# TABLE OF CONTENTS

- Executive summary: 01
- 1. Understanding the Model: 03
- 2. Big picture assessment: 07
- 3. Detailed assessment: 17
- 4. Full spectrum assessment: 19
- 5. Acknowledgements & contact: 20
- 6. References: 21
- Appendix: Ways to use the Model tools: 23
The Climate Democracy Model (the Model) is Demsoc’s holistic view of what we need to mitigate climate change and build climate resilience in our cities and regions in a democratic way – what we term climate democracy. It consists of practical, interconnected tools for a city or region to assess and analyse its progress towards climate resilience through democratic means.

IPCC researchers state clearly that we need to speed up climate efforts to prevent the worst scenarios of climate change (Intergovernmental Panel on Climate Change 2022). We argue that this needs to be achieved through the concept of climate democracy. Democracy enables participation of everyone in imagining, creating, repairing, and maintaining their joint future. It entails having a say in shaping the democratic infrastructure that allows us to collectively thrive. Climate action is a process by which individual, collective, and systemic decisions are made to nurture community and climate resilience and ensure the possibility of an ongoing future on this planet. Climate action enables us a future, and democracy allows it to be a future for all. Thus, advancing climate democracy today, affords climate democracy tomorrow.

After more than a decade working on participation and democracy, and drawing from deep engagement in climate programmes with over 14 cities across Europe in the last two years, we know that durable change requires democratic approaches that are people-centred, committed to community and climate resilience, and responding to the local context. We also know that focusing only on expert-led, technical 'solutions' towards climate action that lack deep democratic support inevitably fail to build popular consent, and open the way for those who for whatever reason oppose necessary action. Community voices and knowledge, connected by collaboration that comes also from the bottom up not only the top down, must be the foundation of the action that governments and civil society take.

The Model is our response to these gaps that we see in pan-European efforts to ensure climate action is taken in ways that reinforce democracy. It provides frameworks and tools to help cities and regions assess and celebrate progress towards climate democracy.
The Model is a compass, not a map. It doesn't hold the answers, it shows a direction, and wants to provoke conversations for change. It is ambitious yet pragmatic, showing how we can move towards a climate resilient world, democratically.

As an image, the Model uses tree canopies to symbolise protection and durability, and rhizomes and seed pods to represent actors and collaborations happening within the ‘soil’ of the city, influencing what happens above for climate resilience.

It can be used in many different ways. By public servants within a policy design cycle for example, and across a city’s climate engagement journey, or to involve citizens in climate action in ways that reinforce democratic principles and practices.

The Model – now in its second release – comes from Demsoc’s partnership in multi-sector, Europe-wide climate programmes since 2019, including EIT Climate-KIC Healthy, Clean Cities Deep Demonstrations, NetZeroCities and European Cities for Climate-Neutral Construction, and through ongoing work with cities, peers and researchers on what ‘climate democracy’ is and enables. See Background and methodology for more information. To this extent the Model is continually developing, and is offered openly for critique and expansion.

The Model is open for use by anyone, including public servants, civil society, funders, researchers and students, and grassroots groups.

We are keen to hear your feedback and how you are using it. Share your thoughts with Nadja Nickel, Climate Programme Director, nadja@demsoc.eu.

WHAT IS CLIMATE RESILIENCE?

Throughout the Model there is reference to ‘climate resilience’. This term is defined in various ways, and we acknowledge ‘resilience’ is a contested concept (Bahadur and Tanner 2014).

We use and understand the term to mean the ability of people, structures, governance and ecosystems to withstand the impacts of climate change, while also taking actions to change our future course. Attention to people, power and politics is critical within this thinking.

ABOUT THE AUTHORS

Democratic Society (Demsoc) is an independent, non-partisan non-government organisation (NGO) working across Europe and the UK. Our Climate Programme – one of our five core programmes – focuses on democratising climate action and involving people in the transition to a just, resilient climate future. We bring expertise in democratic and deliberative practice, research and innovation, to strengthen governance through engaging cities and citizens on topics including climate-neutral smart cities, circular economy, mobility, energy transition, and nature-based solutions.

Since 2019 we have been working with over 14 cities across Europe in major climate programmes including EIT Climate-KIC Healthy, Clean Cities Deep Demonstrations, NetZeroCities, and European Cities for Climate-Neutral Construction, collaborating with governments at all levels, citizen-led initiatives, funders, researchers, and other NGOs to address the climate question through democratic means.
1. UNDERSTANDING THE MODEL

In practice, the Model is four interconnected tools for use at a local, city and regional level to assess and analyse its progress towards climate resilience through democratic means. Combined, tool outcomes provide a robust picture of where things are now, to provoke conversations and action on necessary changes. The tools enable assessment from different perspectives: **Big picture**, **Detailed**, and **Full spectrum**. These are outlined in more detail in Sections 3, 4 & 5.

All of the tools help pinpoint levers for change. Levers “…are places within a complex system (a corporation, an economy, a living body, a city, an ecosystem) where a small shift in one thing can produce big changes in everything.” (Meadows 1999).

---

**BIG PICTURE ASSESSMENT**
Canopy for Climate Democracy

**DETAILED ASSESSMENT**
Actor Types & Interactions
Competencies

**FULL SPECTRUM ASSESSMENT**
Landscape Analysis

---

**BIG PICTURE ASSESSMENT (p7)**
Assessment of climate resilience based on four segments for climate democracy: diversity of actors and knowledge, participatory culture, resourcing, and competencies for climate democracy.

Tools used here:
- Canopy for Climate Democracy

**DETAILED ASSESSMENT (p17)**
Assessment of democratic factors for climate resilience at a more granular level, focusing on actor types, interactions and power dynamics, and competencies for climate democracy. Tools used at this level also feed into the Canopy for Climate Democracy tool for a ‘big picture’ view.

Tools used here:
- Actor Types & Interactions
- Competencies

**FULL SPECTRUM ASSESSMENT (p19)**
Assessment of structural barriers at all levels from perspectives of democratisation, decarbonisation, and community and climate resilience, looking at factors of society, culture, economy, politics and institutions.

Tools used here:
- Landscape Analysis
SUMMARY OF MODEL TOOLS

Each tool has its own intention and format for assessing and analysing climate resilience. See Sections 3, 4 & 5 for full tool descriptions and downloads; these are also accessible on our website.

CANOPY FOR CLIMATE DEMOCRACY

To assess and see the big picture of a city or region’s climate resilience based on four segments for climate democracy derived from Demsoc’s climate work: Diversity of actors and knowledge, Participatory culture, Resourcing, and Competencies for climate democracy. Shows how to map foundational conditions, emerging shifts, and future possibilities. The Actor Types & Interactions and Competencies tools feed into this tool for a ‘big picture’ view.

ACTOR TYPES & INTERACTIONS

Deep democratic support for climate action requires collaboration between diverse actors. This tool helps to identify different types of actors present in action for climate resilience, reveal who is missing, and build inclusive and diverse engagement strategies. Feeds into the Canopy for Climate Democracy.

COMPETENCIES

Taking action for climate resilience requires a spectrum of individual and group skills and capabilities. This tool provides reflection on competencies present in work programmes for climate action, and helps build team profiles and recruitment strategies. Feeds into the Canopy for Climate Democracy.

LANDSCAPE ANALYSIS

Addressing structural barriers to change means being able to identify what’s preventing transition to low-carbon alternatives while simultaneously weakening democracy. This tool uses lenses of democratisation, decarbonisation, community and climate resilience to identify and map structural barriers within a qualitative framework. It is designed to expand thinking about a project or issue, helping teams progressively identify areas for change, build compelling stories about the impacts of making these changes, and celebrate progress made as programmes advance.
WHO THE MODEL IS FOR

The Model is for use by anyone working at local, city and regional levels on climate action programmes or policy, but it will be particularly helpful for:

- **Civil society organisations** working on climate action, resilience and democratic innovation;
- **Public servants** designing or delivering climate innovation programmes;
- **Funders** of climate innovation programmes;
- **Researchers and students** examining ‘climate democracy’ and/or working in climate or democracy fields;
- **Citizens and grassroots groups** progressing change from the ground-up.

WAYS TO USE THE MODEL TOOLS

The best way to get to know the Model tools and how they work is seeing how they can be applied within different scenarios. See Appendix: Ways to use the Model tools for two examples:

- **Scenario 1**: public servants using in a policy design cycle
- **Scenario 2**: across a city’s climate engagement journey

BACKGROUND AND METHODOLOGY

The first Model version released in March 2021 was generated primarily through internal qualitative research through two different methods conducted by Demsoc from October to November 2020 with 12 Demsoc staff: self-guided mapping of people, power and participation activities, and follow up interviews. We conducted this research 18 months into Demsoc’s engagement as a design partner in EIT Climate-KIC Healthy, Clean Cities Deep Demonstrations (HCC DD), a portfolio-based, strategic learning programme being run in 14 European cities with the aim of getting governments, citizens, and civil society to embrace different ways of thinking and collaborating for decarbonised futures.

We worked with 12 Demsoc ‘Local Connector’ staff living and working in nine of the 14 programme locations: Amsterdam, Edinburgh, Krakow, Leuven, Madrid, Malmö, Milan, Orléans and Vienna, and one staff member representing Future Cities South East locations (Križevci, Maribor, Niš, Sarajevo, and Skopje). Local Connectors work with city and design partners to ensure a strong voice for people in the reimagining of the places where they live, work and play. This approach to generating the first Model was internal and self-reflective in nature, and did not involve external or city partners. We sought to address this limitation in the second Model release – read on for how we did it.

For the self-guided mapping activity we asked these 12 Demsoc staff to map people (actors), power dynamics, and game changing participation moments of the HCC DD programme they’d been part of over 18 months, looking for mobilising factors indicating shifts towards more participatory mindsets and methods, and evidence of interventions towards climate action. This resulted in 11 maps which we used a ‘rich picture’ method to analyse, as both a form of grounded sensemaking, and a way to introduce systems thinking into the Model production process, making sense of relationships and cause and effect in a visual way (Conte and Davidson 2020; S. Bell and Morse 2013).
We conducted one-on-one, 1-hour interviews with the same 12 staff who created the maps to probe deeper on the content. Interview data was analysed using a coding process and following principles of grounded theory - an inductive, interactive and comparative approach common in social research to generate a conceptual understanding from data (Gubrium et al. 2012; Williams and Moser 2019). We coded and stored data in a research repository built in Airtable to reveal themes and directionality towards categorisation. These themes and categories were cross referenced with those identified through rich picture analysis, leading to generation of the first Model concept draft.

The first draft also drew upon published theories and work in the participation, democracy and systems thinking fields: design justice principles for centering marginalised communities in design processes and challenging structural inequalities (Costanza-Chock 2020), an adaptation of a socio-technical dynamics theory for low-carbon transitions to include deep roots of gender and culture critical for system change (Fraser 2020), a ‘humble governance’ model for reform in political culture and decision making (Annala et al. 2021), and actor roles and responsibilities designing collaborations for change (Lee and Lepage 2020).

The Model was further iterated through design and content co-creation with the original 14 staff participants and the Climate Programme Director, and collaboration with an editor and illustrator.

The first release was published on 11 March 2021 featuring a blog post and case study introducing the Model (Democratic Society 2021c; 2021b).

This second Model release in 2022 builds on 12 further months of learning across the Demsoc Climate Programme, including further HCC DD work, and Demsoc’s recent work as a NetZeroCities partner in support of the EU mission on climate-neutral and smart cities by 2030, and European Cities for Climate-Neutral Construction. The mission-oriented concept of public value as the driving force towards innovation is influential in ongoing Model development (European Commission. Directorate General for Research and Innovation. 2018).

Further iteration has come from peer, academic and government critique via conference presentations, peer-reviewed publications, and debate on public innovation platforms such as the OECD OPSI’s Innovation Portfolio (Democratic Society 2021a), and testing and iterating Model tools with city representatives, specifically the Actor Types & Interactions, Canopy for Climate Democracy and Competencies tools.

In this release we have also refined tool design, labelling and language, including renaming the model to ‘Climate Democracy Model’. All tools are also offered for the first time for download.

City’s climate engagement journey
2. BIG PICTURE ASSESSMENT

We recommend getting to know the Model by starting with the Canopy for Climate Democracy.

The Canopy for Climate Democracy offers a way of assessing and seeing the big picture of a city or region’s climate resilience based on four segments for climate democracy derived from Demsoc’s work:

1. Diversity of actors and knowledge;
2. Participatory culture;
3. Resourcing;
4. Competencies for climate democracy.

Read on for detail on each of the four segments.

Segments 1 and 4 are explored at deeper levels through the Actor Types & Interactions and Competencies tools – see Section 4: Detailed assessment for more information.

As an image, the Canopy for Climate Democracy uses a simplified drawing of tree coverage across a city or region, seen from above. The denser the canopy coverage, the more protection the city or region is offered for a climate resilient, decarbonised future.

The Canopy for Climate Democracy is not a numerical score or league table, it does not show winners or losers, and it is not intended to be the final word. It is a way of starting conversations and measuring progress on foundational conditions, emerging shifts, and future possibilities for change towards climate resilience.
Foundational conditions for example those present at the start of a climate programme; Emerging shifts through various forms of engagement and action; and Future possibilities, 'gaps' in the canopy that need to be addressed to more fully realise climate resilience and strengthen democracy in the process.

Three states can be mapped using the Canopy for Climate Democracy:

1. Foundational conditions
2. Emerging shifts
3. Future possibilities

Access the tool: demsoc.org/resources/canopy-for-climate-democracy

CREATE A CANOPY FOR CLIMATE DEMOCRACY
FOUR SEGMENTS FOR CLIMATE DEMOCRACY

The Canopy for Climate Democracy tool features four segments for climate democracy derived from Demsoc’s work in the climate field. Here we go deeper into the conditions within each segment, comparing least and most desirable conditions for taking climate action in ways that also reinforce democracy.

PARTICIPIATORY CULTURE

A democratic and inclusive approach to mitigating climate change is crucial to avoid deepening of polarisation, inequalities and social exclusion (EIT Climate-KIC and Democratic Society 2020; Youngs 2021). Participation works to ensure that climate action improves the lives of people in Europe’s increasingly unequal cities, and avoids negative ripple effects. Climate action can only be sustainable if it benefits and empowers communities, especially marginalised and vulnerable groups who bear the brunt of negative climate impacts.

While engaging citizens in climate action is not new, the current levels of engagement are not sufficient to address the challenge at hand. Engagement is often implemented top-down, meaning that governments seek to engage with the public along the policy cycle. However, citizen participation is now understood as entailing a broader definition, including bottom-up and informal processes including community organising (Greenbaum and Loi 2012).

Acknowledging all these factors, the Participatory culture segment is primarily about participation being more than just involving citizens in decision making processes – it’s about decision making processes that affect our lives being more participatory, and people being agents of change, not objects. This means designing processes that prioritise equity and inclusion as well as just outcomes – processes that engage citizens in deeper and wider ways than simply asking them to tick a box in a referendum or give their opinion on a city’s new plan to ‘green the neighbourhood’.

Engaging citizens and stakeholders in co-designing a just transition towards a climate resilient future increases community acceptance of policies, higher levels of trust between citizens and governments, as well as the surfacing of innovative approaches to tackling current challenges, including disinformation. Success depends on the establishment of the conditions and space for people to make sensible informed decisions, where their voices are heard (Veeckman and van der Graaf 2015), going beyond symbolic efforts and creating alliances between policy, science and society, in order to make more equitable and effective transitions possible. This also means creating safe spaces for people to participate on their own terms.
Participatory culture is also about the effectiveness and quality of collaboration between diverse actors e.g. civil servants working with citizens and experts. It emphasises engaging appropriately and meaningfully, to ensure that citizens do not lose trust in governments and climate action (M. Z. Bell 2021). Shifting the ways we engage with each other and the environment counts significantly towards greater climate resilience, because it takes people working in coordination at large scales, not the actions of select groups of individuals. This requires establishing a culture of democracy for transition of social and economic systems, and finding ways to do this inside and outside the city administration, making space for learning, experimentation, and prototyping of new tools and institutions amongst diverse actors, creating new forms of governance leading us towards more just, climate resilient futures. This is also why the adjacent, overlapping Diversity of actors and knowledge segment in the Canopy is important, because who is present in decision making has a direct bearing on outcomes.

Table 1 sets out the conditions for the Participatory culture segment, from less to more participatory, derived from Demsoc’s work in climate, and current thinking in the participation, democracy and systems thinking fields. The left hand column is the least desirable conditions for climate democracy. In the right hand column are the most desirable.

<table>
<thead>
<tr>
<th>#</th>
<th>Less participatory</th>
<th>More participatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Process maintains status quo, and doesn’t challenge concentrated power prioritising fossil energy</td>
<td>Process disrupts power and status quo and addresses deeper structural issues breaking down dependence on fossil energy</td>
</tr>
<tr>
<td>P2</td>
<td>Gatekeeping and hierarchical power structure</td>
<td>Transparency, accountability and shared power</td>
</tr>
<tr>
<td>P3</td>
<td>Organisational, top-down leadership</td>
<td>Relational, collaborative leadership</td>
</tr>
<tr>
<td>P4</td>
<td>Centralised power and responsibility</td>
<td>Shared power and responsibility</td>
</tr>
<tr>
<td>P5</td>
<td>Marginalisation of communities in design processes</td>
<td>Centering of communities in design processes</td>
</tr>
<tr>
<td>P6</td>
<td>One-off participation activities</td>
<td>Governance model based on citizen participation</td>
</tr>
<tr>
<td>P7</td>
<td>Citizens participation as afterthought</td>
<td>Citizens participation interwoven into process</td>
</tr>
<tr>
<td>P8</td>
<td>Telling people what to do and diminishing sense of agency</td>
<td>Building trust and agency over time</td>
</tr>
<tr>
<td>P9</td>
<td>Doing; we deliver this, then we move on to the next challenge</td>
<td>Being; we are part of this, and it’s an evolving process</td>
</tr>
<tr>
<td>P10</td>
<td>Individualism</td>
<td>Collectivism</td>
</tr>
</tbody>
</table>

Table 1. Conditions for the Participatory culture segment, from less to more participatory.
RESOURCING

Climate action requires mobilisation of a lot of money, trillions in fact. COP26 in 2021 highlighted that the goal of USD 100 billion for developed economies to mobilise for developing economies set at COP15 is vastly inadequate. It is going to take a lot of money – upfront investments made over long periods of time beyond election cycles, for example in renewable energy, more coordination of international resources, and a focus on integrity and credibility of implementations (Tonkonogy 2021).

Resourcing for climate democracy involves portfolio divestment that moves investment away from fossil fuels (Land Trust Alliance n.d.), including away from expert-led technical ‘solutions’ such as carbon capture technologies. It also means accounting for stranded assets, which are fossil fuels that need to be left in the ground in order to meet climate targets, acknowledging that if they were extracted they could make oil and gas companies more profitable (Matikainen 2018). These actions send strong signals about alternative forms of infrastructure investment to disrupt carbon lock-in, that other actors, cities, and regions look to.

But Resourcing for climate democracy is about more than how money gets spent or where it comes from. Funding scarcity is also an issue when trying to work through hard challenges and make tough decisions. Related to this is funding and financing social and economic transition in a just way and not leaving anyone worse off, especially those on lower incomes (LSE, n.d.).

Funding scarcity is also an issue when trying to work through hard challenges and make tough decisions.

Resourcing for climate democracy shifts the power balance by entrusting public resource spending decisions to communities through mechanisms such as participatory budgeting (Cook, Amann, and Bastiaensen 2021), and is structured to support emergent possibilities that disrupt the status quo, rather than forcing ‘solution delivery’ based on predetermined funder or financier requirements.

The Resourcing segment is also about supporting training programmes for civil servants and diverse administration actors to build skills, agency and capacity for climate democracy, beyond election cycles. Such training cannot be only for climate or participation specialists. Capacity building on climate must touch every part of organisations and administrations, breaking down organisational silos, because by definition climate action is cross-sectoral and; for example, capacity and knowledge building on financing the energy transition means learning about buildings and the built environment too.

Note: as authors of the Climate Democracy Model, Demsoc recognise that we are less embedded in funding and financing, and that other conditions for resourcing climate action in ways that strengthen democracy are likely to exist beyond those stated here. We recommend reaching out to our civil society partners Bankers Without Boundaries for expertise on these topics.

Table 2 sets out the conditions for the Resourcing segment, from less to more beneficial, derived from Demsoc’s work in climate, and current thinking in the participation, democracy and systems thinking fields. The left hand column is the least desirable conditions for climate democracy. In the right hand column are the most desirable.
<table>
<thead>
<tr>
<th>#</th>
<th>Less beneficial</th>
<th>More beneficial</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Funding projects and outputs for the short-term, with ambiguous goals</td>
<td>Funding options, with clear, concrete goals; emergent possibilities to be explored</td>
</tr>
<tr>
<td>R2</td>
<td>Allocating public resources for predetermined agendas</td>
<td>Redirecting public resources to community collectives</td>
</tr>
<tr>
<td>R3</td>
<td>Short-term thinking; short timelines; funding bound by election cycles; not designed for durability</td>
<td>Long timelines; long-termism; funding beyond election cycles; designed for durability</td>
</tr>
<tr>
<td>R4</td>
<td>Funding fossil fuels and false solutions (e.g. carbon capture technology, hydrogen); limited resources towards real solutions</td>
<td>Defunding fossil fuels and false solutions; abundant resources towards real solutions</td>
</tr>
<tr>
<td>R5</td>
<td>Focused on the here and now; deliver and move on; delivery emphasis</td>
<td>Focused on the future; laying groundwork for what comes next; collaborative emphasis</td>
</tr>
<tr>
<td>R6</td>
<td>Designed and funded as a standalone, single-point solution for scaling e.g. electric vehicles</td>
<td>Designed and funded as a portfolio of approaches encouraging ‘spread’, with room to grow and change</td>
</tr>
<tr>
<td>R7</td>
<td>Funding allocated by sector, specific to one thing e.g. transport</td>
<td>Funding allocated to cross-sectoral projects, breaking down silos e.g. between transport, energy, built environment</td>
</tr>
<tr>
<td>R8</td>
<td>Siloed funding approaches e.g. drawing solely on existing city budgets</td>
<td>Innovative investment approaches combining different funding streams</td>
</tr>
<tr>
<td>R9</td>
<td>Resources not being directed to capacity and capability for change work</td>
<td>Resources being directed to capacity and capability for change work</td>
</tr>
</tbody>
</table>

Table 2. Conditions for the Resourcing segment, from less to more beneficial.

Policy design cycle
Competencies for climate democracy are often thought of in technical terms and framed around expertise in climate resilience, low carbon development or environmental stewardship, for example people working in ‘Environment Adviser’ or ‘Climate Change Adviser’ roles skilled in natural resource management or urban and rural environment (FCDO 2020; DFID 2011). While these are important for a holistic approach to the climate challenge, and for public policymaking expertise and/or experience, climate democracy calls for a broader view, recognising the different expertise and competencies that diverse actors bring, for example leaders of community-level initiatives focused on reduced car usage or sustainable energy production. For example, Demsoc has witnessed the transformative power of government officials hearing first-hand from community leaders at the forefront of local change initiatives. This forges possibilities for greater respect and ‘unlikely solidarities’ between government and community actors (EIT Climate-KIC and Democratic Society 2021; Stearns et al. 2022).

Competencies for climate democracy are also needed for movement building in ways that address grievances between diverse actors and find shared visions for the future. This calls for skills in curation and facilitation and active listening to connect diverse actors and knowledge and “...nudge a disparate group towards a common purpose...” (Mulgan 2019), supported by ‘scaffolding’ of participatory culture and backed by appropriate resourcing.

Climate democracy calls for a broader view, recognising the expertise and competencies that diverse actors bring.

A careful balance of humility and commitment, charisma and quietness is called for (Annala et al. 2021; Mulgan 2019), using approaches that remove obstacles to moving forward in a form of ‘transformative facilitation’ for breakthrough transformative change (Kahane 2021). Examples of a transformative facilitation approach are advocating and enquiring upon the ideas of others to generate solution possibilities collectively, rather than critiquing and ‘solutionising’ ideas in ways that stifle debate and creativity, leading to uninspired outcomes that people don’t feel they had a legitimate say in. This style of transformative facilitation sets up cultural and psychological space for engagement, and can be found among the ranks of community leaders and activists, social innovation practitioners, and increasingly climate and democracy practitioners in this emerging field of climate democracy.

The Competencies for climate democracy segment is also about social intelligence and lived experience of place and community – speaking the language, and knowing the culture and geography intimately. Our work in climate has confirmed one of the most powerful catalysts for change are the local and cultural knowledge and influence networks people build around them (Stearns et al. 2022), not simply the roles people hold in city administrations or citizen-led initiatives.
Table 3 sets out the conditions for the Competencies for climate democracy segment, from less to more beneficial, derived from Demsoc’s work in climate, and current thinking in the participation, democracy and systems thinking fields. The left hand column is the least desirable conditions for climate democracy. In the right hand column are the most desirable.

<table>
<thead>
<tr>
<th>#</th>
<th>Less competency</th>
<th>More competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Lack of understanding of needs and broader vision for climate action; limited to political election cycles</td>
<td>Sound understanding of needs and broader vision for climate action beyond political election cycles</td>
</tr>
<tr>
<td>C2</td>
<td>Limited implementation of or experience with sound climate policies</td>
<td>Longstanding tradition of sound climate policies</td>
</tr>
<tr>
<td>C3</td>
<td>Convergent and ‘closed’ thinking and decision making; lack of cross pollination and dialogue across multiple actors and disciplines</td>
<td>Divergent and open thinking and decision making; cross pollination, dialogue across multiple actors and disciplines</td>
</tr>
<tr>
<td>C4</td>
<td>Perceiving boundaries and complexity as problematic</td>
<td>Crossing boundaries to make sense of complexity</td>
</tr>
<tr>
<td>C5</td>
<td>Disconnected from complementary projects, workstreams</td>
<td>Connected with complementary projects, workstreams</td>
</tr>
<tr>
<td>C6</td>
<td>Climate action as a technocratic, transactional challenge</td>
<td>Climate action as a democratic, relational challenge</td>
</tr>
<tr>
<td>C7</td>
<td>Niche, often technical expertise e.g. Environment Advisor</td>
<td>Mix of expertise, climate and non-climate (e.g. finance)</td>
</tr>
<tr>
<td>C8</td>
<td>Sticking to a predetermined, linear plan with no room for change</td>
<td>Being able to work in ambiguity and complexity in fluid, changing scenarios</td>
</tr>
<tr>
<td>C9</td>
<td>Seeing change as a point at the end of a process</td>
<td>Seeing change as emergent from an accountable, accessible, and collaborative process</td>
</tr>
<tr>
<td>C10</td>
<td>Problems to be solved</td>
<td>Possibilities to be explored</td>
</tr>
<tr>
<td>C11</td>
<td>Designers as experts</td>
<td>Designers as facilitators</td>
</tr>
</tbody>
</table>

Table 3. Conditions for the Competencies for climate democracy segment, from less to more competency.
Across climate programmes there is a tendency towards actors of the same type and background participating in workshops and plenaries, making design decisions, and shaping and implementing solutions, namely civil servants, ‘frontrunner’ citizens with education and privilege, civil society, and private sector. Homogeneity of voices and knowledge risks concentration of power, biased views, and repeated modes of thinking and doing that inadvertently fuel the climate crisis. A climate democracy approach seeks unusual coalitions of actors who can collectively help ‘create the table’ for change.

In this sense, the *Diversity of actors and knowledge* segment is about diversity of actor types increasing collective agency for change, and recognising different roles and responsibilities for bringing about more equitable transitions to just, climate resilient futures. It is about inviting collaboration and celebration of different perspectives and standpoints to ultimately “…speak for change in the same direction” (Weidinger 2020).

Many people in power, from presidents to CEOs, see, think, and learn about the world in a way that fuels the climate crisis. In this dominant way of knowing the world, humans are separate from and can dominate over, manipulate, and extract from the natural world (Castree, 2014). Historians, from Dipesh Chakrabarty (2020) to Christophe Bonneuil and Jean-Baptiste Fressoz (2016), tell the history of the climate crisis with roots in dominant knowledge systems with removed understandings of the world, nature and society, and explain how climatic collapse necessitates a collapse in this way of thinking.

Concentration of power among narrow groups of actors is one of the biggest barriers to climate democracy for traditional representative democracies.

Feminist thinkers, such as Donna Haraway (1988), critique ‘god trick’ framing by where humans look down on and conquer the world. The dominant belief that man can control and dominate nature has led to habitat destruction through oil and resource extraction, and expert-led technical ‘solutions’ such as carbon capture technologies, which offer us no long-term climate resilience. Moreover, these ‘solutions’ have little connection to the needs of communities and neighbourhoods, diminishing collective agency for climate resilience.

The *Diversity of actors and knowledge* segment is about sharing power and knowledge between diverse actors to challenge the status quo, because concentration of power among narrow groups of actors is one of the biggest barriers to climate democracy right now for traditional representative democracies and city administrations (EIT Climate-KIC and Democratic Society 2021b). Challenging the status quo with expanded civic participation takes time and effort, but it’s necessary to get to the root of the problem and address deeper structural barriers holding back climate resilience and a stronger democracy. This also means embracing rather than avoiding conflict, as a necessary part of participation for change.
In the *Diversity of actors and knowledge* segment, socio-economic factors are key considerations. Marginalised and under-represented communities have been the most affected by climate change to date, including the effects of flooding, heat or poor air quality. Moreover, they are also at risk of suffering from additional social and economic impacts of any measure taken to address climate resilience in regions. One of the contributing factors to this situation is that marginalised communities are largely absent from city-level conversations on what needs to change and why.

In response to the above, this segment – and the Model – takes a design justice approach (Costanza-Chock 2020) which counters the tendency for projects and work programmes to prioritise the voices of people of the same ethnicity and educational background, often “...uncritically involving elite actors... depoliticising social issues and not incorporating dissent or conflict” (de Geus, Wittmayer, and Vogelzang 2022, 202).

To this end, the *Diversity of actors and knowledge* segment looks to feminist and Indigenous ways of knowing and understanding the climate crisis, acknowledging deeply connected stories and narratives, and more holistic, sustainable views of our connection to the Earth. Indigenous peoples have shown another way of relating to the world is possible, one in which “...the Earth as alive and imbued with spirit” (McGregor, Whitaker, and Sritharan 2020). “In this view,” McGregor et al. tell us, “...a reciprocal set of duties and responsibilities between humans and the rest of the natural world exists such that... relations between human and non-human entities are maintained in a healthy balance.” (2020).

Table 4 sets out the conditions for the *Diversity of actors and knowledge* segment derived from Demsoc’s work in climate, and current thinking in the participation, democracy and systems thinking fields. The left-hand column is the least desirable conditions for climate democracy. In the right-hand column are the most desirable.

<table>
<thead>
<tr>
<th>#</th>
<th>Less diverse, less inclusive</th>
<th>More diverse, more inclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Homogeneous voices and knowledge systems; decision-making powers limited to specific individuals and groups</td>
<td>Coalitions of diverse voices and knowledge systems; diverse set of individuals are empowered to make decisions</td>
</tr>
<tr>
<td>D2</td>
<td>Homogeneous actors with technical, consultative focus</td>
<td>Mix of technical, participatory, community actors</td>
</tr>
<tr>
<td>D3</td>
<td>Narrowed view of culture</td>
<td>Working across cultural contexts</td>
</tr>
<tr>
<td>D4</td>
<td>Oppressions thought of / addressed in separate ways</td>
<td>Oppressions thought of / fought in intersectional ways</td>
</tr>
<tr>
<td>D5</td>
<td>Adheres to one dominant way of knowing the world</td>
<td>Prioritises Indigenous, feminist, partial ways of knowing the world</td>
</tr>
<tr>
<td>D6</td>
<td>Only focuses on the human part of the problem</td>
<td>Includes non-human actors, “the natural world”</td>
</tr>
</tbody>
</table>

*Table 4. Conditions for the Diversity of actors and knowledge segment, from less to more diverse and inclusive.*
3. DETAIL-ORIENTED ASSESSMENT

The Climate Democracy Model offers two tools for assessment of climate resilience at a more granular level, examining structural factors of society, culture, economy, politics and institutions, and technology from a democratic perspective. These are the Actor Types & Interactions and Competencies for Climate Democracy.

Two of the tools used at this level also feed into the Canopy for Climate Democracy tool to help produce the ‘big picture’ view.

ACTOR TYPES & INTERACTIONS

Leading systems change requires collaboration across diverse actors. How much and how actors come together has a strong bearing on the degree of democratic climate action towards climate resilience. Types of actors include artists, activists, civil society, companies, funders, governments, grassroots groups, journalists, politicians, public servants, and researchers.

More diversity of actor types increases collective agency for change, and more just, equitable transitions to just, resilient climate futures.

The Actor Types & Interactions tool helps us:

- Explain the types of actors involved in democratic climate action, what roles they play, and how their roles must evolve to bring about climate resilient futures;
- Show patterns of engagement of the same kinds of actors, and get cities thinking about who else could be at the table, hoping to inspire new collaborations for change;
- Calculate the degree of and changes to the Canopy for Climate Democracy: Diversity of actors and knowledge segment over time.

Access the tool: demsoc.org/resources/actor-types-and-interactions
COMPETENCIES

Taking action for climate resilience requires a spectrum of individual and group skills and capabilities.

We have compiled a list of eight competencies for climate democracy which highlights how democratic, participatory practices can lead cities and regions to take climate action in ways that reinforce democracy. These competencies are drawn from learnings across Demsoc's climate work, and feedback from city partners and peers.

The Competencies tool helps us:

- Provide reflection on competencies present in work programmes for climate action;
- Help build job and team profiles and recruitment strategies for climate work, for example in bid application and project preparation stages;
- Identifying gaps and opportunities for competency building within teams, building cases for training and mentoring budget;
- Calculate the degree of and changes to the Canopy for Climate Democracy: Competencies for climate democracy segment over time.

Access the tool: demsoc.org/resources/competencies-for-climate-democracy
4. FULL SPECTRUM ASSESSMENT

The Climate Democracy Model features a Landscape Analysis tool for assessment of climate resilience across a spectrum of perspectives.

LANDSCAPE ANALYSIS

Addressing structural barriers to change means being able to identify what’s preventing transition to low-carbon alternatives while simultaneously weakening democracy. This tool uses lenses of democratisation, decarbonisation, and community and climate resilience to identify and map structural barriers within a qualitative framework.

The tool is useful for use and iteration throughout different stages of projects.

The Landscape Analysis tool is open for use by anyone, but in general we recommend use by practitioners with a background in democracy, resilience, and thinking in systems. Contact nadja@demsoc.eu for more information about this tool, or for assistance with using it.

The Landscape Analysis tool helps us:

- Expand thinking about a project or issue
- Helping teams progressively identify areas for change and build compelling stories about the impacts of making these changes.
- Determine where teams could or should be focusing their efforts, providing a way of continuously realigning priorities.

Access the tool: demsoc.org/resources/landscape-analysis

City's climate engagement journey

Neutral Cities 2030
5. ACKNOWLEDGEMENTS & CONTACT

With thanks to our partners and peers for contributing to ongoing Model development.

PRODUCTION CREDITS

Authors: Kate Goodwin, Nadja Nickel, Alexa Waud

Contributing Authors and Reviewers: Daniela Amann, Hanne Bastiaensen, Marian Cramers, Paul Goguel Masson, Lucy J. Parry, Paola Pierri, Max Stearns, Anthony Zacharzewski, and the Demsoc Climate team.

Designer: Kate Goodwin

Illustrations: Orlagh O’Brien, Nour Sadat

HOW TO CITE


LICENSING

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 2.0 Generic License.

Thank you to peers and partners who have shared the Model to date, including:

- OECD OPSI's Innovation Portfolio;
- Simon Fraser University’s Systems-oriented engagement for climate action report;
- UKGBC's innovation challenge on resilience and nature-based solutions.

CONTACT US

Approach us if you would like to discuss the Model in your context, or get help with applying it in practice.

For more information contact Nadja Nickel, Climate Programme Director nadja@demsoc.eu
6. REFERENCES


APPENDIX: WAYS TO USE THE MODEL TOOLS

The best way to get to know the Model tools is seeing how they can be applied within different scenarios. The tools are useful for more than project or programme delivery. They are designed for flexible use serving different contexts and needs, such as public servants using them within a policy design cycle (Scenario 1), or project teams using it across a city's climate engagement journey over months and years (Scenario 2), as illustrated on the next pages. We freely encourage use wherever and whenever they’re helpful.

Repeated use is actively encouraged, to reveal how mindsets and actions are shifting over time, what has led to these shifts, and most importantly what inroads towards climate resilience have been achieved.

Scenario 1: public servants using in a policy design cycle

A five-person team of public servants and policy officers are designing policy focused on the transition towards climate neutrality. The team reports to the Minister for Climate and Sustainability.

The team’s current focus is a new policy on democratised energy production in response to public desire and media attention on localising energy production, reducing energy costs, and breaking reliance on international energy supply. The team is in the Issues exploration phase of the policy design cycle, identifying issues, analysing existing policy, and gathering information.

ISSUES EXPLORATION

The team uses the Canopy for Climate Democracy tool in a workshop to assess the big picture of their city's climate resilience in the energy context, deep diving into diversity of actors and knowledge, participatory culture, resourcing, and competencies. The tool reveals there is a lack of actor diversity in local energy initiatives, but healthy signs of participatory culture within local government where citizens are being more included in city administration negotiations on localised energy production and ownership. Conversations are sparked about gaps and possibilities for addressing diversity and inclusion, and how to strengthen participation as part of the policy.

The team then uses the Actor Types & Interactions tool to dive deeper into the ecosystem of different actor types involved in the city's energy production. It reveals that it's primarily civil servants, civil society, and a couple of citizen-led initiatives operating on the periphery who haven't had much direct participation in the process. The team considers which other actor types could or should play a role, and add them to policy design thinking.

Finally the team uses the Landscape Analysis tool to assess the current energy landscape of their city and identify what structural barriers are reinforcing carbon-lock in. The tool gets them thinking about economic, social, cultural, political, institutional and technological factors linked to democratisation, decarbonisation, and community and climate resilience in the energy context.
Having worked through these tools, the team finds themselves talking about the policy design differently and thinking in new directions. Information is combined with other team research and used to prepare a report of baseline findings for the Minister, which gets tabled in Parliament.

OTHER POLICY DESIGN PHASES FOR MODEL USE

FORMULATION
The team moves on to the next phase of the cycle to formulate the policy. The Actor Types & Interactions tool helps them think about who to consult with on policy specifics outside of the ‘usual actors’. The Canopy for Climate Democracy and Landscape Analysis assessments are revisited and updated based on feedback from consultancy with diverse actors, and recommendations are prioritised in preparation for policy decision making.

ADOPTION
The team moves on to the next phase of the cycle to implement the policy. The Landscape Analysis tool helps with language and framing of the policy’s intentions, and the Actor Types & Interactions tool helps with positioning the Minister’s messaging around the policy’s release.

EVALUATION E.G. POLICY REVIEW
The team revisits the Canopy for Climate Democracy and Landscape Analysis tools six months later to reflect on what’s changed since the policy was implemented, identifying ‘emerging shifts’ and ‘future possibilities’ for the city’s climate resilience in the energy context.

The team leader uses the Competencies tool to think about the shape of the policy design team moving forward, considering competencies and skills for climate democracy work.
Scenario 2: across a city's climate engagement journey

Votham City wants to be climate neutral by 2035.

In 2020 Votham set an ambitious goal to reach climate neutrality as a city by 2035. The City acknowledges that exiting gas and oil will be a key component to be able to reach the goal and bring about a sustainable energy transition.

In 2021 the City established an energy task force, made up of the City's energy and social welfare department, and private sector companies that are implementing the retrofit ambitions and are owning the majority of the housing stock within the city. The task force has attended steering committee meetings and held two participatory workshops with citizens, leading to development and implementation of a fossil free energy strategy for Votham. However, the City is still not seeing the progress needed to reach its goal. Not enough housing owners and renters are opting into retrofitting their units to achieve the progress needed. 40% of the City's housing stock is retrofitted, with 420,000 units still needing conversion.

In 2022 Votham was one of 100 cities successful in applying to join “NeutralCities2030”, a four-year EU-funded mission on climate-neutral and smart cities by 2030. The core of the ‘mission’ is to deliver impact by putting research and innovation into a new role, combined with new forms of governance and collaboration, as well as by engaging citizens. The programme brings together 100 leading city networks, research organisations, and urban stakeholders from 13 countries. Through the programme, Votham learns about the Climate Democracy Model, and how it can be used to support its journey to climate neutrality. It is agreed that the original energy task force will lead use of the tools initially, and share their learnings with others as they go.

VOTHAM CITY’S CLIMATE ENGAGEMENT JOURNEY

The City's climate engagement journey takes them through four stages: **Onboarding the mission, Ramping up capacity, Implementation, and Iterating.**

Read on for how the City uses the Model throughout their journey.
ONBOARDING TO THE MISSION

In the first months of the programme, Votham are focused on establishing their ‘contract’ with the programme group. This involves making commitments, action and investment planning, and determining new forms of governance that will help them progress, including how oversight, accountability and iteration will work.

The task force starts with the Competencies and Actor Types & Interactions tools to think about which actors and competencies they have on their team, and who or what else is needed, including budget, resources and training to help them get off to the best start for taking climate action in a way that strengthens democracy. The tools help them early on to commit to roles and responsibilities, and identify who else they will need to work with in other departments, and in the community and city more broadly to ensure a diverse and inclusive approach. This feeds into a recruitment and participation strategy that they’ll continue to build on over time.

They then use the Canopy for Climate Democracy over a two-day workshop to assess how the Votham City are tracking on climate resilience, focused on energy and retrofit. The activity reveals how little diversity there has been in citizen engagement on the fossil free energy strategy to date, and that money and resources are being inefficiently distributed, prioritising certain groups of citizens over others, and technically-focused solutions. This leads to strong debate between taskforce members and triggers a rethink of what’s really blocking their carbon neutrality progress. The taskforce moves to reframe their programme efforts and resources as a result.

RAMPING UP CAPACITY

Feeling more familiar with the idea of ‘climate democracy’ now having used a few Model tools, they run another workshop using the Landscape Analysis tool to go deeper on what’s preventing the City’s transition to low-carbon alternatives. The tool is very helpful for subjective assessment and discussion of what structural barriers of politics and institutions, culture, society, economics and technology are holding them back from democratisation, decarbonisation, and community and climate resilience. It gets them thinking about a challenge in a larger way and identifying which areas are in most dire need of attention, helping them focus their efforts and align their priorities.

At this point, the team are curious about where other cities ‘stand’ on climate democracy, and run a workshop with five other NeutralCities2030 cities to compare and contrast their Landscape Analysis results. Strong commonalities are observed on issues of politics and institutionalisation and economic conditions as barriers to carbon neutrality, and this helps feed into broad programme learnings for the entire cohort to learn from. Plus, this also satisfies the funder’s requirements for sharing ongoing, strategic learning. The funder shares the learnings publicly, also benefiting cities and regions outside of Europe, and other funders looking to learn how they can better support wide-scale climate action programmes.
Now four months into the programme, the team uses the **Actor Types & Interactions** and **Competencies** tools to determine participation and recruitment strategies for doing work in the field, including who is going to facilitate it and what kinds of qualities they need suited to ‘climate democracy’. The **Actor Types & Interactions** tool gets the team thinking about engaging different types of actors from those they’re used to (public servants and private sector companies). They think more broadly about academics, artists, grassroots groups, and trade unions. They develop an engagement strategy that feels significantly more diverse and inclusive than anything they’ve attempted in the past, and identify community connectors who can help them gain access to marginalised groups.

As engagement activities are continually developed, implemented and reviewed, the team refers back to the **Canopy for Climate Democracy** and **Landscape Analysis** as reminders of where their gaps and opportunities for climate resilience are, and use these as ‘arguments’ in ongoing debates with peers, the public and private sectors, and other stakeholders as to why they’re prioritising certain methods and approaches, which might feel different to what has been attempted in the past.

As the months and years pass, the team periodically run workshops with the same tools to update their assessments and reflect on what’s changed across the programme and why, identifying ‘emerging shifts’ towards climate resilience. They use this information to feed into progress reports to departmental and programme management.

As the four year programme draws to a close, the team again uses the **Canopy for Climate Democracy** and **Landscape Analysis** to reflect on what happened across the programme lifespan, drilling on what shifted within the whole mission and intervention, towards climate resilience. This also helps them identify ‘future possibilities’ towards climate resilience the City should continue pursuing beyond the programme, feeding into continuation strategies.