Until recently, Sue Peachey, an apartment building manager in Bath, U.K., didn’t think much about climate change. “I did my recycling,” she says. “I just wasn’t aware of how serious it was.” She never imagined the U.K. Parliament asking for her advice on climate policy. But last year, a letter arrived in her mailbox inviting her to do just that, by joining the United Kingdom’s first ever climate assembly. “I’d never done jury service—I’d never done anything like it before,” Peachey says. She thought about her stepchildren and stepgrandchildren, and the legacy they would inherit. “That was the main reason why I thought, ‘Well, if somebody is going to have input on it, why shouldn’t it be me?’”

So, Peachey signed up to spend four weekends driving to Birmingham to listen to experts, deliberate with 109 fellow citizens, and recommend climate policies. The assembly was more than a focus group or a town hall meeting: It was an experiment in handing political power to a random but representative set of citizens. Last month, it produced its final report, and its recommendations will shape debates in Parliament.

The U.K. Climate Assembly is one of a growing number of similar gatherings popping up across Europe, many of them charged with addressing climate change and other science-heavy issues. A citizens’ assembly in Ireland that deliberated from 2016 to 2018 led to a referendum that legalized abortion and a government plan to quadruple its carbon tax by 2030. This year in France, an assembly made 149 climate policy recommendations, and President Emmanuel Macron has agreed to push for 146 of them, including making “ecocide” a crime and including climate goals in the French constitution. Spain, Denmark, and Scotland have announced their own upcoming climate assemblies, although they have been delayed by the coronavirus pandemic. And at the regional and local level, dozens of citizens’ juries...
and councils have drawn up policies on climate adaptation, air quality, and environmental protection.

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Advocates say these carefully designed “minipublics” can break political stalemates by bringing together citizens to hear evidence and deliberate. They point to evidence of high-quality policy created by fresh and diverse perspectives, and to behavioral research showing the power of guided deliberation to change minds and reduce polarization. What began as an abstract, academic model has taken off in real-world settings, says David Van Reybrouck, a Belgian historian, author, and advocate of minipublics. “We’ve really seen a wave, a surge, of deliberative democracy.”

Claudia Chwalisz, a policy analyst who has tracked the growing wave of minipublics for the Organisation for Economic Co-operation and Development, a club of economically developed nations, says these deliberative bodies are well-suited to tackling long-term issues because citizens need not worry about the short-term incentives of electoral cycles, giving them more freedom than elected politicians. A minipublic can also embody a wide range of perspectives, an advantage for problems with complex trade-offs and value-based dilemmas. Climate policy, she adds, ticks both boxes.

**Deliberative surge**

The number of national and local minipublics—randomly selected assemblies that deliberate over policy recommendations—has risen in the past decade. Many dealt with scientific questions.

![Chart](https://www.sciencemag.org/news/2020/10/jury-duty-global-wa...)

*The Organisation for Economic Co-operation and Development assembled data for the rest of 2019.*

**Dealt with questions on climate, environment, neuroscience, research priorities, or food technology.**

(Graphic) C. O’GRADY AND N. DESAI/SCIENCE; (Data) OECD DATABASE OF REPRESENTATIVE DELIBERATIVE PROCESSES AND INSTITUTIONS (2020)
Letting ordinary people determine climate policy might seem risky, but “if climate scientists have learned anything over the last couple of decades, it’s that they can’t just do the science and expect it to speak for itself,” says John Dryzek, a political scientist at the University of Canberra who wants to use the approach to tackle another fraught science issue. Last month, he and other minipublic advocates published a call for what would be the first global citizens’ assembly. He wants it to take on the issue of genome editing, on the grounds that its widespread ramifications demand international agreements. For this and many other science policy questions, he argues, minipublics are an excellent way to integrate public values with advice from scientists and ethicists. “Scientists don’t have a monopoly on public values,” he says.

Randomly assigning citizens to positions of political power has a history stretching back to ancient Greece, where the Athenians used the practice to select magistrates and members of their representative Council of Five Hundred. But the architects of electoral systems in postrevolution France and the United States preferred a republican system of professional politicians—an “elected aristocracy”—over outright rule by the masses, Van Reybrouck says. “They were as much afraid of democracy then as we would be of anarchy today.”

Now, however, electoral democracies are floundering in the face of partisanship and populism. In November 2018, Van Reybrouck attended a lunch during a French state visit to Belgium and was pulled into a conversation with Macron. At the time, France was on fire: Thousands of protesters furious at the prospect of a fuel tax hike were expressing their rage in the streets. “What did they want me to do?” Van Reybrouck recalls Macron asking in frustration. “They want me to save the environment and at the same time to keep petrol prices low.”

Bringing citizens into the discussion would help, Van Reybrouck says he told the French president. Not everyone in France has access to public transit, and those already struggling with the costs of a car would now be further disadvantaged. When Van Reybrouck started to talk about minipublics, he says, “[Macron] puts down his fork and takes a ballpoint and starts taking notes.”

The next month, Macron’s administration walked back the tax hike and announced a series of public town hall meetings for citizens to air grievances. In April 2019, Macron announced the Citizens’ Convention on Climate. Among the assembly’s many eventual proposals were a fuel tax for recreational aviation, an insurance tax based on vehicle emissions, and a tax on vehicle weight—but no fuel tax for drivers.

Macron’s situation was hardly unique. Governments are hamstrung by the problem of climate action, says Rebecca Willis, an environmental social scientist at Lancaster University who helped choose expert speakers for the U.K. Climate Assembly. She interviewed U.K. politicians and studied their speeches and found that they underestimated public support for climate action. “They didn’t feel under any pressure to act,” she says. Politicians also tend to overestimate the opposition of a vocal minority to some climate measures—such as onshore wind farms, she says. And they fear punishment at the ballot box, where citizens express their opinions about a multitude of policies at the same time: “Voting is such a blunt instrument.”

In mid-2019, the United Kingdom set a target of net zero carbon emissions by 2050, a first step toward keeping its commitments to the 2016 Paris agreement. But since then, there’s been no action to meet the goal, says Darren Jones, a Labour Party politician. “We’ve legislated this target, and that’s great,” he says. “But now
how are we going to get there?” Climate policies need the backing of the public, Willis says, which means the public should be involved in creating them. And so, like Macron, Jones and other members of the U.K. Parliament asked the public to help.

Peachey was one of the 30,000 people whose postcode came up in a random lottery to choose potential participants, and one of 1748 people who responded to the invitation. An algorithm whittled the sample down to 110 people who matched the overall U.K. population’s gender, age, ethnicity, education level, geographic region—and, crucially, their degree of concern about climate change. This two-stage process limits the influence of self-selection, which skews toward people who already have strong interests in a topic and drives polarization, says Stephen Elstub, a political scientist at Newcastle University who is studying how well the U.K. Climate Assembly worked.

The nonprofit Involve, contracted by Parliament to run the assembly, tried to eliminate barriers to entry, says Sarah Allan, Involve’s head of engagement. The team chose Birmingham as a geographically central city and arranged travel, accommodation, child care, and accessibility adaptations like large-print reading materials. They covered all the members’ costs, paying upfront when necessary so as not to exclude members who couldn’t pay out of pocket. And they paid all members an honorarium of £150 for each weekend, a lure to those with little preexisting interest in the subject. “It’s really important to try and get the people who wouldn’t normally participate,” Elstub says.

On a gloomy Friday evening in late January, the assembly members gathered for the first time on the top floor of the glossy, high-rise Park Regis hotel. Famed naturalist David Attenborough made an appearance to greet the members and host a Q&A about his work. In the first sessions, U.K. academics explained climate science basics: the greenhouse effect, the impacts of rising temperatures. Peachey’s understanding skyrocketed. “I just thought it was getting hotter, but that’d be nice,” she says. “I bet you there’s a lot of people out there who think the same thing.”

Over three weekends—and a fourth weekend forced online and stretched over three
weekends because of the pandemic—the assembly listened not only to scientists, but also to representatives of interest groups such as Greenpeace and industry body Energy UK. The goal was to provide both impartial information and explicitly labeled opinions from advocates, says Chris Stark, chief executive of the Committee on Climate Change, an independent body advising the government. Assembly member Ibrahim Wali, a doctor from Epsom, says that although some members didn’t believe the scientists or think climate action was worthwhile, it was clear to everyone that they were not there “to argue about whether climate change is real.” The assembly’s clear task—identifying policies to reach net zero by 2050—kept discussions on track, he adds.

Sessions shifted between speaker presentations and small group discussions, where members deliberated on policy recommendations, then voted on them by secret ballot. The ballot papers combined predetermined policy suggestions—like a ban on the sale of petrol, diesel, and hybrid cars by 2035—with ideas and amendments suggested by members.

With facilitators making space for everyone to chime in, Wali says no one dominated in the small group discussions. A poll of members found that 94% felt their views were respected, even when others disagreed, and 95% felt they were given “ample opportunity” to express their views. In an age of polarization, a willingness to respectfully hear other views, and the reasons people hold them, changes the hostile dynamic of politics entirely, says Alice Siu, a political scientist at Stanford University: “Something magical happens.”

Some researchers contend that entrusting policymaking to ordinary citizens is risky. Cass Sunstein, a legal scholar at Harvard Law School, has argued that deliberating groups can be fertile ground for polarization, pointing to evidence from experiments showing that groups such as churchgoers or jury members can spiral into polarized conclusions.

But a long tradition of research suggests the discussions are often constructive. In 1994, Stanford political scientist James Fishkin polled 869 people—randomly selected from the U.K. electoral register—on their attitudes toward rising levels of crime, asking questions such as whether more people should be sent to prison and whether sentences should be tougher. Next, 301 of them agreed to meet for 2 days in Manchester, where they heard from politicians, lawyers, and police. They asked questions and discussed policy proposals in small groups before being polled again. The results showed participants had changed their opinions, in some cases dramatically: For each question in the poll, at least one-third of the deliberators had shifted their stance to some degree, and on some questions, as many as two-thirds had changed their minds.
Fishkin and his collaborators around the world went on to conduct more than 100 of these experiments, which they call deliberative polls. They have explored opinions on flood management in Uganda, constitutional reform in Mongolia, and educational reform in Northern Ireland. A deliberative poll held in Dallas last year saw Republicans and Democrats moving toward a middle ground on divisive issues such as refugee resettlement and a minimum wage. Across the board, the researchers found participants could back up their opinions with clear reasoning. Siu, analyzing transcripts from these experiments, has found that men and women contributed equally to discussions, contrary to expectations that men would dominate.

Such good outcomes aren’t guaranteed, says Sander van der Linden, a University of Cambridge social psychologist who studies decision-making. In some cases participants do become more polarized, rather than less, in the face of disagreement; that happened in group discussions of gay rights in Poland—not one of Fishkin’s experiments—that had recruited participants from pools with strong opinions. And in groups with a majority and minority opinion, “polarization cascades” can override the minority, causing them to shift their opinion for reasons that have nothing to do with evidence and good arguments.

But with high-quality information, facilitators to keep discussions on track, and rules to enforce civility, it is possible to steer people away from group biases, van der Linden says. In 2017, Kim Strandberg, a behavioral scientist at Åbo Akademi University in Finland, and his colleagues found such measures prevented polarization in discussions about the status of the Swedish language, spoken by a minority in Finland. “The people who are polarized and tribal are actually a minority,” Dryzek says. A good assembly may include some members of this minority, he says. “But most of the people in a minipublic have no history of activism or involvement with an issue, and so they’re in a good position to reflect on what they hear.”

What makes deliberation so powerful and positive seeming is still a bit of a black
box, says André Bächtiger, a political scientist at the University of Stuttgart. Recent experiments like Strandberg’s seem to demonstrate the effects of deliberation and good design. But a deliberative experience is made up of countless moving parts of human interaction, and “we just don’t have everything under control,” Bächtiger says. “We’re still in the infancy of all of this.”

And the growing popularity of minipublics carries another risk: Some will be constituted as cheap imitations, without the crucial design elements. Fishkin trademarked the term “deliberative poll” partly to maintain quality control, and Chwalisz and her colleagues have published guidance on best practices. But citizens’ panels, juries, and conferences that rely on self-selected participants still spring up. “Lots of people are calling a lot of different things citizens’ assemblies now, because it’s kind of a trendy method,” says Graham Smith, a political scientist at the University of Westminster.

The U.K. Climate Assembly’s final report, published on 10 September, says climate action should be based on cross-party leadership and principles of fairness to different groups of people. Its policy recommendations, supported by a majority of assembly members, include restoring public ownership for public transit—largely privatized in the United Kingdom—introducing air travel taxes that increase as people fly more often, and adding labeling to food that indicates its carbon footprint.

Will those recommendations be adopted in the end? Whereas the French assembly was set up by Macron himself, the U.K. assembly was run at arm’s length from Prime Minister Boris Johnson’s Conservative government, which means its impact will be less direct, Smith says. The parliamentary committees that established it will use the report to introduce debates, inform their own recommendations, and scrutinize legislation coming from Johnson and his government, but “we’ve yet to see how the government will respond,” Smith says.

Even if a minipublic’s recommendations are discussed by politicians, it’s difficult to say how much they influence later policies, says Émilien Paulis, a political scientist at the French-speaking Free University of Brussels. But in an analysis of data on the policy impact of 55 minipublics, Chwalisz and her colleagues found that, 75% of the time, public authorities implemented more than half the citizens’ suggestions. Only six minipublics in the sample saw none of their recommendations implemented.

Some advocates have suggested imbuing minipublics with official legislative powers, but that would be antidemocratic because they were never given consent to govern, says Cristina Lafont, a political philosopher at Northwestern University who describes herself as a “frenemy” of the deliberative bodies. Keeping minipublics in an advisory role, rather than enabling them to produce binding recommendations, is more truly democratic, she says. Although she wants the public to engage in thoughtful deliberation, she worries that minipublic participants cannot be held to account by the wider public. And being too enthralled by the results of “lottocratic” minipublics runs the risk of encouraging a lazy shortcut to good governance, she says: “Why not let the minipublics do the thinking and the deciding for us?”

Dryzek agrees that democracies should not blindly defer to the decisions of minipublics. But they still offer a critical piece of information for policymakers that experts can’t provide, he argues: a meaningful gauge of public values.
For Peachey, the climate assembly made the right course clear. Her new awareness of climate change and its impacts has galvanized her on behalf of her stepgrandchildren. “We’re not going to benefit,” she says. “But future generations will.” Since the U.K. assembly’s final meeting, Peachey has joined her local parish council and worked with fellow councilors to declare a climate emergency—a symbolic gesture that has led to local climate minipublics elsewhere in the country. She daydreams about bringing a wind farm to an old military airfield near Bath.

Her own habits have changed, too. She now shops at her local farmer’s market and plans to get solar panels for her home. Her new electric car is a great conversation starter, a chance for her to unpack what she learned at the assembly, she says. “I’ve been given this information. It seems a shame not to use it.”