describes how law in each jurisdiction structures that element, concluding with a comparison of key similarities and differences. The article concludes with overall observations regarding the balance between legally guaranteed public participation options and legal provision of public participation flexibility (Section 5).

2 | METHODOLOGY

2.1 | Comparative law analysis

This article uses a comparative law analysis. "The essence of comparative law is the act of comparing the law of one country to that of another" (Eberle, 2009: 452; see also Reitz, 1998: 618–619). The assessment of similarities and differences among different nations' laws on the same subject allows for increased understanding of the content and range of different legal systems, and "[t]he insights gathered can usefully illuminate the inner workings of a foreign legal system" as well as offer new perspectives "that may yield a deeper understanding" of the researchers' "own legal order" (Eberle, 2009: 452, 453; see also Reitz, 1998: 620–622). At times, the comparative law approach can identify or suggest "universal principles of law that transcend culture" (Eberle, 2009: 453), although the comparative law scholar must avoid the temptation to view certain systems as comparatively better or "ideal" (Reitz, 1998).

The comparative law method can also illuminate and hence help to evaluate the different legal approaches that nations take, or the different legal mechanisms that they use, to implement legal principles such as the importance of public participation to good environmental governance-that the studied nations readily acknowledge that they share (Reitz, 1998: 624), although researchers must also heed Reitz's (1998: 621, 625-626) admonition to look for functional equivalents among the differences in legal systems. This article falls into this second category of comparative law methodologies. As noted, both the EU and the US have promoted and often guaranteed public participation in governmental decision making generally, and environmental governance in particular, for decades. Both entities, and the subordinate levels of government within each, have considerable familiarity and experience with both the different aspects of public participation and the different mechanisms that allow the public to participate in environmental decision making. Thus, both the US's and EU's similarities in environmental public participation law and their differences are likely to be informative regarding the issue of matching public participation modalities to governmental decision making contexts as well as regarding their incorporations of the entire spectrum of public participation options.

Of course, an important component of the comparative law methodology is sensitivity to the cultural and systemic individualities of nations (Eberle, 2009; Reitz, 1998). Here we avoid many of the difficulties of a single author trying to learn the nuances of a foreign legal system by combining the insights of a legal scholar from each of the systems under review.

2.2 | The IAPP's five-stage spectrum of public participation

As noted, public participation can take many forms. In a widely influential article, Arnstein (1969) typologized public participation into an eight-rung ladder, with each rung signifying increasing participation. The rungs range from manipulation and therapy at the bottom, which are basically nonparticipatory, to citizen control at the top, where the public actively makes the decisions regarding how to govern itself (Arnstein, 1969). However, Arnstein's ladder presents modes of public participation as an ascending scale of normative improvement rather than acknowledging fully that different contexts warrant different kinds of public participation. For this reason, and because of its focus on power, Arnstein's ladder has been subject to a number of criticisms, including that it does not capture the full range of public participation modalities (Lane, 2006; O'Connor, 1988; Tritter & McCallum, 2005).

Therefore, this article instead uses the IAPP's spectrum system for classifying public participation, which is simultaneously simpler, more inclusive, and less hierarchical than Arnstein's ladder. The IAPP spectrum of public participation modalities implicitly acknowledges the need for different kinds of public participation in different contexts. Moreover, the IAPP spectrum is used internationally and hence offers a consistent system against which to assess nations' uses of multiple kinds of public participation.

The IAPP's five-stage spectrum of public participation ranges from a government commitment to merely inform the public of its decision making to the fourth and fifth stages of collaboration and empowerment (IAPP, 2018). Notably, when the government engages

in empowerment, it "place[s] final decision-making in the hands of the public" (IAPP, 2018). However, in line with contemporary public participation scholars, we also recognize that public participation modalities must be tailored to context; empowerment is not appropriate in all contexts.

3 | ACCESS TO INFORMATION

Under the first and most limited IAPP category of public participation, governments promise to inform the public in order "[t]o provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions" (IAPP, 2018). Access to information has long been considered a cornerstone of democracy because it supports government transparency and government accountability. Government transparency is "the ability to find out what is going on inside a public sector organization through avenues such as open meetings, access to records, the proactive posting of information on Web sites, whistle-blower protections, and even illegally leaked information" (Piotrowski & Van Ryzin, 2007). Citizens also need information about their governments in order to effectively participate in government decision making and access courts and other means of checking illegal or unwise government action ("access to justice") (Redford, 1969). Some scholars even argue that governmental information belongs to the public (Stiglitz, 1999). Previous studies have examined rules controlling the access to information, including means of enforcing that access (Piotrowski & Van Ryzin, 2007), but only a few researchers have employed a comparative perspective.

Good environmental governance, including climate change governance, and effective public participation generally requires public access to two different kinds of information. First, governments and their authorities, agencies, employees, and contractors often generate, assemble, and evaluate information about the environment itself-for example, GHG concentrations, global average temperature increases, and water quality status-and about the ability of particular kinds of changes to the environment, such as specific kinds of pollution, to interfere with ecological function or human health and safety, such as how climate change impacts are affecting water temperature or a community's disease vulnerability. This basic scientific information is critical to evaluating the effectiveness of environmental regulation and the appropriateness of new government actions. In this first category, we acknowledge the requirements in international treaties and national laws that commit approximately 191 of the world's 193 nations to EIAs in at least some circumstances (Morgan, 2012). However, while we acknowledge the importance of EIAs, we do not discuss them in this article because the laws governing EIAs most directly require governments and government agencies to generate environmental information-not necessarily to turn over the EIA to the public or to allow for public participation in the process. In the interests of keeping our comparison focused, we concentrate on the laws that do guarantee public access to environmental information (including EIAs).

Second, government agencies and authorities also have information about their own environmental decision making plans and processes—when they plan to make decisions, about what subjects, based on what information, for what particular reasons. Their decisions can range from new regulations to restrict polluters in the interest of protecting public health to the issuing of permits and licenses to allow development or the consumption of natural resources. Public access to information about these decision making processes is a critical first step in enabling other kinds of public participation This section lays out how the EU, Netherlands, and US legally regulate public access to both kinds of government environmental information.

3.1 | The European Union

The EU and most of its member states, including the Netherlands, are parties to the Aarhus Convention—more officially, the Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters (UNECE, 1998). This is the most important treaty in international law that deals with public participation in environmental decision making (Toth, 2010), although most of the 47 signatories are European countries (Hartley & Wood, 2005).

The Aarhus Convention defines "environmental information" broadly to include information regarding environmental quality (e.g., air pollution levels), factors affecting or likely to affect environmental quality, and the impact of environmental degradation on human health and safety (UNECE, 1998: art. 4). Parties to the Convention agree to inform the public of environmental decision making (UNECE, 1998: arts. 4(1) & 5(1)), including providing notice of public participation opportunities. In addition, during public participation processes, parties to the Convention must make all information relevant to the activity and decision available to the public (UNECE, 1998: art. 6(6)). Finally, Article 9 of Convention allows members of the public to seek administrative review if they believe that government authorities improperly denied their requests for environmental information (UNECE, 1998: art. 9(1)).

The EU incorporated the Convention's requirements into Directive 2003/4/EC, addressing public access to environmental information. The Directive provides a broader definition of "environmental information" than the Aarhus Convention and therefore broadens the scope of the information to which the public has access; it also limits the ability of governments to treat environmental information as confidential (Jendrośky, 2005). Pursuant to this Directive, member states must ensure that government authorities provide the public with any environmental information requested; the requester does not have to state a reason (Hartley & Wood, 2005). These obligations apply to both domestic and transnational environmental decision making. Moreover, Article 6(1) of Directive 2003/4/EC obliges member states to allow for independent judicial review if, in their opinion, administrative authorities have not carefully or correctly responded to public requests for information, while Article 6(2) deals with independent judicial review of other kinds of government environmental decisions, such as a decision to issue or deny a permit.

The EU itself is also subject to public disclosure requirements. The EU Charter of Fundamental Rights and the Treaty of the Functioning of the EU (TFEU) create a right of access to the EU institutions' information (arts. 42 resp. 15(3)), which includes EU-level environmental information. Regulation EC No. 1267/2006 further ensures access to these institutions' environmental information. Finally, the public enjoys a general right to access information from the European Parliament and Council, as well as Commission documents (Regulation EC No. 1049/2001; Widdershoven et al., 2017). However, the EU does not provide direct means for citizens to enforce these rights (art. 263 Treaty of the Functioning of the European Union; Barnard & Peers, 2017).

3.2 | The Netherlands

The Netherlands has incorporated both the Aarhus Convention's and Directive 2003/4/EC's rights of access to environmental information into the Dutch Environmental Protection Act (EPA; in Dutch: Wet milieubeheer). The Dutch EPA is the most important law in the Netherlands to protect the environment. It deals with the disposal of waste, greenhouse gas emissions, noise pollution, environmental plans, recycling, and water quality. It contains substantive and procedural rules for establishing environmental plans, environmental quality standards, EIAs, permit regimes, and enforcement of environmental standards and conditions. It also contains the most important rules governing the public's access to environmental information.

Article 19.1a of the Dutch EPA copies the EU Directive's broader definition of "environmental information," and therefore the right to access environmental information in the Netherlands is similarly broader than what the Aarhus Convention mandates. Article 19.1b allows the public to access without cost relevant environmental information during decision making processes occurring pursuant to the Mining Act, Animal Act, Nuclear Energy Act, Noise Pollution Act, Air Pollution Act, Soil Protection Act, and General Environmental Law Act. However, as provided in both the Aarhus Convention and Directive 2003/4/EC, and confirmed in the Dutch Government Information (Public Access) Act, Dutch agencies can deny certain requests for environmental information, such as when the requested information is confidential (Bäcker et al., 2014; STEM, 2008).

The Netherlands also implements the Aarhus Convention through the Dutch General Administrative Law Act (GALA, in Dutch: Algemene wet bestuursrecht), which regulates the relationship between the government and citizens in terms of public participation and access to justice during government decision making. GALA provides the public with access to (environmental) information, especially information related to agency decision making, through its general requirements for administrative authorities. GALA lays down basic rules, but Dutch law supplements these rules through other administrative regulations, such as spatial planning regulation or the Dutch EPA. GALA has been developed over time and has been strongly influenced by the principles of good administration that have been developed through case law (Addink, 2019).

With respect to public access to information, GALA requires the administrative authority to publicly announce its intent to make a decision, such as to charge an administrative fine (art. 5:49(1) GALA) or to hire an expert (art. 8:47(3) GALA). If the decision will affect particular individuals, the administrative authority sends the proposed decision to those parties (art. 3:41 GALA). Generally, the authority has to explain why it is making the decision (art. 3:47 GALA), unless its motivation is reasonably clear (art. 3:48(1) GALA). Even so, if someone requests the reasoning, the agency must provide the explanation as soon as possible (art. 3:48(2)).

An administrative authority also must inform the public that they can participate in its decision making process. Under GALA, Dutch administrative authorities design the process of public participation through a public preparatory procedure (PPP) (discussed in more detail in Section 4.2). When the PPP applies, the administrative authority must provide the public with all information relating to the decision (art. 3:11(1) GALA). The authority will make the documents available online or in physical form at a designated location. It will then notify the public of their availability in one or more newspapers or free local papers, or in any other suitable way (art. 3:12 GALA).

Administrative authorities must also inform the public when their decision have been objected to or appealed to the courts and make public all relevant documents (arts. 7:4(2) & 7:18(2) GALA). Again, the authority can provide the documents online or in physical form at a designated location. In case of judicial proceedings, administrative authorities must also send all these documents to the judge (art. 8:42 (1) GALA). Documents can be withheld, however, for serious reasons (arts. 7:4(6), 7:18(7) & 8:29(2) GALA), and seriousness is judged on a case-by-case basis (Daalder, 2005). However, when information is deemed "public" under the Government Information (Public Access) Act (art. 7:4(7) GALA), the authority cannot withhold it.

3.3 | The United States

The US is not a party to the Aarhus Convention. Moreover, under the US system of federalism, both the federal government and the state governments engage in environmental decision making, and each level of government provides for public participation in those processes. In general, the federal government delineates public participation rules for federal courts and administrative agencies, while each state government delineates the public participation rules for its state courts and administrative agencies. The most general of these rules are found in the federal Administrative Procedure Act (APA, 5 U.S.C. §§ 551–559, 701–706) and its 50 state analogs (Ballotpedia, 2021), which are often based on the Model State Administrative Procedure Act (Bonfield, 1986). These statutes provide the default procedures that environmental agencies must follow, including access to information and public participation rights.

Federal and state APAs require, respectively, federal and state agencies to make information available to the public; for convenience, this discussion focuses on the federal requirements, because the state-level requirements are generally similar. Section 552 of the

federal APA, known as the Freedom of Information Act (FOIA), requires each federal agency to make certain kinds of information routinely available to the public, including information about the agency's organization, its procedural rules, its substantive regulations, its policy statements, and its adjudicative decisions. Specific federal environmental statutes supplement general APA disclosure requirements by requiring environmental agencies to make specific kinds of environmental information available to the public. For example, under the federal Clean Water Act, the U.S. Environmental Protection Agency (US EPA) provides information to the public regarding sewage treatment options, water quality guidelines and reference water quality criteria, and numerous public reports to Congress, including regular reports on the nation's water quality (33 U.S.C. §§ 1294, 1314, 1375).

FOIA also lays out extensive procedures that members of the public can use to request additional information from federal agencies (5 U.S.C. § 552). The agency can charge fees to provide this additional information, but for noncommercial purposes such as education, scholarly or scientific research, or news reporting, those charges are limited to the reasonable costs of copying the documents (5 U.S.C. § 552(a)(4)(A)(ii)). Notably, Congress enacted the APA in 1946, before the advent of the internet, and most federal (and state) environmental agencies now provide significant amounts of information to the public for free through their government web sites (e.g., https://www.epa. gov). FOIA also requires agencies to have a Chief FOIA Officer to oversee the fulfillment of information requests (ibid.). FOIA creates nine explicit exemptions from disclosure (5 U.S.C. § 552(b)), most of which have been well litigated. The exemptions range from national defense and foreign policy secrets to trade secrets and confidential business information to personnel and medical files to certain law enforcement records to the locations of wells (ibid.), FOIA gives federal courts authority to resolve conflicts between the requester and the agency over whether the information should be disclosed (5 U.S. C. § 552(a)(4)(B)).

Other sections of the federal APA require additional disclosures of information during agency decision making processes. For example, most federal agencies promulgate, repeal, and amend regulations through informal, or "notice and comment," rulemaking. To comply with the APA, the agency must provide notice of the proposed rule in the Federal Register, a daily publication of the federal government, and make public all the information that the agency is relying on (5 U.S.C. § 553(b)). The agency must also publish its final regulation in the Federal Register (5 U.S.C. § 553(d)). While some environmental statutes add procedures to these basic APA requirements-for example, the federal Endangered Species Act has significant scientific and timing requirements for rules listing species for protection (16 U.S.C. § 1533)—all retain these basic notice and information-providing requirements. In addition, agencies must provide a variety of regulatory impact analyses for particularly significant environmental regulations, potentially including an environmental impact statement (42 U.S.C. § 4332(C)) and a cost-benefit analysis (Clinton, 1993; Obama, 2011), among others.

Proceedings that affect particularly individuals, such as licensing, permitting, and enforcement actions, are known as adjudications and

are generally more formal—even trial-like. However, the agency still must give "all interested parties" notice of these proceedings (5 U.S.C. § 554(a)–(c)). Moreover, under most federal environmental statutes, environmental permitting processes are public, with the public being entitled to notice of the permit application, draft permit, final permit, and any proposed permit amendments (e.g., Clean Air Act, 42 U.S.C. §§7661b(e), 7661d).

The APA also provides members of the public with the means of enforcing their access to information: "A person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof" (5 U.S.C. § 702). It empowers the federal courts to "compel agency action unlawfully withheld or unreasonably delayed" (5 U.S.C. § 706(1)), including information disclosures. Moreover, the U.S. Supreme Court has repeatedly held that a federal agency's failure to supply required information supports standing to sue for the members of the public injured by that failure (Federal Election Commission v. Akins, 524 U.S. 11, 21 (1998); Public Citizen v. Department of Justice, 491 U.S. 440, 449 (1989)).

3.4 | Comparison

The EU, the Netherlands, and the US have enacted sometimes elaborate legal regimes to inform their citizens about both government environmental decision making and environmental quality, although the US environmental statutes are often more specific about the kinds of environmental information that federal environmental agencies must produce, assemble, and disclose. Notably, both the US and the Netherlands rely on combinations of legal instruments to ensure that citizens receive information about government environmental decision making. Specifically, both countries mesh general procedural requirements that apply to all government agencies and authorities (GALA and the APAs) with more specific environmental informational requirements in environmental statutes. While these combinations of statutes, regulations, and, in the US, presidential Executive Orders can make it more difficult for members of the general public to discern at first glance the totality of their environmental information rights, the legal layering does also ensure both general access to agency information and public access to specific types of environmental information, including notice of environmental decision making. The US more explicitly addresses citizen enforcement of their information access rights, however, providing explicit access to courts to challenge agency failures to make information available either when required or requested.

4 | PUBLIC PARTICIPATION AND ACCESS TO JUSTICE

Beyond merely providing the public with information about environmental conditions and informing the public that environmental decision making is occurring, governments can actually engage the public in that decision making-for example, regarding best strategies to reduce GHG emissions or adaptation plans. The IAPP recognizes four levels of more active public participation. When governments consult with the public, they seek to "obtain public feedback on analysis, alternatives and/or decisions" and promise not only to keep the public informed but also to "listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision" (IAPP, 2018). When governments involve the public, in turn, they seek to "work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered" (IAPP, 2018). Governments collaborate with the general public when they "partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution" (IAPP, 2018). Finally, governments empower the public when they "place final decision making in the hands of the public," implementing whatever decision the relevant facet of the public reaches (IAPP, 2018).

The EU, Netherlands, and US range across this spectrum of public participation in their environmental laws, depending on context. They also differentiate who qualifies as the relevant "public" in different contexts.

4.1 | The European Union

The Aarhus Convention deals with public participation in articles 6, 7, and 8. In these provisions, it distinguishes between the "public" and the "public concerned." The "public" means the general public, regardless of any legal person's or organization's actual connection to the environmental decision at hand (art. 2(4)). In contrast, "the public concerned" means "the public affected or likely to be affected by, or having an interest in, the environmental decision-making; for the purposes of this definition, non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest" (art. 2(5)). This is an important distinction; for instance, in the Netherlands, opportunities for public participation are sometimes limited to the public concerned.

Article 6 of the Aarhus Convention governs participation during specific government activities (for instance, permitting) and offers the most elaborate rules. Importantly, the Convention requires both notice to the affected public as well as an opportunity to actually participate in the decision making. Thus, "the public concerned shall be informed, either by public notice or individually as appropriate, early in an environmental decision-making procedure, and in an adequate, timely and effective manner" (art. 6(2)). Such public notice must include a description of the proposed activity and the nature of the possible decision, the envisaged procedure, an indication of what environmental information relevant to the proposed activity is available, and whether the activity is subject to a national or transboundary impact assessment procedure. In addition, "[e]ach Party shall require the competent public authorities to give the public concerned access for examination, upon request where so required under national law, free of charge and as soon as it becomes available,

to all information relevant to the decision-making" (art. 6(6)). In turn, members of the public concerned may submit in writing any comments, information, analyses or opinions that they consider relevant to the proposed activity (art. 6(7)), and the decisionmaker must provide the public with information about the outcome of the public's participation, as well as the final decision (art. 6(8), (9); Squintani & Schoukens. 2019).

Article 7 applies to the preparation of plans, programs, and policies relating to the environment and governs public participation in those activities (UNECE, 1998: art. 7). Article 8 emphasizes the importance of effective public participation and requires the public to be involved at "an appropriate stage," when all options are still open and public participation can still affect the final decision (UNECE, 1998: art. 8). Article 8 thus suggests that parties to the Convention should at least aspire to structure their laws to achieve IAPP Stages 3 and 4 of public participation, working to more actively involve and collaborate with the public in environmental decision making.

Finally, Article 9 of the Aarhus Convention allows parties to seek review in court if government authorities make environmental decisions without observing the notice and participation requirements (UNECE, 1998: art. 9(2)). In order to seek such judicial review, however, individual members must have a "sufficient interest" or impairment of a right, as national law requires (ibid.). Finally, "each Party shall ensure that, where they meet the criteria, if any, laid down in its national law, members of the public have access to administrative or judicial procedures to challenge acts and omissions by private persons and public authorities which contravene provisions of its national law relating to the environment" (UNECE, 1998: art. 9(3)).

EU Directive 2003/35/EC, governing "public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice," incorporates the Convention's public participation requirements. This Directive obligates authorities to reasonably take into account the input gathered during public participation and to show how the participation influenced the decision (Hartley & Wood, 2005). Thus, under the Directive, member states must actively respond to the public's comments during consultations, improving the value and potential influence of that participation (Keessen et al., 2014).

However, public participation requirements in the EU also come from other sources. For example, under the Treaty of the European Union (TEU), the legislative procedures leading to directives and regulations—including rules on the environment—are strict. Prior to submitting a proposed Directive to the Parliament and Council, the Commission must carry out broad consultations with the parties concerned to ensure that the EU's actions are coherent and transparent. Beyond these requirements, the Commission must engage with citizens and representative associations and maintain an open, transparent and regular dialog with them (art. 11). Article 11(4) provides a right to a citizen initiative if one million citizens request a legal act from the EU (Regulation (EU) 2019/788). Article 227 of TFEU, moreover, grants citizens a petition right on any matter that (may) affect that person directly (Barnard & Peers, 2017). In addition, members of the public can, under certain circumstances, appeal to the lack or

wrongful implementation of directives (*C-91/92 Paola Faccini Dori* vs *Recreb Srl*, *C-6/90 Francovich and C-6/90 Bonifaci*), while the Charter of Fundamental Rights provides the right to an effective remedy and a fair trial (art. 47; Widdershoven et al., 2017).

4.2 | The Netherlands

GALA provides the minimum rules for public participation in government decision making. GALA applies to all government decisions, although more specific environmental statutes may provide additional rules for participation or exemptions from the generally applicable public participation regime.

GALA enacts two important public participation requirements: the right to be heard (GALA arts. 4:7 & 4:8) and the PPP (GALA div. 3.4). The principles of careful preparation, balancing of interests, and justification of decisions guide GALA's public participation requirements (Addink, 2019). These principles require that an administrative authority with power to make decisions promotes the public good, has all necessary information available before it makes a decision, is aware of local preferences and values, ensures that it has included all interests, and has justified the balance among those interests in its decision (Akerboom, 2018).

Under GALA, the right to be heard applies when a decision directly affects a specific citizen or actor or small group of people (GALA arts. 4.7 & 4.8)—for instance, when a permit for a renewable energy facility or windfarm is denied. This actor always has access to justice in the form of a chance to appeal that decision. In contrast, the PPP governs the public participation process when a government decision affects a larger group of stakeholders—for instance, a decision on whether and where to locate a wind farm or nuclear facility (GALA div. 3.4). The PPP is required for certain decisions, but administrative authorities can also use it if they deem these procedures appropriate (GALA art. 3.10; Wertheim, 2019). Division 3.4 of the GALA lays down the basic rules, which other Acts may supplement.

In a PPP, the administrative authority publishes a concept (proposed) decision, which is then open to public consultation for 6 weeks (GALA arts. 6.9, 6.10, & 6.15). The concept decision can be anything from a zoning decision to an environmental permit. The comment process may be entirely written (or, increasingly, electronic), although administrative authorities can also decide to organize a public hearing and collect views orally (GALA art. 3.15). GALA public participation, therefore, fits the IAPP's category of consultation.

In general, only the public concerned is entitled to submit views (GALA art. 3:15), although the group of participants can be widened, either upon decision of the administrative authority or as required by law. For instance, Division 13 of the Dutch EPA broadens PPP participation for decision making in which the PPP is mandatory under the Mining Act, Animal Act, Nuclear Energy Act, Noise Pollution Act, Air Pollution Act, Soil Protection Act or General Environmental Law Act (art. 13.2). Examples of PPP-mandatory decisions include CO₂ storage permits (art. 25(1)(b) Mining Act) and licensing of nuclear facilities (art. 17(1) Nuclear Energy Act), both of which could be relevant to

addressing climate change. In these instances, article 13.3 of the Dutch EPA dictates that participation is open to the entire "public," a broader group than the "public concerned."

There has been some debate as to whether the PPP appropriately implements the Aarhus Convention (Boeve & Groothuijse, 2019; Keessen et al., 2014; Perlaviciute & Squintani, 2020; Schueler, 2014), especially regarding the requirements of "early" and "effective" participation. After all, the PPP applies only after a draft decision is made public. The authority has already carefully prepared these draft decisions and ensured that they comply with applicable substantive and procedural requirements (Akerboom, 2019), suggesting that authorities are unlikely to change them significantly in response to public comment. However, the Administrative Law Judicial Division of the Council of State accepts that participation on the basis of a draft decision is "timely" because, at least theoretically, the decision is not yet final (ECLI:NL:RVS:2018:616; ECLI:NL:RVS:2015:1702).

Other statutes are also relevant to public participation in environmental decision making in the Netherlands, including the Dutch EPA and the Spatial Planning Act (SPA). The Dutch EPA regulates opportunities for public participation during the preparation of an EIA (art. 7.11(2)). The Netherlands also legally ensures public participation in certain environment-related spatial planning efforts. Currently, the SPA governs public participation in planning efforts, such as zoning plans, that pave the way for authorities to permit specific activities, such as a wind farm, nuclear facility, or mine. In the case of a municipal zoning plan, the public has the opportunity to submit views (SPA art. 3.6(4)) through a procedure that strongly resembles the PPP. Zoning and structural plans at the national and provincial level are not open to public input under the SPA (SPA arts. 2.24(20), 3.28(2), 3.8 (1)): GALA art. 3.12), but public authorities can voluntarily apply GALA division 3.4 to allow such participation. Thus, the extent of public participation in spatial planning currently depends on what level of government is doing the planning and what kind of plan it is creating, but most public participation in government spatial planning again primarily consists of consultation.

Regulations under the GALA, Dutch EPA and SPA provide many of the default details for public participation during the decisions they govern, but Dutch administrative authorities can always decide, depending on the context, to allow other forms of public participation. As a practical matter, authorities are more likely to do so in certain contexts, such as water management decision making, than in others, such as wind energy decision making (Rijswick & Akerboom, 2020).

GALA also allows certain members of the public to enforce their participation rights. Chapters 6, 7, and 8 provide for both administrative appeal and judicial review. However, both enforcement routes are limited to "legal" stakeholders, which is comparable to the "public concerned" (arts. 1.2, 7.1 & 8.1). Therefore, the number of people who can participate in the decision making through a PPP is often larger than the number who can actually appeal the decision made (see Akerboom, 2019 for examples of case law). However, even these legal stakeholders must have participated during the PPP in order to pursue an administrative or judicial appeal (ECLI:NL:RBLIM:2018:12159; Verbeek, 2019). They also cannot use arguments during the appeal that

they did not submit during the PPP (Boogers & Wannink, 2013). The Dutch legislature thus attempted to limit the number of appeals that can occur while simultaneously providing citizens with an opportunity to engage with their administrative authorities before decisions become final, although this balance has been criticized (Backes, 2015; Hoevenaars, 2015).

The Environmental and Planning Act (E&PA, in Dutch: Omgevingswet)) will soon replace the SPA. Indeed, the E&PA was supposed to become effective on 1 January 2021, but the effective date has been delayed, most likely until 1 January 2022. The E&PA will regulate public participation in environmental matters distinctively differently from the SPA, marking a clear change in the culture of environmental public participation in the Netherlands.

The new E&PA identifies five kinds of environmental instruments or decisions: environmental plans; environmental visions; environmental programmes; environmental permits; and project decisions. Moreover, it defines public participation as the involvement of citizens, businesses, NGOs and other governmental bodies at an early stage of the decision making procedures. Thus, public participation under the E&PA will constitute more than the organization of formal occasions that provide the public with the opportunity to submit their views on a decision that the administrative authority has already formulated (Boeve & Groothuijse, 2019)—for example, more than just consultation.

The E&PA identifies and regulates three forms of public participation, keyed to the five environmental instruments or decisions. Before preparing environmental plans, environmental visions, and environmental programs, the government authority must describe how citizens, businesses, NGOs, and other government bodies will be involved (E&PA arts. 8.1, 8.4, & 8.5). The new Act thus leaves the authority considerable discretion to decide for itself what public participation in these environmental decisions will look like. Nevertheless, the new Act should stimulate greater public involvement and collaboration-IAPP categories 3 and 4-than the GALA and SPA current minimum requirements do. Although, as mentioned above, public authorities are currently empowered to allow public participation beyond the minimum legal requirements, the culture of doing so is sparse and depends significantly on the topic at issue. The Dutch legislature strived to expand these opportunities by more clearly invoking public participation in the E&PA (Rijswick & Akerboom, 2020), which could, among other things, expand public participation in governmental decision making relevant to climate change.

Municipalities and provinces can decide to make public participation obligatory for specific types of environmental permits (E&PA art. 7.4). Moreover, project developers and parties who request a permit are responsible for organizing the public participation (E&PA art. 7.4). Given the lack of national rules in this context, municipalities and provinces are also free to incorporate (or create) their own norms for public participation. As a result, the E&PA may encourage these municipalities and provinces to more actively involve the public in permit applications, perhaps even encouraging three-way collaborations among the government authority, the permit applicant, and the affected public regarding permit terms and environmental protections.

Nevertheless, they can still opt to organize public participation rather conservatively along the currently consultation model.

The E&PA provides the most elaborate description of public participation requirements for project decisions (E&PA art. 5.2.2). The administrative authority must conduct an investigation and scope the decision before granting any environmental permit. The investigation must seek public input on preferences and alternative solutions before the final decision, thus already increasing public involvement compared to current practices. Before engaging in this investigation, moreover, the administrative authority must describe how citizens, companies, and NGOs will be involved and how the authority will make use of the public input it receives (E&PA art. 5.47). There are again no national-level requirements limiting this process, so again the administrative authority will have great freedom to design the public participation process, perhaps increasing public involvement in or even collaborating with the public regarding the project's design and implementation.

This new regulation might also lead to different case law regarding public participation. Because the E&PA emphasizes public participation, the position of the Judicial Division of the Council of State may also change regarding whether mere commenting is sufficient. One harbinger of the future may be a recent windfarm siting decision, which was challenged because of the lack of public participation opportunities (ECLI:NL:RVS:2019:4209). Although the court ruled that public opposition to the windfarm was insufficient in itself to reverse the decision, the Judicial Division did also suggest that administrative authorities might want to draft a generally applicable, legally binding instrument regarding their public participation obligations, including new norms for what that participation should look like.

Even before the E&PA takes effect, however, Dutch citizens and NGOs have increasingly used existing public participation opportunities to shape the national government's environmental agenda through litigation. In 2019, for example, NGO Mobilisation for the Environment, prevailed in the nitrogen case (ECLI:NL:RVS:2019:1603), forcing the Netherlands government to implement EU limitations on nitrogen monoxide and nitrogen dioxide emissions to protect biodiversity in Natura 2000 nature conservation areas (Backes & Nijmeijer, 2019). More famously, the environmental NGO Urgenda has used available processed to force the Netherlands to more actively confront climate change. It and 900 Dutch citizens originally sued the Netherlands government in the Hague regarding the Netherlands' regulation of greenhouse gas emissions (GHG). Relying on a variety of laws, including the Netherlands Constitution, EU emissions reductions targets, and the European Convention on human rights, all three levels of courts, concluding with the Dutch Supreme Court in December 2019, found for Urgenda and the citizens (Urgenda case, ECLI:NL:HR:2019:2006), a landmark decision (Backes & Van der Veen, 2020). Thus, as a result of EU and Dutch laws providing for access to justice, "[t]he Dutch government is increasingly confronted by public litigation in sustainability, environmental and societal issues" (Haverkamp et al., 2019)-and members of the public are increasingly using these law-based routes of involvement and empowerment (IAPP, 2018) to drive the nation's environmental agenda.

4.3 | The United States

Environmental decision making in the US generally falls into two categories: decisions that primarily affect individuals and decisions that affect the public generally. US administrative and environmental law give the general public extensive authority to participate within, and often to dictate the contours of, both kinds of processes.

When government decision making directly affects specific individuals, those individuals acquire rights to participate in the process. Due process provisions in the U.S. Constitution grant individuals directly affected by governmental decisions minimal rights of participation-notice and an opportunity to be heard (Mullane v. Central Hanover Bank & Trust Co. 339 U.S. 306, 313 (1950)). The federal and state APAs generally grant such individuals far more extensive participation rights. Under the federal APA, for example, adjudications are agency proceedings that affect individuals or small groups of specific individuals, such as licensing, permitting, and enforcement (5 U.S.C. §§ 551(6)-(10), 554), As noted, most federal adjudications are formal, for which the APA dictates trial-like procedures with a neutral decisionmaker, strict prohibitions on ex parte communications, formal submission of evidence, testimony under oath, and decisions based strictly on the record created (5 U.S.C. §§ 556, 557). However, the agency must also provide "all interested parties" the opportunity to submit facts, arguments, and offers of settlement and negotiation in these proceedings (5 U.S.C. §§ 554(c)). Given the trial-like nature of these proceeding, this public participation constitutes public involvement in government decision making and perhaps even collaboration if the decisionmaker incorporates participants' advice, recommendations, and settlement negotiations (IAPP. 2018).

In addition, as noted, most environmental permitting processes including air emissions permitting under the Clean Air Act, which often now includes regulation of GHG emissions-are public processes that provide multiple opportunities for public participation. For example, during hazardous waste facility permitting under the federal Resource Conservation and Recovery Act, the public can comment on the proposed activity before the permit application is filed, participate in the application process, comment on the draft permit, appeal the final permit, and comment on any proposed permit modifications (US EPA, 2016: 30-45). Such extensive public participation, especially before the applicant even applies for the permit, again often rises to the level of public involvement and occasionally even collaboration; as the US EPA itself notes, public participation in these processes allows the agency and the permittee to "have a conversation with the public," "incorporate public viewpoints and preferences," and allow local communities "a more primary role in local decisions that directly impact their day-to-day lives" (ibid.: 1).

Finally, even individual environmental enforcement actions are in some ways subject to public preferences. Since Congress enacted the Clean Air Act in 1970, it has included citizen suit provisions in all of the major federal environmental statutes (*Hallstrom v. Tillamook County*, 493 U.S. 20, 23 n.1 (1989) (providing a fairly complete list)). These citizen suit provisions allow "any person" or "any citizen"

(including NGOs) to sue "any person" who is in some way violating the statute (e.g., Clean Water Act, 33 U.S.C. § 1365(a)(1)). There are limitations on these enforcement rights: the plaintiff usually must give notice to the federal agency, the relevant state, and the violator 60 days before filing suit, allowing the violator to come into compliance or the governments to take over the enforcement (e.g., Clean Water Act, 33 U.S.C. § 1365(b)); and the plaintiff must have standing bring the lawsuit, meaning that the plaintiff must have suffered an injury-in-fact caused by the defendant's violation that the court can redress (Lujan v. Defenders of Wildlife, 594 U.S. 555, 560-61 (1992)). However, Congress did want to encourage such citizen suits, and hence it allowed courts to award successful environmental citizen suit plaintiffs their costs, "including reasonable attorney and expert witness fees" (Clean Water Act, 33 U.S.C. § 1365(d)). Citizen suits are thus a form of public empowerment (IAPP, 2018), and citizen enforcement actions are an important component of overall environmental enforcement in the US, providing a backstop when the government's enforcement enthusiasm wanes (May. 2003).

State environmental citizen suits can involve even more members of the public. While many states have standing requirements similar to the federal courts', others have secured more general public access to their courts on environmental matters. For example, in its Environmental Policy Act, Connecticut allows that:

any person, partnership, corporation, association, organization or other legal entity may maintain an action in the superior court for the judicial district wherein the defendant is located, resides or conducts business ... for declaratory and equitable relief against the state, any political subdivision thereof, any instrumentality or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organization or other legal entity, acting alone, or in combination with others, for the protection of the public trust in the air, water and other natural resources of the state from unreasonable pollution, impairment or destruction. (Conn. Gen. Stat. § 22a-16)

In Fort Trumbell Conservancy, LLC v. Alves, 815 A.2d 1188, 1199 (Conn. 2003), the Connecticut Supreme Court held that "all that is required to invoke the jurisdiction of the Superior Court under § 22a–16 is a colorable claim, by "any person" against "any person," of conduct resulting in harm to one or more of the natural resources of this state." Thus, Connecticut has virtually eliminated any standing limitation on its state environmental citizen suits.

Rulemakings, in turn, apply to the public at large and result in rules "designed to implement, interpret, or prescribe law or policy" (5 U.S.C. §§ 551(4), 553). Given their more public character, even informal rulemakings—such as GHG emissions standards for new cars and trucks—must allow for extensive public participation. Under the federal APA, for example, "the agency shall give interested persons an opportunity to participate in the rulemaking through submission of written data, views, or arguments with or without opportunity for oral

presentation" (5 U.S.C. § 553(c)). In a particularly controversial environmental rulemaking, the US EPA can receive tens of thousands of comments, and it must respond to all the comments it receives (5 U.S.C. § 553(d)). Nevertheless, as in the Netherlands, public participation in standard rulemakings is primarily consultation, and public comments are generally unlikely to *significantly* change the agency's initial proposed rule—particularly because significant enough changes would require the agency to initiate a new round of public notice and comment (*Long Island Care at Home, Ltd v. Coke*, 551 U.S. 158, 174 (2007)).

The federal and state APAs thus provide the foundations for public participation in general US environmental decision making, including EIAs. At the federal level, this requirement comes through the National Environmental Policy Act (NEPA)—but while NEPA requires consultation with relevant federal agencies and notification of "appropriate Federal, State, and local agencies," it defaults to the APA for public notification, participation, and judicial review procedures (42 U.S.C. § 4332(C)). An important exception to the APA default rules at the federal level is the Clean Air Act, which (rather infamously among US environmental lawyers) substitutes its own detailed judicial review and rulemaking provisions for the APA's (42 U.S.C. § 7607(b)-(g)). The Clean Air Act also has its own public participation provision, exhorting the EPA Administrator "in promulgating any regulation under" the Act to "ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided" (42 U.S.C. § 7607(h)). These special requirements apply to most GHG regulation in the United States.

Moving beyond consultation, the APA and many environmental statutes also explicitly give every member of the public "the right to petition for the issuance, amendment, or repeal of a rule" (5 U.S.C. §§ 553(e)), and the agency must promptly respond to those petitions, including with an explanation of why a petition was denied (5 U.S.C. §§ 555(e)). Thus, at least on occasion, the general public can actively collaborate (IAPP, 2018) in environmental agencies' decision making agendas. For example, it was a member of the public who petitioned the US EPA to regulate greenhouse gas emissions from cars (Lazarus, 2020), leading to the U.S. Supreme Court's decision in Massachusetts v. EPA, 549 U.S. 497 (2007), that the US EPA had authority to regulate those emissions under the Clean Air Act. Similarly, under the federal Endangered Species Act, citizen petitions play a large role in determining which species the US Fish & Wildlife Service and National Marine Fisheries Service actually list for protection (Brosi & Biber, 2012).

Negotiated rules are even more collaborative, sliding into empowerment (IAPP, 2018), because the federal agency involved generally enacts the consensus recommendation of the public representatives. The Negotiated Rulemaking Act (5 U.S.C. §§ 561–570a) allows a federal agency to "establish a negotiated rulemaking committee to negotiate and develop a proposed rule" if that procedure is in the public interest (5 U.S.C. § 563(a)). Negotiated rulemaking is generally appropriate when "there are a limited number of identifiable interests that will be significantly affected by the rule," adequate representatives for each of those interests—including the interests of the general public—are available to negotiate, and the representatives are likely to reach a consensus that can form the basis of the agency's rule (ibid.).

For example, the US EPA used negotiated rulemaking to create the Phase I reformulated gasoline rules under the Clean Air Act. The negotiating parties included "representatives from EPA, the Department of Energy, the State and Territorial Air Pollution Program Administrators, the Association of Local Air Pollution Control Officials, the Northeast States for Coordinated Air Use Management, the California Air Resources Board, the American Petroleum Institute, the National Petroleum Refiners Association, the American Independent Refiners Association, the Rocky Mountain Small Refiners Association, the Clean Fuels Development Coalition, the Oxygenated Fuels Association, the Renewable Fuels Association, the American Methanol Institute, the National Council of Farmer Cooperatives, the National Corn Growers Association, the Petroleum Marketers Association of America, the Society of Independent Gasoline Marketers of America, the Independent Liquid Terminals Association, the Motor Vehicles Manufacturers Association, the Association of International Automobile Manufacturers, Citizen Action, the Sierra Club, the American Lung Association, and the Natural Resources Defense Council" (US EPA, 1991: 31,176 [representatives of the general public italicized]), and the US EPA implemented their consensus regulation (US EPA, 1994).

The APAs also give citizens multiple opportunities to enforce their public participation rights. For example, under the federal APA, citizens can seek review of "[a]gency action made reviewable by statute and final agency action for which there is no other adequate remedy" (5 U.S.C. § 704). Courts can set aside the agency's decision if the agency failed to follow mandated procedures—including if it failed to provide for required public participation (5 U.S.C. § 706(2)(D)). Similar provisions in the Clean Air Act allowed citizens and states to litigate the EPA's denial of the petition to regulate GHG emissions from cars, eventually allowing access to the U.S. Supreme Court, and allowed NGOs to access courts to challenge the Trump Administration's replacement of the Clean Power Plan with the Affordable Clean Energy Rule, which the U.S. Court of Appeals for the D.C. Circuit invalidated the day before President Trump left office (American Lung Association v. EPA, 985 F.3d 914 (Jan.19, 2021)).

Finally, environmental citizen suits also allow citizens to participate in agency decision making and even to develop environmental agendas by allowing citizens to sue to force government agencies to comply with their mandatory duties (e.g., Clean Water Act, 33 U.S.C. § 1365(a)(2)). These types of citizen suits, against the agencies themselves, have generated a significant portion of the court decisions interpreting environmental laws (May, 2003) and have jumpstarted entire new environmental programs (Houck, 2002). Thus, again, these citizen suit provisions allow interested citizens to become activity involved in environmental decision making and agency agendas, empowering them to force environmental agencies to implement programs and environmental protections that the agencies might otherwise have ignored. Babich (1995) characterized environmental citizen suits as "the teeth in public participation," and these provisions, in conjunction with extensive use of citizen petitions and some use of negotiating rulemaking, demonstrate that US environmental law has embraced the IAPP's full spectrum of public participation modalities across different decision making contexts.

4.4 | Comparison

Noticeable similarities emerge from a comparison of the Netherlands' implementation of the Aarhus Convention and EU public participation requirements and US environmental law. First, both nations distinguish the rights of individuals directly affected by environmental decision making, such as in permitting and enforcement, from the general public's participation rights, particularly with respect to judicial review. Second, the two nations also meaningfully distinguish between members of the general public who have a direct interest in environmental decision making from those with a more general interest-in the Convention's terms, the "public affected" and the "public." In all three jurisdictions, this distinction is again most relevant to judicial review (access to justice), creating different categories of "the public" who can participate in agency/authority decision making and who can pursue judicial review/access to justice. Notably, however, US federal court standing doctrine is a constitutional limitation on federal lawsuits and hence unlikely to change, whereas US states, the Netherlands. and the EU are free to broaden access to courts on environmental matters.

Third, both the Netherlands and US emphasize consultation as the dominant mode of *required* public participation in environmental decision making. Notably, however, both countries also create legal pathways that allow agencies and authorities to pursue more active public participation—involvement and collaboration—if they so choose. The facts that agencies in the US only rarely pursue negotiated rulemaking and that authorities in the Netherlands only sparingly develop more elaborate public participation procedures is suggestive of common tendencies for governments to rely more heavily on their own processes and expertise regardless of national context.

Against that suggestiveness, however, plays the clear difference in the US's and Netherlands' approaches to public participation in environmental decision making. Between petition and citizen suit provisions, US law actively empowers the public to *initiate* environmental decision making. These two kinds of provisions have for over 50 years allowed members of the general public to actively steer aspects of how agencies and the courts interpret, implement, and enforce federal environmental laws. While the Dutch equivalent of environmental citizen suits are starting to emerge, mostly by way of EU environmental requirements and access-to-justice provisions, the US currently makes far more use of the entire IAPP spectrum of public participation options.

5 | FINAL ANALYSIS AND CONCLUSIONS

The EU, Netherlands, and US provide an initial snapshot of how governments that are equally or similarly committed to public participation in environmental decision making can nevertheless legally structure public participation in different ways. Moreover, this comparison reveals that these legal structures can: (1) mandate basic public participation requirements, which in turn can vary from context to context; (2) allow government agencies flexibility to experiment with

different kinds of public participation; and (3) empower citizens and NGOs to demand additional or different kinds of governance.

Our comparison reveals that legal mandates for public participation tend to limit governments to the IAPP categories of inform and consult. In this sense, in many respects, laws in the EU, Netherlands, and US structure environmental public participation in broadly similar ways. For example, all three jurisdictions have legal instruments that provide for access to governmental information (inform), notice of governmental proceedings and an opportunity to comment on proposed governmental decisions (consult), and access to the courts for at least those persons and entities most directly affected by administrative agency decision making, increasing the legitimacy of those inform and consult decisions. Nevertheless, even here different modalities of participation emerge. Thus, both the Netherlands and the US legally distinguish between governmental actions like permitting and enforcement that directly affect one or a very small number of persons or other entities and more broadly applicable administrative decision making. Governments must often involve persons in the former category in the decision making process, allowing them to propose the scope of a permitted activity or to introduce evidence and arguments to counter agency proposals. For the latter category, in contrast, public participation is often limited to commenting on the authority's or agency's proposed decision, squarely within the consult range of the spectrum. While the administrative agencies throughout the EU and in the US must actively respond to these comments, the chances that this late-stage consultation will substantially affect the agency's preferences are slim.

Nevertheless, climate change governance—and particularly effective climate change adaptation (Ruhl & Craig, 2021)-may require greater use of the more active ends of the IAPP spectrum: involve, collaborate, empower, Indeed, the most recent scholarship on environmental public participation promotes these much more active roles for the public in shaping environmental goals and processes at multiple scales (Chaffin et al., 2014; Cosens et al., 2017; Spyke, 1998)-an advocacy for more public involvement, collaboration, and even empowerment, particularly as climate impacts unsettle normal expectations (Chaffin et al., 2014; Cosens et al., 2017). Notably, both the Netherlands and US provide nonmandatory legal structures that allow agencies to involve and collaborate with the public if the agencies so choose, potentially moving at least some kinds of environmental decision making down the IAPP spectrum to more active public participation. In the EU, for example, there has been experimentation with different kinds of public participation in watershed governance under the Water Framework Directive (Newig et al., 2016). Nevertheless, both use of the Negotiated Rulemaking Act in the US and experimentation with the PPP in the Netherlands have been rare occurrences, and in both nations the willingness of government agencies to voluntarily do more than consult with the general public has depended intensely on the exact kind of environmental decision being made. Even so, the Netherlands' new Environment and Planning Act may soon inspire Dutch authorities to experiment more expansively with environmental public participation, perhaps eventually inspiring them to create a more varied spectrum of public participation in environmental decision making, including climate change governance, than

the US public enjoys. No similar legal innovation is likely in the near future in the US, nor do existing US public participation laws provide government agencies the same flexibility to invoke a range of public participation modalities that Dutch laws do.

Even so, US laws currently more often and more explicitly the EU and Dutch laws directly *empower* the US public to actively direct environmental decision making to particular ends and to new topics. This direct empowerment derives especially from the legal right of members of the general public to petition administrative agencies to take particular actions and from environmental citizen suits (May, 2003). In the context of climate change in particular, petitions to the EPA were critical to jumpstarting GHG regulation in the United States (Lazarus, 2020), while environmental citizen suits and APA judicial review were instrumental legal empowerments for challenging inter-Administration backsliding during the Trump Administration.

Notably, the unearthing of similar legal pathways for direct NGO climate challenges have also proven effective in the Netherlands, as in the Urgenda decision. This recent parallelism suggests that empowerment of citizens to both challenge and steer government environmental decision making is, possibly, a critical legal structure for advancing progress in addressing climate change, at least for the moment in these two countries. However, more studies such as this one are needed to close knowledge gaps regarding how individual nations actually legally structure public participation in environmental decision making before scholars can test the universality of any correlation between increased public participation activity (involvement, collaboration, and empowerment on the IAPP scale) and progress toward achieving national environmental goals, including both the sustainable development goals and climate change mitigation.

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