M.S in Sustainability Management Capstone

Integrating Youth Climate Demands into City Climate Action Planning

Report for C40 Cities Climate Leadership Group

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Executive Summary

The youth climate movement has quickly gained momentum in recent years, with millions of students organizing, striking, and protesting for change. Today's youth challenge what they perceive as governments' failure to deliver meaningful climate action and are reinvigorating the social movement for climate action on a scale never seen before. The C40 Cities Climate Leadership Group (C40) has recognized the youth movement as a new key force shaping the climate agenda and is seeking more information to help its constituents harness this energy and long-term commitment toward improving climate work in cities.

This report explores how key messages and priority topics from the youth climate movement can be embedded into C40's city climate action planning around the world, and identifies opportunities for C40 cities to more deeply engage with their young constituents. Through research into 28 youth climate groups and interviews with 15 youth climate activists, as well as a review of 21 complete and incomplete Climate Action Plans (CAPs), the research team sought to answer the following key research questions:

1. Who makes up the youth climate movement and what do these youth activists care about?
2. How do youth climate activist demands compare to the city actions detailed in CAPs?; and
3. To what extent are youth demands incorporated into CAPs, and if not, could they be?

The researchers found that, at a high-level, cities and youth are focused on many of the same climate-related issues —climate/social justice, stakeholder engagement, fossil fuel reduction/elimination, and government policy—but that there are differences in how youth and cities discuss these topics. Additionally, the team identified several themes that appear in youth demands but do not appear in CAPs, as well as others—such as education—that are discussed by both youth and by cities but are more expansively discussed by youth. With these findings, as well as insight from interviews where youth discussed their openness to outreach and collaboration with local government, the team developed the following conclusions and recommendations:

- **Conclusion 1:** Youth want to see more inclusive stakeholder engagement in climate action planning
    - o **Recommendation 1a:** Consider updating the CAP Framework to require a stakeholder engagement strategy that explicitly calls for inclusion of youth in CAP stakeholder discussions
    - o **Recommendation 1b:** Set explicit targets on a more inclusive set of stakeholders
    - o **Recommendation 1c:** Encourage cities to connect climate issues to broader social justice initiatives and provide more specificity in the CAP Framework on inclusivity best practices
- **Conclusion 2:** Youth view education as a key tool for climate action, a topic that goes largely undiscussed by cities in CAPs
    - o **Recommendation 2a:** Understand how member cities engage with their education systems
    - o **Recommendation 2b:** Explore how C40 can provide educational resources to youth directly
- **Conclusion 3:** Planning documents by design, CAPs may not be good mechanisms to succinctly communicate youth's desire for visibility into past action and progress
    - o **Recommendation 3a:** Incorporate the C40 Declaration Program more fundamentally into each city's C40 profile
    - o **Recommendation 3b:** Explore leveraging other communications channels and forums for engagement with youth

Introduction

The Global Youth Climate Movement

"We, the youth, are the conscience and the moral voice calling on all of you to do the right thing and to do the right thing quickly and urgently."

- Alexandria Villaseñor, 14-year-old climate activist and founder of Earth Uprising[1]

After years of mounting urgency on climate issues, young people around the world have banded together to demand immediate action on climate change. Today's youth argue that it is they who will face the worst consequences yet to come from an increasingly inhospitable planet.[2] Out of fear for their uncertain futures, youth are mobilizing to make their voices heard and to challenge what they perceive as governments' failure to deliver meaningful climate action. The youth climate movement has quickly gained momentum in recent years, with millions of students organizing, striking, and protesting for change. The Fridays for Future youth climate strikes, first sparked by the 16-year-old Swedish climate activist Greta Thunberg in August 2018, are continuing to expand and draw massive crowds of young people.[3] In 2019, young people set historic records twice for climate-related protests: the first time was on March 15th, across 123 countries with an estimated 1.4 million participating; the second time was in September 2019, with an estimated 6 million people, from over 185 countries, participating in multiple strikes.[4] The events were global and a striking visual testament; the modern world has rarely, if ever, witnessed a youth movement so large and wide, spanning across a diversity of societies and nations and tied together by a common purpose.[5]

Youth activism is not new. From the Civil Rights movement to protests over the Vietnam War to the present day Black Lives Matter movement, youth have well documented success in challenging adult authority.[6] Since the late 1980s, youth have been involved in activism related to different environmental and sustainable development issues. This activism has included protests and sit-ins, as well as participation in international negotiations, such as the Rio Earth Summit in 1992.[7] For most of the 1990s, youth environmental activism centered on key issues such as conservation and pollution, but in the 2000s that began to shift to a broader concern over global warming and climate change.[8]

What is unique about youth climate activism today is that the common fear of losing their collective future has motivated youth to join the movement in unprecedented numbers.[9] The current generation of youth protestors focused on climate change is "louder and more coordinated than its predecessors" due to global connectivity and social media platforms.[10] The youth movement has benefited from the reach and community offered by the internet, allowing solidarity around a singular issue. Individual youths, such as Greta Thunberg, have become household names for their ability to speak with a moral clarity that captures the world's attention.[11] The messages of these

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[1] Twitter, @C40Cities, October 11, 2019, https://twitter.com/c40cities/status/1182713759846064128?s=20

[2] UNICEF, "Youth for Climate Action," accessed April 12, 2020, https://www.unicef.org/environment-and-climate-change/youth-action.

[3] Angely Mercado, "The Youth Climate Movement Is Just Getting Started," The Nation, June 13, 2019, https://www.thenation.com/article/archive/the-youth-climate-movement-is-just-getting-started-global-warming-fridays-for-future/.

[4] Eliza Barclay and Brian Resnick, "How Big Was the Global Climate Strike? 4 Million People, Activists Estimate.," Vox , September 22, 2019, https://www.vox.com/energy-and-environment/2019/9/20/20876143/climate-strike-2019-september-20-crowd-estimate; Eliza Barclay and Kainaz Amaria, "Climate Strike March 15: Photos from around the World," Vox, March 17, 2019, https://www.vox.com/energy-and-environment/2019/3/15/18267156/youth-climate-strike-march-15-photos.

[5] Somini Sengupta, "Protesting Climate Change, Young People Take to Streets in a Global Strike," The New York Times, accessed March 26, 2020, https://www.nytimes.com/2019/09/20/climate/global-climate-strike.html.

[6] Maggie Astor, "7 Times in History When Students Turned to Activism - The New York Times," 2018, https://www.nytimes.com/2018/03/05/us/student-protest-movements.html.

[7] Bob McDonald, "Youth '92 All over Again at the 2019 Youth Climate Summit ," CBC Radio , September 20, 2019, https://www.cbc.ca/radio/quirks/youth-92-all-over-again-at-the-2019-youth-climate-summit-1.5292013.

[8] Olivia B Waxman, "Before the March 15 Youth Climate Strike, There Were Ecokids," Time, March 15, 2019, https://time.com/5549331/youth-climate-strike-ecokids/.

[9] Karen O'brien, Elin Selboe, and Bronwyn M. Hayward, "Exploring Youth Activism on Climate Change: Dutiful, Disruptive, and Dangerous Dissent," *Ecology and Society* 23, no. 3 (October 1, 2018), https://doi.org/10.5751/ES-10287-230342.

[10] Emma Marris, "Why Young Climate Activists Have Captured the World's Attention," Nature (NLM (Medline), September 1, 2019), https://doi.org/10.1038/d41586-019-02696-0.

[11] Charlotte Alter, Suyin Haynes, and Justin Worland, "Greta Thunberg: TIME's Person of the Year 2019," Time Magazine , 2019, https://time.com/person-of-the-year-2019-greta-thunberg/.

young leaders are informed by science and delivered with grit, emotion, and appeals to unite a global movement.[12] The youth have been successful in rising as recognizable leaders in part because social media gives unprecedented visibility to climate issues, especially by framing them through personal lenses, often about social justice.[13] Social media platforms, such as Instagram and Twitter, have provided youth with a way to connect and speak to a global audience on climate issues, and allowed the current generation of youth climate activists to engage in widespread, coordinated actions.[14]

As a result, prominent youth activists span a range of nationalities, languages, ages, and specific demands. For example, a prominent youth activist is 14-year old Alexandria Villaseñor, the founder of Earth Uprising in New York City and one of the youngest organizers of the September 2019 global strike.[15] Another prominent activist is Xiuhtezcatl Martinez, youth director of Earth Guardians, an indigenous climate activist who has been a powerful voice in the climate justice movement since he was 6 years old.[16] Notably, social media has also helped spotlight youth in developing regions, providing them with a platform to talk about both global and local issues. For example, Leah Namugerwa, a 15-year-old member of Fridays

for Future in Uganda, is leading a youth petition demanding a plastic bag ban in Uganda.[17] Another example is 17-year-old indigenous activist Helena Gualinga, who is using social media to bring attention to the destruction of her community in Amazonian Ecuador due to deforestation.[18]

Additionally, today's activism is empowering more young people to turn their protests into political action, from pressuring lawmakers and businesses to taking action to energize voters.[19] For example, Sunrise Movement, founded in 2015, has successfully mobilized over 15,000 young people to show up for in-person actions such as sit-ins on Capitol Hill. [20] Their tactics have been incredibly effective at drawing media attention to the climate crisis and pressuring politicians to enact climate change plans. The group has been a critical partner in championing the Green New Deal, holding over 200 town hall meetings across 46 states in 2019.[21] Due to these and other actions, youth climate activists are grabbing the attention of mayors and other local leaders who want to find ways to better engage these new voices in local and regional climate action.[22] It has become increasingly clear that the youth cannot, and should not, be ignored.

Integrating Youth Voices into City Climate Action Planning

Given the importance of youth voices and demands, several city governments have approached C40 for guidance on how to engage with youth groups and include their voices in city planning around climate change. The C40 Cities Climate Leadership Group (C40) is uniquely positioned to guide cities to best assess and engage with youth climate demands in city planning. C40 is a network of the world's megacities committed to addressing climate change.[23] It was founded in 2005 to advance climate action agendas of the world's cities and to achieve meaningful reductions of greenhouse gas emissions and climate risk. C40 equips and empowers city governments to lead the fight against climate change while building the case for the global importance of climate action in expanding city economies, creating jobs, and improving cities as places to live and work.[24] Cities often face similar challenges across the world and C40 offers an active

[12] Emma Marris, "Why Young Climate Activists Have Captured the World's Attention," *Nature* (NLM (Medline), September 1, 2019), https://doi.org/10.1038/d41586-019-02696-0.

[13] Sophie Sleeman, "Climate Justice Is Breaking down the Walls That Divide the World | Sophie Sleeman | Opinion | The Guardian," The Guardian , March 15, 2019, https://www.theguardian.com/commentisfree/2019/mar/15/climate-justice-young-people-social-media.

[14] Mercado, "The Youth Climate Movement Is Just Getting Started."

[15] Carolyn Kormann, "New York's Original Teen-Age Climate Striker Welcomes a Global Movement ," The New Yorker , September 21, 2019, https://www.newyorker.com/news/dispatch/new-yorks-original-teen-age-climate-striker-alexandria-villasenor-greta-thunberg.

[16] Earth Guardians, "Earth Guardians Youth Director Xiuhtezcatl Martinez," Earth Guardians , 2020, https://www.earthguardians.org/xiuhtezcatl.

[17] Haider Sarwar, "Meet Leah Namugerwa: The 15-Year-Old Leading Climate Activism In Uganda," The Rising , January 2, 2020, https://therising.co/2020/01/02/leah-namugerwa-climate-activism/.

[18] Tonya Mosley, "Fighting Climate Change Is 'About My Home' For Indigenous Teen Activist Helena Gualinga ," Wbur Here & Now, December 13, 2019,

https://www.wbur.org/hereandnow/2019/12/13/helena-gualinga-climate-change-activist.

[19] Kristoffer Tigue, "'We Must Grow This Movement': Youth Climate Activists Ramp Up the Pressure," Inside Climate News, October 11, 2019, https://insideclimatenews.org/news/10112019/climate-change-school-strike-protests-extinction-rebellion-future-greta-thunberg.

[20] Sunrise Movement, "About," accessed March 21, 2020, https://www.sunrisemovement.org/about.

[21] Sunrise Movement, "Green New Deal Tour ," 2020, https://www.sunrisemovement.org/tour.

[22] Ella Nilsen, "The New Face of Climate Activism Is Young, Angry — and Effective," Vox , September 17, 2019, https://www.vox.com/the-highlight/2019/9/10/20847401/sunrise-movement-climate-change-activist-millennials-global-warming.

[23] C40 Cities Climate Leadership Group, "About C40 ," https://www.c40.org/about.

[24] Integrative Capstone Workshop in Sustainability Management, Master of Science in Sustainability Management, Spring 2020 Semester Handbook. "Project Description: Youth in City Climate Action Planning," p35.

forum where they can collaborate, share knowledge, and drive meaningful and measurable action on climate change. The C40 network consists of nearly 100 of the world's largest and most innovative cities, representing over 700 million citizens and 25% of global GDP.[25]

C40 is currently supporting its member cities in reviewing, updating, and adopting integrated and inclusive Climate Action Plans (CAPs) to deliver low-carbon and climate resilient development, consistent with the 1.5˚C and adaptation objectives of the Paris Agreement. C40 defines a CAP as "a strategic document (or series of plans and documents) that demonstrates how a city will deliver on its commitment to address climate change."[26] Each CAP is generated by a member city to develop a pathway to deliver an emissions neutral city by 2050 at the latest. The plan outlines the city's governance powers and demonstrates the city's mitigation, adaptation, and resilience plan. It also elaborates on the wider socio-economic and environmental benefits of such a plan in an equitable and equal manner to all citizens.

C40 supports city CAP development through a Climate Action Planning Framework (CAP Framework) and a technical assistance program. Through these initiatives, cities are provided access to a range of resources, guidance, tools, and peer-to-peer knowledge sharing meant to support them in implementing the Paris Agreement and delivering on the benefits of climate action to communities.[27] Key components of climate action planning, as laid out in the CAP Framework, include discussions around emissions neutrality, resilience to climate hazards, inclusivity and benefits, and governance and collaboration. Although there is no specified format for a CAP, each of the above components must be included in a city's climate action planning documentation.[28] Through its Deadline 2020 Program, C40 has created a roadmap to help its member cities meet these climate ambitions by the year 2020.[29] So far, 12 cities have completed CAPs, with 60 others targeting completion by 2021.

Project Overview

C40 has recognized the youth movement as a new key force guiding the climate agenda forward and is seeking more information to help its constituents harness this energy and long-term commitment toward improving climate work in cities. *The goal of this project is to explore how key messages and priority topics from the youth climate movement can be embedded into C40's city climate action planning around the world.* To achieve this, the team conducted research and identified key messages and actions proposed by a range of groups in the youth movement and assessed to what extent these messages are currently addressed, or could be addressed, through city Climate Actions Plans.

The key research questions addressed in this report are:

1. Who makes up the youth climate movement and what do these youth activists care about?
2. How do youth climate activist demands compare to the city actions detailed in CAPs?; and
3. To what extent are youth demands incorporated into CAPs, and if not, could they be?

While addressing these questions, the team also sought to understand:

- The current state of engagement between youth and government, particularly city government;
- How youth demands address mitigation and adaptation actions;
- Whether youth demands should be addressed universally or are better suited to be addressed at local and/or regional levels; and
- How C40 and its member cities could use new communication approaches to ensure widest possible reception of and support for city-centered climate action.

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[25] C40 Cities Climate Leadership Group, "About C40," https://www.c40.org/about.
[26] C40 Cities, "Climate Action Planning Framework," p4.
[27] C40 Cities Climate Leadership Group.
[28] C40 Cities Climate Leadership Group, "C40 Climate Action Planning Resource Centre," 2020, https://resourcecentre.c40.org/climate-action-planning-framework-home.
[29] C40/ ARUP, "Deadline 2020: How Cities Will Get the Job Done," 2016, 59, https://www.c40.org/researches/deadline-2020.

Report Outline

This report is divided into three main sections: (1) Research Approach, (2) Findings, and (3) Conclusions and Recommendations. The Research Approach section presents methodology for both data collection and analysis. It discusses the methods used for selecting the sample of youth groups and youth interviewees, as well as the methods for selection and review of CAPs. It then provides a review of the mapping and analytic exercises performed to identify commonalities and gaps between youth demands and city actions.

Next, the Findings section outlines the key findings from this research and analysis in four distinct categories: (1) Youth Climate Landscape, (2) Comparing Youth Demands to CAPs, (3) Incorporating Youth Demands within CAPs: Opportunities and Challenges, and (4) Communication Approaches.

Lastly, the Conclusions and Recommendations section provides a set of recommendations for C40 on how to best incorporate youth movement demands in city climate action planning.

Research Approach

Research for this project was conducted in two phases. The first phase consisted of background research and data collection for both the youth climate movement and for C40 member cities. For the youth movement, data collection activities included research on youth climate groups and interviews with youth climate activists to identify their key messages and requests to cities. These requests will be broadly categorized throughout this report as "youth demands." For C40 member cities, data collection included a review of Climate Action Plans (CAPs) to identify key city actions and initiatives contained within these documents, broadly categorized as "city actions" within this report.

The second phase of research consisted of mapping and analytic activities to identify commonalities and gaps between youth demands and city actions. Thematic and linguistic analyses were conducted, as well as additional analysis tied to mitigation and adaptation characterization. The below section will further describe the research approach and methodology used within each distinct research phase.

Background Research and Data Collection

The next sections further describe the first phase of research, in which primary and secondary data was collected to better understand key messages and themes as stated by youth climate groups and in CAPs.

A. Youth Climate Movement Demands

After a preliminary literature review to understand the landscape of youth climate activism, a standardized definition of a youth climate group was developed to focus the research and facilitate synthesis. For purposes of this research, youth climate groups are defined as:

> *Youth-led groups—with youth leadership at a central and/or or chapter level—with a set of formalized demands or guiding principles, including at least one that is climate or environment focused. These groups should see political engagement and/or protest as central to climate action and should be largely comprised of individuals between the ages of 8 and 24 years old.*

The age range for youth was chosen to be inclusive of all plaintiffs in the Children vs. Climate Crisis complaint filed through the UN Convention on the Rights of the Child, who range from ages 8 to seventeen 17.[30] The upper age limit of 24 was then chosen to be consistent with the United Nation's "World Youth Report: Youth & Climate Change."[31,32] To ensure diverse representation of youth groups meeting this definition, the research team also checked for regional and structural diversity in selecting its sample of youth groups to review. Regionally, the team ensured that a minimum of one youth group per geographic region in which C40 works was included.[33] Similarly, the team ensured that youth groups in the sample spanned a variety of group structures, from fully centralized in demands and organizational structure—like Baltimore Beyond Plastic, which operates only in Baltimore, Maryland and is united by a set of demands shared by all group members—to decentralized networks—such as Fridays for Future (FFF), connected by a common philosophy but with 80 chapters in different countries around the world, each chapter with unique demands and expectations.[34]

A total of 28 groups were included for analysis. See Table 1 for a full list of the selected youth groups, with their corresponding regions and structures.

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[30] Michael D Hausfeld et al., "Communication to the Committee on the Rights of the Child," 2019.
[31] United Nations Department of Economic and Social Affairs, "World Youth Report 2010: Youth and Climate Change ," World Youth Report (WYR), 2010, https://www.un.org/development/desa/youth/world-youth-report/world-youth-report-2010.html.
[32] One youth group, SwitchON Foundation, is currently led by individuals exceeding the defined age range. However, this group was still included in the analysis because the group was founded ten (10) years ago by youth and the group continues to work with youth today.
[33] C40 Cities Climate Leadership Group, "Climate Action Planning Framework."
[34] Fridays For Future, "About - #FridaysForFuture," 2020, https://www.fridaysforfuture.org/about; Baltimore Beyond Plastic, "Baltimore Beyond Plastic - Home," accessed February 27, 2020, http://www.bmorebeyondplastic.org/.

Table 1. Summary of youth group research sample (n=28).

Region	Group Structure	Youth Group
Africa (n=4)	**Centralized demands with central structure**	Jeunes Volontaires pour l'Environnement
		South African Youth Centre for Climate Change (SAYCCC)
		The Green Generation Initiative
	Centralized demands with decentralized (e.g., regional) structure	African Youth Initiative on Climate Change
Central East Asia (n=1)	**Centralized demands with central structure**	China Youth Climate Action Network
East, Southeast Asia & Oceania (n=4)	**Centralized demands with central structure**	Australian Youth Climate Coalition (AYCC)
		Klima Action Malaysia
		Pacific Islands Students Fighting Climate Change
	Centralized demands with decentralized (e.g., regional) structure	Bye Bye Plastic Bags
Europe (n=4)	**Centralized demands with central structure**	Climáximo
		Italian Climate Network
	Centralized demands with decentralized (e.g., regional) structure	UK Student Climate Network (UKSCN)
		Youth for Climate France
Latin America (n=4)	**Centralized demands with central structure**	Nosotros Por la Tierra
		TierrActiva Peru
	Centralized demands with decentralized (e.g., regional) structure	Misión Planeta
		Reacción Climática
North America (n=7)	**Centralized demands with central structure**	Baltimore Beyond Plastic
		US Youth Climate Strike
		Zero Hour
	Centralized demands with decentralized (e.g., regional) structure	Earth Guardians
		Our Climate
		Sunrise Movement
		Women's March Youth Empower
South and West Asia (n=2)	**Centralized demands with central structure**	Nepal Youth Climate Network
		SwitchON Foundation
International (n=2)	**Centralized demands with decentralized (e.g., regional) structure**	Extinction Rebellion (XR) Youth
	Decentralized demands with decentralized structure	Fridays for Future

Each group in this sample was individually researched to identify the group's key messages, objectives, and demands for climate action. Each demand was itemized and compiled into a standardized data template. Each demand was then reviewed for and coded with thematic, linguistic, and other identifiers, as discussed in the "Analysis and Mapping of Youth Demands and City Actions" section below.[35]

B. Interviews with Youth Climate Activists

Interviews with youth activist representatives from a subset of the youth groups included for analysis were performed to allow for a more in-depth analysis of youth demands and youth political engagement. In these interviews, youth group representatives were asked a series of standardized questions about how they view the role of various entities—including local and city governments—in climate adaptation and mitigation, as well as how they want to be involved in governmental climate actions. Additionally, various messaging strategies for city climate action plans were tested with interviewees by asking interviewees to react to a selected city action and a selected youth demand about the same topic, but worded differently.[36] The full interview guide, which was developed in both English and Spanish, is available in Appendices A and B.

Table 2. Summary of interview sample (n=15).

Region	Group Structure	Youth Group
Africa (n=2)	**Centralized demands with central structure**	The Green Generation Initiative (n=1)
		African Youth Initiative on Climate Change (AYICC) (n=1)
East, Southeast Asia & Oceania (n=1)	**Centralized demands with central structure**	Klima Action Malaysia (n=1)
Europe (n=1)	**Centralized demands with decentralized (e.g., regional) structure**	UK Student Climate Network (UKSCN) (n=1)
Latin America (n=1)	**Centralized demands with central structure**	Nosotros Por la Tierra (n=1)
North America (n=5)	**Centralized demands with central structure**	US Youth Climate Strike (n=1)
	Centralized demands with decentralized (e.g., regional) structure	Earth Guardians (n=1)
	Centralized demands with decentralized (e.g., regional) structure	Our Climate (n=1)
	Centralized demands with decentralized (e.g., regional) structure	Sunrise Movement (n=1)
	Centralized demands with decentralized (e.g., regional) structure	Women's March Youth Empower (n=1)
South and West Asia (n=2)	**Centralized demands with central structure**	SwitchON Foundation (n=2)
International (n=3)	**Decentralized demands with decentralized structure**	Fridays for Future (n=3)[37]

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[35] All demands considered for this research, and their categorizations, can be found in the accompanying data file—"C40 Capstone Synthesis Spreadsheet Final."

[36] Interviewees were read two statements, a city action from the Melbourne City Action Plan (CAP) and one youth demand from Zero Hour, that discuss fossil fuel reduction/elimination. The origin of the statement (i.e. city action or youth demand) was not shared with the interviewees. Interviewees were then asked to react to the substance and tone, and indicate their preference, if desired.

[37] Representatives of Fridays for Future were interviewed from Azerbaijan and Pakistan in South and West Asia, and Portugal in Europe.

Outreach using a standard letter, available in Appendix C, began on February 27th, 2020. General youth group email addresses and online contact forms were primarily used for initial contact, with 46 advance messages sent.[38] Twenty-one responses were received—a 46% response rate—with only one refusal, where the respondent declined to participate in the study.[39] Ultimately, 15 interviews representing 12 unique youth groups were conducted between March 5th, 2020 and April 16th, 2020. Table 2 identifies these youth groups, with the number of interviewees per group and the group's corresponding region and structure indicated. As with other youth climate movement research, care was taken to capture regional and structural diversity amongst the interview sample

C. City Actions in Climate Action Plan (CAPs)

To assess how youth demands could be better embedded within city climate action planning, a sample of climate documents from C40 member cities was reviewed. To date, 12 CAPs have been completed, all of which were included and reviewed for analysis purposes. Additionally, a selection of "incomplete" CAPs were reviewed to broaden the research sample and ensure regional and cultural diversity. "Incomplete" CAPs refer to related climate and/or environmental plans developed by C40 member cities that have yet to be approved by C40 as formal CAP documents.[41] Cities with incomplete CAPs are in various stages of CAP development but are collectively motivated by C40's objectives in their climate agenda and goal setting. As with youth group selection, the research team ensured that a minimum of one city per geographic region in which C40 works was included. The team also ensured that at least one city per C40 member status was accounted for within the CAP sample.[42]

The final research sample consisted of 12 cities with complete CAPs and 9 cities with incomplete CAPs. Table 3 identifies these cities, with each city's country, region, member status, and CAP status indicated.

Each of the selected CAPs was reviewed to identify the key climate actions within the plan. Each high-level city action—often identified as a goal or priority area within the CAP—was itemized and compiled into a standardized data template.[43] As with youth demands, each city action was then reviewed for and coded with thematic, linguistic, and other identifiers, as discussed in the "Analysis and Mapping of Youth Demands and City Actions" section below.

Table 3. Summary of CAP research sample (n=21).

Region	CAP Status	City	Country[40]
Africa (n=2)	Complete	Durban	South Africa
	Incomplete	Tshwane	South Africa
Central East Asia (n=1)	Incomplete	Hong Kong	China
East, Southeast Asia & Oceania (n=3)	Complete	Melbourne	Australia
	Incomplete	Auckland	New Zealand
		Seoul	Republic of Korea
Europe (n=6)	Complete	Barcelona	Spain
		Copenhagen	Denmark
		London	United Kingdom
		Oslo	Norway
		Paris	France
		Stockholm	Sweden
Latin America (n=2)	Incomplete	Bogota	Colombia
		Rio de Janeiro	Brazil
North America (n=5)	Complete	Los Angeles	United States
		New York City	United States
		Portland	United States
		Washington, DC	United States
	Incomplete	Vancouver	Canada
South and West Asia (n=2)	Incomplete	Chennai	India
		Dubai	United Arab Emirates

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[38] Outreach to selected youth activists included both blind outreach, as well as direct outreach through existing connections. None of the groups included had explicit connections to C40.

[39] The youth responded to the outreach by stating that his group did not want to be interviewed for this study because they felt it might contribute to "greenwashing" and because they could not understand how their participation would "contribute to urgent climate action."

[40] C40 Cities Climate Leadership Group, "C40 Cities," 2020, https://www.c40.org/cities.

[41] Specific citations, including links, for all incomplete CAPs can be found in the accompanying data file —"C40 Capstone_Synthesis Spreadsheet_Final."

[42] C40 Cities Climate Leadership Group, "C40 Cities."

[43] Many city actions have associated sub-actions, which were referenced for all analytical activities but were not individually catalogued. For example, four city actions were associated with Melbourne to reflect the four strategic priorities in this city's CAP. In analyzing the first of these strategic priorities—Strategic Priority 1: 100% renewable energy—six sub-actions were accounted for. All city actions considered for this research, and their categorizations, can be found in the accompanying data file—"C40 Capstone_Synthesis Spreadsheet_Final."

Analysis and Mapping of Youth Demands and City Actions

This project's primary research goal was to identify the key priorities and demands of youth climate activists, and how their demands compare to actions detailed in CAPs. The second phase of research focused on analyzing youth demands and city actions to allow for the identification of commonalities and gaps between youth and cities. To achieve this, each youth demand and city action was reviewed and categorized by:

A. Theme; and
B. Discussion of mitigation and/or adaptation strategies.

Additionally, a language analysis was performed to identify linguistic trends across youth demands and city actions. Specifically, this analysis provided insight into:

A. Verb usage;
B. Tense usage; and
C. Strength of language.

Collectively, these analyses served to identify prevailing themes, leanings towards adaptation and mitigation measures, and linguistic trends across both youth demands and city actions.

A. Thematic Analysis

To thematically compare the issues discussed by youth groups and by cities, and to ultimately identify commonalities and gaps across these parties, the research team developed a set of 35 unique themes by which each action and demand was categorized (see Table 4).[44] Each action and demand was mapped to at least one and up to three themes. These themes were not ranked by importance; multiple themes were allowed per action or demand because a single youth demand or city action may discuss multiple thematic areas (for example, a city action that is discussing the reduction of transportation emissions would be categorized as both transportation and air pollution).

Table 4. List of unique themes used for thematic analysis.

Unique Themes		
Air pollution	Education	Land management
Biodiversity	Employment	Opposition
Buildings	Extreme heat	Plastics
Campaigning/canvassing	Financial divestment	Recycling
Carbon taxation	Flooding	Renewable energy
Circular economy	Food and agriculture	Reparations
Climate/social justice	Fossil fuel reduction/elimination	Socialization of resources
Climate migration	Government policy	Stakeholder engagement
Coastal resilience	Green infrastructure	Transportation
Consensus	Green tech	Waste management
Consumption	Human health	Water management
Disaster relief	Implementation	

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[44] The unique themes were developed by the research team emergently, after reviewing both the city actions in the CAPs and the youth group demands. Definitions for each theme can be found in Appendix D.

Once each action and demand was mapped to its relevant theme(s), a frequency analysis was performed to calculate the percentage of times each theme was discussed within the youth demand sample and within the city action sample. The prevalence of a particular theme across all demands and city actions was assessed, as well as the count of youth groups and cities that discussed a particular theme. Thematic frequency was assessed for the full sample as well for regional subsets.

B. Adaptation and Mitigation Analysis

In addition to thematic categorization, each city action and youth demand was, where applicable, categorized as a mitigation and/or adaptation measure. Interactions between adaptation and mitigation efforts are of particular interest to C40 as the organization believes that the failure to "integrate these two policies could potentially lead not only to mal-investment and conflicts of interest, but also missed opportunities."[45] The following definitions were used for this categorization, adapted from C40's descriptions:[46]

- *Mitigation:* A demand or action directly leading to greenhouse gas (GHG) emission reduction, or a plan or request for action with this same end goal;
- *Adaptation:* A demand or action directly leading to reduced climate risk (e.g., protection from current and future extreme weather events), or a plan or request for action with this same end goal;
- *Both:* A demand or action discussing both mitigation and adaptation measures; and
- *Neither:* A demand or action discussing measures not directly tied to either mitigation or adaptation.

Once each action and demand was categorized, a frequency analysis was performed to calculate the percentage of mitigation and/or adaption measures being demanded by youth and discussed by cities.

C. Language Analysis

In addition to identifying the key priorities and demands of youth climate activists, and how their demands compare to actions detailed in CAPs, a key research goal of this project was to understand how C40 should provide guidance to cities on how to engage with the passionate voices that youth groups bring to the table. As such, the main goal of the language analysis was to understand differences and similarities in language tense, sense of urgency or long-term nature of language, and key overlaps and gaps in communication between youth groups and cities.

Verb Usage
As a first linguistic exercise, all verbs used in the research sample of youth demands and cities actions were extracted. These verbs were then aggregated, counted, and compared across youth and cities. Verbs unique to both cities and youth groups were identified, as well as shared verbs between the two groups.

Tense Usage
Each demand and action was also analyzed for language tense. Table 5 describes these tenses, their interpretations, and an illustrative example from the sample set. When an action had multiple sub-actions if at least one sub-action included a target date or target amount, the whole action category was classified as "Future Tense: Target Amount" or "Future tense: Target Date." Where a youth demand or city action included both a target amount and a target date, the "Future Tense: Target Date" categorization was chosen.

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[45] C40 Cities Climate Leadership Group, "New Tool Will Help Cities Understand Interactions between Mitigation and Adaptation Actions," 2018, https://www.c40.org/blog_posts/new-tool-will-help-cities-understand-interactions-between-mitigation-and-adaptation-actions.
[46] C40 Cities Climate Leadership Group.

Table 5. Language tense categorizations, descriptions, and examples from youth groups and CAPs.

Language Tense	Description	Example
Future Tense	Written in future tense and is general in aim	"**Cut** Bogota's carbon dioxide emissions"[47]
Future Tense: Target Amount	Written in future tense with a specific target amount	"Reduce solid waste going to the landfill or incinerator by **50%**"[48]
Future Tense: Target Date	Written in future tense with a specific target date	"**100%** electricity supplied by renewable energy by **2050**"[49]
Past Tense	Written in past tense	"We **channeled** the momentum from previous wins in the #StopAdani campaign to focus on shifting the politics to stop new coal mines and secure a safe climate future"[50]
Present Tense	Written in present tense and is general in aim	"We **support** a Green New Deal for agriculture"[51]
Present Tense: Urgency, Now	Written in present tense with a focus on urgency and immediacy	"An **immediate** and **rapid** shift to renewable energy"[52]

Language Trends

Additionally, language trends were analyzed by noting and counting the frequency of select key words in youth demands and city actions. These key words were then categorized into larger groupings for aggregated analysis (see Table 6).

Research Limitations

Key limitations and necessary caveats must be acknowledged in relation to the nature of the documents and sources reviewed, data integrity, and possible biases such as skewed data and sample size. These data and analysis limitations are listed below:

Table 6. Select key words and groupings.

Key Words	Aggregated Groupings
"immediate" "immediately" "immediacy"	Mention of urgency
"now"	
"urgent" "urgency" "urgently"	
"unjust" "just" "justice" "injustice"[53]	Safety and rights
"right" "rights"	
"safe" "safety" "safely" "unsafe"	
"emergency"[54]	Mention of climate crisis
"crisis"[55]	
"change" "shift"[56]	Paradigm shift
"demand, demanded, demands, demanding"[57]	Demanding verbs
"need" "needs" "needed" "needing"[58]	
"want" "wants" "wanted" "wanting"[59]	

- Youth group demands were often collected from websites in information sections with titles such as "About Us" or "What We Do." As such, youth group language was pulled from live sections of a website where youth were often describing a combination of their past actions, current needs, and declarations on their approach to climate action. In comparison, CAPs are designed as planning documents for cities and are inherently forward-looking. Due to the differing audiences and orientation of these documents, direct comparison was a challenge of this study.

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[47] City of Bogota, "Adaptation and Mitigation to Climate Change Plan for Bogota," accessed April 12, 2020, https://carbonn.org/uploads/tx_carbonndata/Brief %5BIngles%5D - Plan Distrital de Adaptación y Mitigación al Cambio Climático 19.10.pdf.

[48] City of Vancouver, "Greenest City: 2020 Action Plan," accessed April 12, 2020, https://vancouver.ca/files/cov/Greenest-city-action-plan.pdf.

[49] City of Durban, "Durban Climate Action Plan 2019," 2019, https://cdn.locomotive.works/sites/5ab410c8a2f42204838f797e/content_entry5c8ab5851647e100801756a3/5e5e3f71469c8b00a735fbac/files/Climate_Action_Plan_web.pdf?1583234929
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[50] Australian Youth Climate Coalition, "AYCC 2018 IMPACT REPORT WE'RE FIGHTING FOR CLIMATE JUSTICE," 2018, https://d3n8a8pro7vhmx.cloudfront.net/aycc/pages/1813/attachments/original/1559268783/Impact_Report_2018.pdf?1559268783.

[51] US Youth Climate Strike, "Platform," accessed February 27, 2020, https://www.youthclimatestrikeus.org/platform/.

[52] Earth Guardians, "Youth Climate Strikes," accessed February 26, 2020, https://www.earthguardians.org/youth-climate-strikes.

[53] Only included "just" as a noun (i.e. excluded use as a qualifier)

[54] Only included "emergency" as it related to the mention of a current climate emergency (i.e. excluded mention of future emergencies or disaster preparedness")

[55] Only included "crisis" as it related to the mention of a current climate emergency (i.e. excluded mention of future crises or disaster preparedness")

[56] Only included "change" and "shift" as they related to a demand around a paradigm shift (i.e. excluded use as a verb or uses such as "climate change" or "land use change")

[57] Only included derivatives of "demand" as an action verb (i.e. excluded "energy demand" or "demand" as it relates to consumption)

[58] Only included derivatives of "need" as a verb (i.e. excluded uses as a noun)

[59] Only included derivatives of "want" as a verb (i.e. excluded uses as a noun)

- The distribution of completed CAPs is skewed in favor of high GDP Organization for Economic Cooperation and Development (OECD) countries in the North American and European regions. While there was an attempt to review incomplete CAPs from other regions, there is not equal representation of all regions within the CAP data.

- The city actions for each CAP were distilled down from what were perceived to be the major action areas of the CAP documents. Many city actions have associated sub-actions, which were referenced for all analytical activities but were not individually catalogued. For example, four city actions were associated with Melbourne to reflect the four strategic priorities in this city's CAP. In analyzing the first of these strategic priorities—Strategic Priority 1: 100% renewable energy—six sub-actions were accounted for. However, there is a chance that the catalogued city actions do not fully capture the entirety of the CAP, or perhaps miss some specific language and/or actions embedded within the document.

- The selection of unique themes was an iterative process done by several researchers, and individual discretion was used when choosing a particular theme. Though definitions for each theme can be found in Appendix D, thematic categorizations may include human error and/or individual views on a particular subject. Further, a particular city action or youth demand may not be attributed to every relevant theme as a given demand or action could only be coded with up to 3 themes.

- The sample size of this study is limited and, as such, results should be considered suggestive as opposed to statistically representative or significant. Specifically, no statistically significant differences were identified across thematic frequencies between youth groups and cities, making it challenging to definitively assess overlaps and gaps.

- With regard to interviews, this study utilizes interviewee perspectives to provide insights not as readily found on youth websites and social media; quotes and insights should not be interpreted as reflections of a youth's entire organization but as anecdotes that support the research findings. The interview sample size is relatively small (15) and does not reflect all youth groups and geographic regions equally. Further, the interview data is skewed in favor of English-speaking interviewees.

Findings

Key findings from this research are outlined below in the following sections:

1. Youth Climate Landscape;
2. Comparing Youth Group Demands with CAPs;
3. Incorporating Youth Demands within CAPs: Opportunities and Challenges; and
4. Leveraging Communication Approaches.

1. Youth Climate Landscape

Key Findings

→ The analysis of youth demands indicates that climate/social justice, stakeholder engagement, education, climate migration, government policy, and fossil fuel reduction/elimination are top priorities for youth.

→ Addressing social and racial disparities is important to many youth climate activists and is reflected in a number of youth group demands.

→ Youth climate groups often depend on and value partnerships with other youth groups, civil society and non-profit organizations (NGOs), and global governance institutions. This has led to the formation of organizational networks to collaborate and address climate issues.

→ Youth have a mixed view of engagement with government. Some expressed that they do not feel "heard" by their governments and expressed the need to be included in planning as a formal stakeholder. Other youth spoke more positively about having successfully worked with varying levels of government.

→ In some instances, youth have used litigation as a tool for bringing about action on key climate issues.

→ More than half of the youth demands discuss neither mitigation nor adaptation measures, suggesting that a majority of youth demands are not explicitly climate-related.

A key goal of this project was to provide a snapshot of the youth climate movement, the findings of which are discussed in this section. As mentioned previously, the primary research sample includes a survey of 28 youth groups and interviews with 15 youth activists. Broadly speaking, the youth included in this research want to see a more sustainable and equitable future based on a clean energy economy. Youth groups are advocating for a wide range of issues, from a rapid transition from fossil fuels, to banning plastics, to support for vulnerable communities impacted by natural disasters. Some groups are calling on government for a carbon tax or fossil fuel divestment; others are focused on developing and campaigning for climate-focused political candidates.[60,61] Activism differs across groups and regions; some youth are working directly to address climate change through small-scale and informal community-based actions, while others are active in formal organizations with global demands. A majority of the youth groups surveyed challenge business-as-usual economic and social policies, including the emphasis on economic growth. Overall, youth climate groups are emphasizing the urgency of climate change

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[60] Youth for Climate France, "The 'Lausanne Charter,'" 2019, https://youthforclimate.fr/charte-de-lausanne/; Our Climate, "Principles," accessed March 21, 2020, https://www.ourclimate.us/principles; US Youth Climate Strike, "Platform."

[61] Sunrise Movement, "Our Principles," accessed March 21, 2020, https://www.sunrisemovement.org/principles; Nepalese Youth for Climate Action (NYCA), "About Us ," accessed April 17, 2020, https://www.nyca.net.np/?page_id=2; Australian Youth Climate Coalition, "About AYCC," accessed March 21, 2020, https://www.aycc.org.au/about.

and importance of taking action to help save their collective future.

The analysis of youth demands indicates that climate/social justice, stakeholder engagement, education, government policy, and fossil fuel reduction/elimination are top priorities for youth. Of the total demands across all youth groups, the highest frequency of demands were categorized into these five themes, respectively (see Figure 1). Climate/social justice and stakeholder engagement are the top two themes across all youth groups demands. Additionally, 75% of all surveyed youth groups have at least one demand related to

stakeholder engagement, and 68% of all youth groups have at least one demand related to climate/social justice (see Figure 2). This suggests that youth find inclusive and equitable participation to be a critical component of climate action. To illustrate this, one of the demands of the UK Student Climate Network is, "Young people must be included in policymaking, and no one should be excluded from participation in our democracy on the basis of age, citizenship, permanent address, incarceration or anything else."[62] As another example, Extinction Rebellion demands that "government must create and be led by the decisions of a Citizens' Assembly on climate and ecological justice."[63]
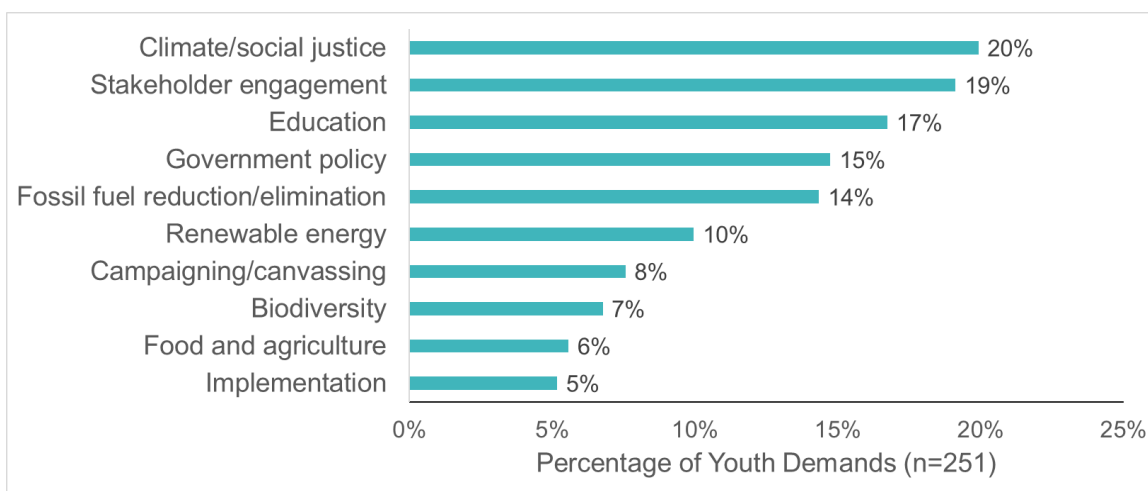
Figure 1. Top ten themes discussed in youth demands. Percentages indicate the proportion of total youth demands (n=251) categorized to a particular theme.
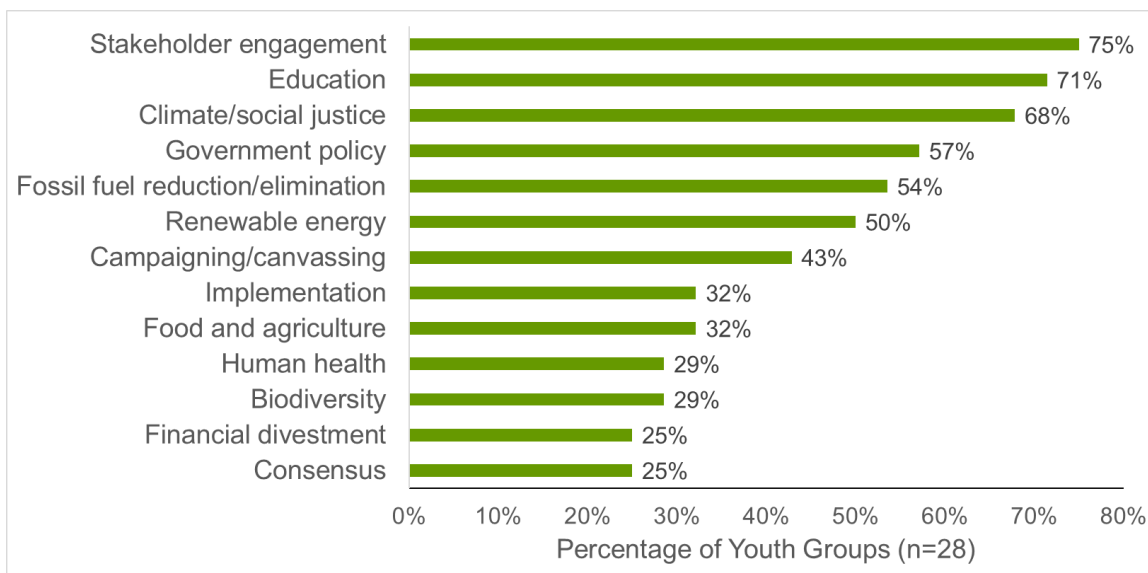
Figure 2. Themes discussed by at least a quarter of all sampled youth groups. Percentages indicate the proportion of total youth groups (n=28) that discuss a particular theme.

[62] UK Student Climate Network, "Our Demands," accessed February 24, 2020, https://ukscn.org/our-demands/.

[63] Extinction Rebellion Youth, "About XR Youth - The Young Voice of the Rebellion," accessed February 15, 2020, https://www.xryouth.org/about.

Similarly, many youth groups view education as one of the most critical aspects for moving the dial on climate change. Specifically, 71% of youth groups in the studied sample have at least one demand related to education (see Figure 2). Youth demands on this subject are wide-ranging, discussing both formal and informal modes of education, such as reforming school curricula to include the climate crisis, more transparency around scientific advances/environmental problems, and demanding that every politician take a climate science test. Often, calls for education are also combined with themes of climate justice and/or stakeholder engagement. The following demand from Zero Hour is an excellent example of this, "Make climate justice education part of the Department of Education guidelines based on recommendations from communities of color and indigenous climate justice groups, by 2020."[64]

Youth groups are also calling on the government to make policy changes for their future, particularly around reducing fossil fuel emissions. For example, the South African Youth Center for Climate Change (SAYCCC) is demanding "strict policies and regulations against the private and industrial sector's environmental emissions" and Klima Action Malaysia is demanding that Malaysia "adopt stricter environmental regulations and effective enforcement."[65] To further illustrate, the youth group Reacción Climática is calling for Bolivia to leave "80% of its hydrocarbon reserves below ground and change its energy matrix to alternative energy in the next two decades."[66]

Another key insight, which is reflected in the prevalence of climate justice across demands, is the importance of addressing social and racial justice to youth climate activists. For many of today's youth, climate change activism is fundamentally incomplete without incorporating broader social justice goals. For example, a core value of the youth group Youth Empower, the youth chapter of Women's March, is that "every person and every community in our nation has the right to clean water, clean air, and access to and enjoyment of public lands."[67,68] Similarly, Earth Guardians has a demand to "support and highlight frontline communities who are most vulnerable to the impacts of climate change."[69] Youth care about increasing diversity around the table and coming up with equitable

solutions, often highlighting how climate change has already adversely affected people of color, indigenous people, and low-income communities. A good example of this is the following demand from Zero Hour, "Ensure that any new legislation or climate solution does not disproportionately burden communities of color and low-income communities through greater cost or displacement, by 2020."[70]

> "There is no point talking about who does what. It's more important that we all come together to find solutions."
>
> - Interviewee, SwitchON Foundation

Youth climate groups often depend on and value partnerships with other youth groups, civil society and non-profit organizations (NGOs), and global governance institutions (such as the United Nations). However, only three of the 15 interviewees were familiar with C40. Sunrise Movement expresses this desire for collaboration clearly in its demand, "We stand with other movements for change. Stopping climate change requires winning and holding power at every level of government. This is a huge job and we can't do it alone. When it makes sense, we work with other movements who share our values and are also working to win political power."[71] Youth interviewed indicated that they are often collaborative, and do not view themselves as completely distinct from one another. This led to the formation of organizational networks to collaborate and address climate issues with varying stakeholders. Intersectionality is vital to today's youth, so networks often include a range of youth groups focused on various issues, from climate to gender rights to indigenous rights.[72] For example, the youth representative from Fridays for Future Portugal noted, "There is a lot of collaboration between youth groups, not only organizing events such as strikes, concert benefits, and digital campaigns, but actively participating in and supporting other groups that are not explicitly climate-focused."[73] Several interviewees indicated that these networks and collaborations are critical to making their collective demands heard, such as an interviewee from the SwitchON Foundation who spoke very positively about the role of various stakeholders in climate action, stating that "there is

[64] Zero Hour, "Letter to Politicians," accessed February 15, 2020, http://thisiszerohour.org/files/zh-platform-politicians-web.pdf.
[65] South African Youth Centre for Climate Change (SAYCCC), "Durban Youth For Climate Action," 2019, https://sayccc.org.za/blog/no-title-7.html; Klima Action Malaysia (KAMY), "About Us," 2019, n.d., https://en.klimaactionmalaysia.org/.
[66] Reaccion Climatica, "Climate Reaction - Get Informed," accessed March 22, 2020, https://reaccionclimatica.webs.com/informate.htm.
[67] Women's March, "Mission and Principles — Women's March 2020," accessed April 10, 2020, https://womensmarch.com/mission-and-principles.

[68] Youth Empower is considered a youth climate group under the research definition, as it is has at least one formalized demand that is climate focused.
[69] Earth Guardians, "Youth Climate Strikes."
[70] Zero Hour, "Letter to Politicians."
[71] Sunrise Movement, "Our Principles."
[72] Alix Schroder, "Interview with Youth Representative from Women's March - Youth Empower" (Zoom Video Chat, 2020).
[73] Kathryn Homa, "Interview with Youth Representative from Fridays for Future - Portugal" (Phone, 2020).

no point talking about who does what. It's more important that we all come together to find solutions."[74]

Youth have a mixed view of engagement with government. Some youth expressed that they do not feel "heard" by their governments and expressed the need to be included in planning as a formal stakeholder. For example, an interviewed youth representative from Sunrise Movement said that, as a whole, her chapter does not feel governments are listening to youth on climate issues. "A lot of politicians say it's an emergency, but then they don't vote for the policies that support climate change," she stated in the interview.[75] She also mentioned finding state level government to be more effective than city government as, in her experience, states have more access to funding. Further, she noted it is often hard to get city and state governments on the same page on environmental issues.[76] Another example is from the youth activist interviewed from Fridays for Future Portugal, who noted that their chapter believes the Lisbon city government practices greenwashing and views their group as "more of a nuisance than a real stakeholder."[77] Similarly, the youth interviewee from African Youth Initiative on Climate Change (AYICC) said that while they were invited to workshops with the government, the inclusion of youth mostly came off as a public relations stunt, since there was no action taken to address their demands.[78] Youth are energized and engaged, yet often feel they are not taken seriously on account of their age. The youth interviewed from Youth Empower made the following plea to policymakers, "Meet with us, hear our concerns, even if we're not voting age. You need to understand the future is what we will need to live with."[79]

> "Meet with us, hear our concerns, even if we're not voting age. You need to understand the future is what we will need to live with."
>
> - Interviewee, Youth Empower

Other youth were more positive and have successfully worked with varying levels of government. On the topic of city government specifically, the interviewee from the UK Student Climate Network noted how important city governments are, stating that her group has had several positive interactions with the Belfast City Council in Northern Ireland working on environmental issues.[80] Other youth interviewees spoke positively about experiences at the state and county level. Specifically, the Extinction Rebellion chapter focused in Nyack and Rockland County in New York has had good engagement at the county level.[81] After numerous meetings and input from youth, New York State released the Climate and Community Protection Act, a climate policy act geared towards reducing GHG emissions and transitioning to renewable energy.[82] Additionally, while the SwitchON Foundation has not worked directly with local governments, the group has collaborated with the central Indian government on youth training and is supported by the national bank.[83]

In some instances, youth have used litigation as a tool for bringing about action on key climate issues. Youth climate groups, such as Zero Hour and Sunrise Movement, often use litigation as a tool to enact change and draw media coverage to issues. Specifically, one of Zero Hour's demands states, "Recognize the constitutional right of youth to a livable climate, [and] support youth lawsuits, by 2020."[84] In other cases, individual youth have banded together to bring forward litigation against their governments or private industries. The majority of these litigation cases are either at the federal or state levels.[85] For example, in the case, "Juliana v. United States" a group of 21 youth, including members of Earth Guardians, filed a climate lawsuit against the United States government for violating "the youngest generation's constitutional rights to life, liberty, and property, as well as [for failing] to protect essential public trust resources."[86] As part of this lawsuit, state-level actions were also pursued. In New York, a petition for rulemaking to "achieve scientifically adequate emission reductions in the state" was filed with the New York Department of Environmental Conservation on behalf of youth. It was ultimately not accepted.[87] Youth climate activists have also used litigation effectively to push their national

[74] Alyssa Blumenthal, "Interview with Youth Representative 1 from SwitchON Foundation (India)" (Phone, 2020).

[75] Kate Bosler, "Interview with Youth Representative from Sunrise Movement" (Phone, 2020).

[76] Bosler.

[77] Homa, "Interview with Youth Representative from Fridays for Future - Portugal."

[78] Willis Alala, "Interview with Youth Representative from the African Youth Initiative on Climate Change (AYRR)" (Phone, 2020).

[79] Schroder, "Interview with Youth Representative from Women's March - Youth Empower."

[80] Alyssa Blumenthal, "Interview with Youth Representative from Northern Ireland Student Climate Network" (Phone, 2020).

[81] Kathryn Homa, "Interview with Youth Representative from US Youth Climate Strike - New York Chapter" (Phone, 2020).

[82] Elizabeth Taveras, "Interview with Youth Representative from Our Climate" (Phone, 2020).

[83] Blumenthal, "Interview with Youth Representative 1 from SwitchON Foundation (India)."

[84] Zero Hour, "Letter to Politicians."

[85] This research did not uncover any city-level litigation attempts or cases.

[86] Youth v Gov, "Our Case," 2020, https://www.youthvgov.org/new-folder.

[87] Our Children's Trust, "New York ," 2020, https://www.ourchildrenstrust.org/new-york.

governments to enforce existing laws. This can be seen in the case filed by Ridima, an 11-year-old climate activist, against the country of India, which sought to require the government to enforce existing enactments under India's Environmental Protection Act of 1986.[88] Even though many of these cases do not win, youth often view litigation as an important tool for bringing awareness and gaining media attention. During an interview with a youth representative from Earth Guardians, the interviewee stated, "Even if a lawsuit fails it still points to the flaws in our government and what changes need to be made."[89]

More than half of the youth demands discuss neither mitigation nor adaptation measures, suggesting that a majority of youth demands are not explicitly climate related (see Figure 3). This finding—coupled with the high prevalence of youth demands related to stakeholder engagement, climate/social justice, and education—suggests that youth are more concerned about structural issues around climate change, such as which stakeholders are involved and how climate is discussed, rather than specific climate goals or targets themselves. This may also suggest that the youth climate movement is much broader than just climate, and represents wider environmental and social interests, which are reflected in their demands. Overall, there were slightly more youth demands focused on mitigation (25%) than adaptation (10%). This is in line with youth interest in fossil fuel reduction and greenhouse gas (GHG) emissions.

It is also worth noting that, when youth groups discuss adaptation, they tend to do so broadly.[90] Youth for Climate
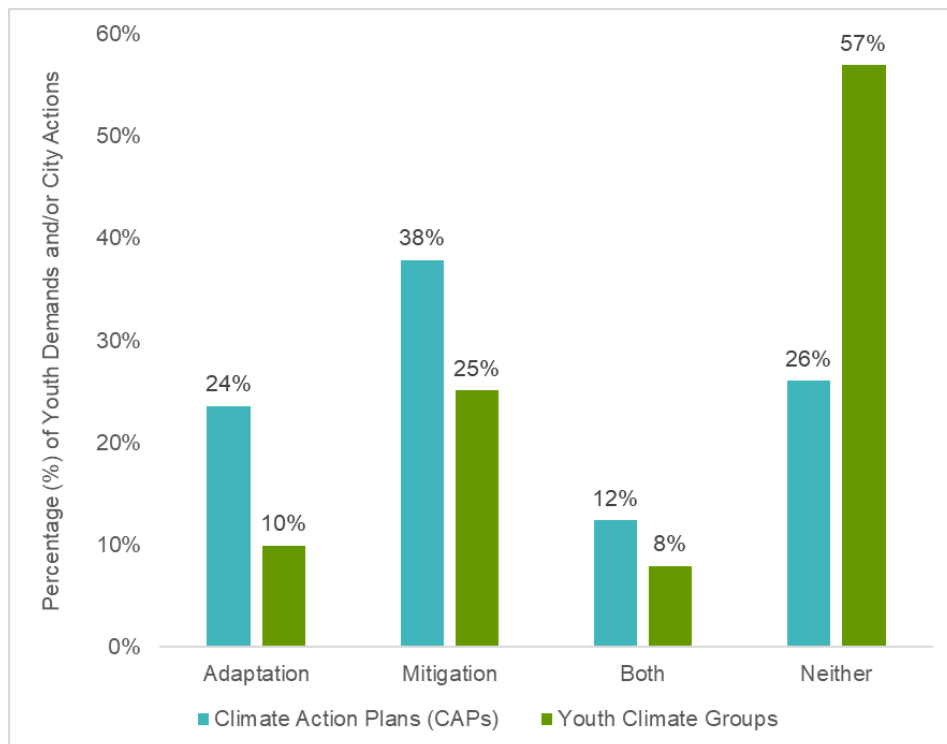
Figure 3. Adaptation and/or mitigation categorization. Percentages indicate the proportion of total demands or actions (n=251 or n=161, respectively) categorized as adaptation, mitigation, both, or neither.

France provides a representative example in their demand, "Measures need to be put in place to improve resilience to climate change and reduce the severity of the already existing impacts of it."[91] Despite a trend towards general language around adaptation, some topics that youth groups discuss explicitly include a desire for bolstered support for frontline communities, protection of endangered species, and equitable transfer of technology that will aid adaptation.[92] One group, African Youth Initiative on Climate Change (AYICC), explicitly mentions both mitigation and adaptation in one of their goals, "Develop and increase the capacity of youth in climate change mitigation and adaptation."[93]

[88] Indian Youth Climate Network (IYCN), "About Us," accessed February 25, 2020, http://iycn.in/about-us/; Our Children's Trust, "India," 2019, https://www.ourchildrenstrust.org/india.

[89] Mary Cristina Cole, "Interview with Youth Representative from Earth Guardians" (Phone, 2020).

[90] For greater detail and itemized demands addressing adaptation, please reference the "Youth Data" tab of the consolidated spreadsheet.

[91] Youth for Climate France, "The 'Lausanne Charter.'"

[92] Earth Guardians, "Youth Climate Strikes"; US Youth Climate Strike, "Platform"; Zero Hour, "Letter to Politicians"; Nosotros por la Tierra, "Selva Maya," accessed March 21, 2020, http://www.nosotrosporlatierra.org/titulo-de-la-publicacion-en-el-blog/; Youth for Climate France, "The 'Lausanne Charter'"; "Nepalese YouthClimate Network," CAN International, accessed March 21, 2020, http://www.climatenetwork.org/profile/member/nepal-youth-climate-network.

[93] African Youth Initiative on Climate Change, "About AYICC ~ AYICC KENYA," accessed March 21, 2020, http://ayicckenya.blogspot.com/p/about-ayicc.html.

2. Comparing Youth Demands to CAPs

Key Findings

→ At a high-level, cities and youth are focused on the same climate-related issues in their actions and demands—stakeholder engagement, climate/social justice, fossil fuel reduction/elimination, and government policy. However, there are differences in how youth and cities discuss these themes.

→ Many youth do not feel there is equal representation of all communities and people in climate action planning and want to see more inclusive stakeholder engagement.

→ The largest gap between what youth groups are demanding and city actions in CAPs is education.

→ There are several themes that appear in youth demands but do not appear in CAPs, including campaigning/canvassing, consensus, opposition, reparations, carbon taxation and socialization of resources. This is an area for further research.

To compare youth demands to city actions detailed in CAPs, both the demands and actions were thematically categorized and analyzed.[94] This analysis helped to provide insight into key gaps and overlaps of themes, and to point to areas to explore further. The findings outlined below are broad insights derived from the analysis, and supported by the interviews.

The results indicate that, at high-level, cities and youth are focused on the same climate-related issues in their actions and demands (see Figure 4). This figure details the five most frequent themes across all youth demands and all city actions, in order of frequency. The highlighted themes are those that overlap—climate/social justice, stakeholder engagement, fossil fuel reduction/elimination, and government policy. There is a significant overlap of themes across both research samples, indicating that both cities and youth broadly care about the same issues related to climate change. Interestingly enough, this overlap is less pronounced when assessing the incidence of

themes per youth group or city (see Figure 5). However, discussions of climate/social justice and stakeholder engagement are still fairly common in CAPs—with 67% and 62% of cities, respectively, discussing these issues.

It is important to note, however, that there are differences in how youth and cities discuss these themes, discernible through directly comparing actions and demands per theme. For example, within fossil fuel reduction/elimination, cities are typically laying out actions that provide prescriptive pathways for reducing dependence on fossil fuels, whereas youth groups are typically demanding commitments to eliminate the use of fossil fuels. As another important example, within climate/social justice, youth demands tend to be more specific than city actions within CAPs. Youth explicitly demand racial, economic, and gender justice and inclusion; for example, "We demand the full protection and restoration of the rights of indigenous people."[95] City actions tend to talk about equality and inclusion in broader

Thematic Frequencies (per Total Youth Demands and City Actions)			
Youth Climate Groups		**Climate Action Plans (CAPs)**	
20%	Climate/social justice	30%	Fossil fuel reduction/elimination
19%	Stakeholder engagement	17%	Renewable energy
17%	Education	16%	Climate/social justice
15%	Government policy	16%	Stakeholder engagement
14%	Fossil fuel reduction/elimination	16%	Government policy
% of youth demands (n=251)		*% of city actions (n=161)*	

Figure 4. Top five themes discussed across all youth demands and city actions. Percentages indicate the proportion of total demands or actions (n=251 or n=161, respectively) categorized to a particular theme. Highlighted themes are on the top five list for both youth climate groups and CAPs.

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[94] See Research Methods – Thematic Analysis.

[95] US Youth Climate Strike, "Platform."

Thematic Frequencies (per Youth Groups and Cities)			
Youth Climate Groups		**Climate Action Plans (CAPs)**	
75%	Stakeholder engagement	90%	Fossil fuel reduction/elimination
71%	Education	86%	Renewable energy
68%	Climate/social justice	81%	Government policy
57%	Government policy	81%	Transportation
54%	Fossil fuel reduction/elimination	81%	Waste management
% of youth groups (n=28)		*% of cities (n=21)*	

Figure 5. Top five themes discussed by youth groups and by cities in CAPs. Percentages indicate the proportion of youth groups or CAPs (n=28 or n=21, respectively) that discuss a particular theme. Highlighted themes are on the top five list for both youth climate groups and CAPs.

terms, such as "ensuring equal access to healthy food in a changing climate."[96] On the theme of government policy, both city actions and youth demands discuss similar content, in this case, specific policies and tools to address climate change. The difference, however, is that cities have control over their policies, whereas youth demands are calling upon the government to take action, either on particular issues like stricter environmental regulations or on a broader scale, such as by declaring a climate emergency.[97]

A review of youth demands in top thematic areas also indicated that many youth do not feel there is equal representation of all communities and people in climate action planning, and want to see more inclusive and diverse stakeholder engagement. Multiple groups expressed frustration at the lack of youth participation and inclusion in climate action planning. This call for inclusion may be best expressed by Extinction Rebellion, a group that calls for "promoting a truly representative voice of young people in a world built for and biased towards adults."[98] The UK Student Climate Network echoes this sentiment, demanding that young people be included in policymaking, with the inclusion of all citizens, non-citizens, and members of society above the age of 16.[99] The lack of perceived representation not only applies to youth, but also to a larger group of what youth feel are underrepresented voices in climate action. The international group, Zero Hour, for example, not only cites the need for youth to benefit from "a complete just transition away from the fossil fuel economy," but also extends this to "indigenous, communities of color, and frontline communities."[100] Many youth groups discuss the need for climate justice and action on behalf of women and people of color, but also for groups such as the

young, indigenous, disabled, undocumented, frontline, and incarcerated peoples. While 13 of the 21 of CAPs reference stakeholder engagement, CAPs are generally broader in their mention of stakeholders as community members or citizens.

A comparative analysis between youth demands and city actions also indicated that the most substantial gap between youth demands and city actions is on the topic of education. While 71% of surveyed youth groups discuss education—with 17% of their demands tied to this topic—only a third of cities do so, and in only 6% of total actions. As highlighted earlier, education is one of the most frequent themes across youth demands, indicating that education is a key priority for youth climate activists. Youth view both formal and informal education as an important tool for climate action and are vocal about the need for increased climate education inside and outside of the school classroom. For example, the US Climate Youth Climate Strike has the following demand, "We demand a comprehensive environmental justice centered education plan that will greatly expand the curriculum about the climate crisis and its effects."[101]

Cities, on the other hand, appear to consider education less within climate planning. Seven cities mention education in their CAPs, but only two CAPs have robust goals around climate-specific education:

1. Washington DC, which has a specific goal around educating both students and the community about the environment and sustainability; and

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[96] City of Los Angeles, "L.A.'s Green New Deal: Sustainable City PLAn," 2019, https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf.
[97] Klima Action Malaysia (KAMY), "About Us"; Zero Hour, "Letter to Politicians."
[98] Extinction Rebellion Youth, "About XR Youth - The Young Voice of the Rebellion."
[99] UK Student Climate Network, "Our Demands."
[100] Zero Hour, "Letter to Politicians."
[101] Our Climate, "Principles."

2. Rio de Janeiro, which has a specific target to "educate the youth for resilience" under its goal to increase resilience and promote social cohesion.[102]

The other mentions of education within CAPs are more general, such as in the Los Angeles CAP, which has a target of reaching "2 million Angelenos through outreach, education, and training programs by 2025" under its goal to "Lead by Example."[103]

There are several themes that appear in youth demands but do not appear in CAPs. These themes include campaigning/canvassing, consensus, opposition, plastics, reparations, carbon taxation, and socialization of resources. While these findings point to the potential gaps between CAPs and youth demands, it should be noted that, of the aforementioned themes, only campaigning/canvasing and consensus are discussed by at least a quarter of sampled youth groups. Further, several of these themes seem to fall outside of the scope of city governance and/or a CAP, such as campaigning/canvassing and opposition. Within the youth demands, it was not clear if youth are seeking action on these issues specifically from city government, except for the case of plastics. For example, Baltimore Beyond Plastics has a specific

goal around reducing plastic pollution in the city of Baltimore and wants the city to pass legislation banning plastic.[104]

Another key finding is that there is limited mention of youth and/or youth-specific goals within the reviewed CAPs. Of the 21 CAPs included in this research sample, only four mention youth in a meaningful way.:

1. Auckland, which has a goal committed to youth and intergenerational equity;[105]
2. Rio de Janeiro, whose CAP discusses a flagship initiative to educate youth for resilience;[106]
3. New York City, which discusses the role of the Department of Education in increasing youth leadership around sustainability;[107] and
4. Paris, whose CAP discusses creating a Digital Citizen's Council, which will include a representative from the Paris Youth Council.[108]

As discussed earlier, youth do not feel heard by local government. This suggests that cities need to find meaningful ways to engage youth in climate planning.

3. Incorporating Youth Demands within CAPs: Opportunities and Challenges

The findings from the previous section helped to paint a picture of what youth are demanding and how their demands compare to city actions within CAPs. It also helped identify a few key gaps and areas for further research. This section builds on this by exploring how these youth demands are currently being addressed by CAPs, and where they are not, by discussing how the CAPs could be adapted to better account for youth demands.

Key Findings – Opportunities

→ CAPs already incorporate the issues that youth care about, with a few outliers worthy of further study.

→ CAPs are well-positioned to address youth's city- and/or regional-specific needs given their local focus.

→ Several C40 member cities are successfully engaging youth in climate planning and can serve as a positive example for other cities.

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[102] District of Columbia, "CLIMATE READY DC: The District of Columbia's Plan to Adapt to a Changing Climate," accessed February 28, 2020, https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/CRDC-Report-FINAL-Web.pdf.
[103] City of Los Angeles, "L.A.'s Green New Deal: Sustainable City PLAn."
[104] Baltimore Beyond Plastic, "Baltimore Beyond Plastic - Home," n.d., www.bmorebeyondplastic.org/.
[105] Auckland Council, "Te Tāruke-ā-Tāwhiri," 2019, https://www.aucklandcouncil.govt.nz/have-your-say/topics-you-can-have-your-say-on/auckland-climate-action-framework/Documents/aucklands-climate-action-framework.pdf.

[106] City of Rio de Janeiro, "Resilience Strategy of the City of Rio de Janeiro," accessed April 12, 2020, https://www.100resilientcities.org/wp-content/uploads/2017/07/estra_res_rio_ingles_2.pdf.
[107] City of New York, "1.5°C: Aligning New York City with the Paris Climate Agreement," 2017, https://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/1point5-AligningNYCwithParisAgrmt-02282018_web.pdf.
[108] City of Paris, "Paris Climate Action Plan," 2018, https://cdn.locomotive.works/sites/5ab410c8a2f42204838f797e/content_entry5ab410faa2f42204838f7990/5ab41171a2f422048d8f5a9c/files/Paris_Climate_Action_Plan.pdf?1562248411.

→ Many of the youth interviewed indicated that they were open to outreach and collaboration with local government and would welcome new coalitions or partnerships.

As discussed, CAPs already incorporate many of the issues that youth care about, with a few outliers worthy of further study. This research indicates that both cities and youth are focused on key issues related to fossil fuel elimination/reduction, stakeholder engagement, climate/social justice, education, and government policy. However, youth would like to see cities do more around climate/social justice and stakeholder engagement. Stakeholder engagement is a vital element in improving the sustainability of any climate policies by increasing the quality of actions and initiatives and their acceptance amongst stakeholders. In particular, youth advocate for their inclusion as a key partner in developing climate plans for the future. This is an area of opportunity for the CAPs to better account for youth demands.

CAPs are well-positioned to address youth's city- and/or regional-specific needs. City- and/or regional-specific issues are important to youth in city planning and messaging. While CAPs, as planning documents, may not be the best avenue for communicating with youth, CAPs are able to address regional needs as they apply to youth groups. While a collection of groups are internationally or nationally focused, some youth groups operate at a regional or local level and look to their cities to drive climate action. For example, one of Baltimore Beyond Plastic's principles is "work with other organizations in order to help pass legislation that is environmentally centered," specifically in Baltimore and the surrounding area.[109] Even for decentralized chapter-based groups like Fridays for Future the regional needs between chapters can greatly differ, as expressed by the Fridays for Future Pakistan's lead organizer, who adapted the group's namesake weekly protests into weekly education sessions throughout Pakistan to promote climate literacy. In an interview, he also cited the challenges of different religious beliefs and gender equity as it relates to generating grassroots momentum in his country.[110] While no Pakistani

> **KEY MOVE 9:** Youth and inter-generational equity
>
> As rangatahi, we bring our unique perspective on climate change. We are living in uncertain times with responsibilities to te taiao (the environment), our tūpuna (ancestors) and those who will follow.
>
> - Auckland Climate Action Plan

cities have generated a CAP, the regional focus of a CAP would allow for a localized approach, addressing hyper-regional issues such as religion, climate literacy, and gender equity in a way that youth groups alone currently cannot. Not only are CAPs well-positioned to address youth's regionally specific needs, in a few cases, cities are already building this connection into their CAPs.

Several C40 member cities are successfully engaging youth in climate planning and can serve as a positive example for other cities. Most notably, the Auckland CAP provides an explicit example of a city action centered on youth and inter-generational equity, detailing plans to implement educational programs, encourage behavior changes, and provide skill-building opportunities to enable the next generation of leaders. It is also worth noting that the Auckland CAP integrates Maori language, extending the inclusion not just to youth, but also to indigenous people.[111] Rio de Janeiro, as well, has a goal within its CAP to educate youth for resilience, focusing on education related to climate change, disaster preparedness, personal defense, and sustainable consumption and resource efficiency.[112] Los Angeles is also taking steps to better incorporate youth as part of its commitment to diverse stakeholder engagement. Mayor Garcetti recently formed a Youth Council for Climate Action, comprised of students between the ages of 16 and 22, to "help influence decisions and raise awareness around climate action, encourage more young people to get involved, and eventually kick off a coordinated campaign with the Mayor's Office to address climate change."[113] Further, both Paris and Washington DC also detail in their CAPs the pathways they have created to engage multiple stakeholders in their communities via the formation of youth councils and commitments to increasing climate education in public

[109] Baltimore Beyond Plastic, "Our Work - Baltimore Beyond Plastic," accessed April 10, 2020, http://www.bmorebeyondplastic.org/our-work.html.
[110] Kathryn Homa, "Interview with Youth Representative from Fridays for Future - Pakistan" (Phone, 2020).
[111] Auckland Council, "Te Tāruke-ā-Tāwhiri."

[112] City of Rio de Janeiro, "Resilience Strategy of the City of Rio de Janeiro."
[113] Office of Los Angeles Mayor Eric Garcetti, "Mayor Garcetti Convenes Inaugural Meeting of Youth Council for Climate Action," September 30, 2019, https://www.lamayor.org/mayor-garcetti-convenes-inaugural-meeting-youth-council-climate-action.

schools.[114] These CAPs and city examples provide a potential benchmark for future CAPs and present important opportunities for cities as they explore involving youth in their climate action planning. C40 also recently launched a Global Youth Initiative, which seeks to bring together leaders of climate movements from all over the world to work with mayors. This can serve as an important resource for C40 member cities wishing to further engage with youth.

> "It is people who push local policymakers, which then leads to a momentum that then reaches the national and international level."
>
> - Interviewee, Earth Guardians

Many of the youth interviewed indicated that they were open to outreach and collaboration with local government and would welcome new coalitions or partnerships. When asked in interviews, many youth group representatives indicated that they wanted to engage with the local government. Several said that they felt local government was an effective actor to move the climate agenda forward.[115] A youth interviewee from Earth Guardians noted, "It is people who push local policymakers, which then leads to a momentum that then reaches the national and international level."[116] An interviewee from Youth Empower believes there is space for more collaboration between youth and their representatives, specifically with members that are not voting age and cannot have a say in government through traditional voting.[117] Several groups are already working in some capacity with state and/regional policymakers, such as Our Climate with New York State. These groups, and others, seemed eager to engage at the city level, as long as it was authentic.[118] This appears to be the case across various regions and cultural contexts. For example, a youth interviewed from Green Generation Initiative (GGI) spoke about how there is an increasing space for young people in Africa to collaborate with both local and federal government actors, as well with major global players such as the United Nations (UN) and the World Bank.[119]

Key Findings – Challenges

→ Some demands can be addressed universally, such as climate/social justice and fossil fuel reduction/elimination, but the specifics of how to engage need to be determined at a regional level.

→ The level and ability of youth to engage with government varies depending on country and/or cultural context.

→ CAPs, as a planning document by design, are not a good mechanism to detail current or past action, which is something that needs to be visible to youth.

→ CAPs address issues as they apply to direct goals, whereas youth are often asking for general commitments and acknowledgement of key issues.

As discussed, the theme analysis indicates that youth broadly care about issues like fossil fuel elimination/reduction, stakeholder engagement, climate/social justice, education, and government policy. These themes are quite broad and should be addressed universally. **However, the specifics of how to engage with youth need to be determined at a regional level.** For instance, climate justice is a universal theme shared by both cities and youth around the world, but at a local and/or regional level, these themes could look very different. For Nosotros Por La Tierra, climate justice is ensuring the native peoples in the Maya Forest are not dispossessed.[120] For the Australian Youth Climate Coalition (AYCC) it is respecting the leadership of the Aboriginal and Torrest Trait Islander people.[121] In these and in other cases, youth demands are inherently local.

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[114] City of Paris, "Paris Climate Action Plan"; District of Columbia, "Sustainable DC 2.0 Plan," 2019, http://www.sustainabledc.org/wp-content/uploads/2019/04/sdc-2.0-Edits-V5_web.pdf.
[115] Cole, "Interview with Youth Representative from Earth Guardians"; "Interview with NY US Youth Climate Strike," 2020; Alyssa Blumenthal, "Interview with Youth Representative 2 from SwitchON Foundation (India)" (Phone, 2020); Blumenthal, "Interview with Youth Representative 1 from SwitchON Foundation (India)"; Blumenthal, "Interview with Youth Representative from Northern Ireland Student Climate Network."
[116] Cole, "Interview with Youth Representative from Earth Guardians."

[117] Schroder, "Interview with Youth Representative from Women's March - Youth Empower."
[118] These groups did not provide detail on why they currently not engaging with city government.
[119] Willis Alala, "Interview with Youth Representative from The Green Generation Initiative (GGI)" (Phone, 2020).
[120] Mary Cristina Cole, "Interview with Youth Representative from Nosotros Por La Tierra" (Phone, 2020).
[121] Australian Youth Climate Coalition, "About AYCC."

For example, some demands such as "popularization of improved stoves" and "promotion of SODIS in Togolese schools"—both from the African group Jeunes Volontaires pour l'Environnement—are key issues for those youth, and are specific to the region.[122] Similarly, the Bolivian youth group Reacción Climática has a number of demands specific to Bolivia, including deforestation and the country's hydrocarbon reserves.[123] A regional analysis of the youth demands within this research sample was conducted in order to assess if there were any regional trends; unfortunately, the analysis did not demonstrate any trends that were statistically significant. This is a challenge for C40, in thinking about the messaging for youth and how to provide strategic guidance to cities.

The level and ability of youth to engage with cities varies depending on country and/or cultural context. There are unique parameters that affect youth climate groups in developing countries including age, culture, developed/developing context, heterogeneity of population, religion, education-level, and climate literacy. These factors can greatly affect and influence how youth engage with cities. For example, an interviewed youth representative from Fridays for Future Pakistan spoke about how civil disobedience is inherently dangerous in Pakistan, and how it is often not safe for women, which limits the modes of engagement for youth activists.[124] Others expressed concern around government corruption, truth, and accountability. One interviewee from Nosotros Por La Tierra stated, "We do not feel that we can trust the government to tell the truth. This is mostly because when invited to speak with government leaders they give information that is not backed up with official or public documentation."[125] Similarly, a youth interviewed from Klima Action Malaysia spoke about the massive corruption and internal issues within Malaysia and how that has impacted their organizing strategies.[126] These are important challenges for youth that C40 should consider when assessing how to guide cities on climate action planning.

CAPs, as a planning document by design, are not a good mechanism to detail current or past action, which is something that needs to be visible to youth. CAPs detail actions as they relate to future planning and implementation.

Youth groups, in comparison, do not have dedicated or standardized planning documents and express their demands in a variety of past, present, and future tenses. While most youth demands are written in the future tense, youth groups present a more significant variety of tenses compared to cities, with 42% of demands expressed in present tense. Of the 21 CAPs reviewed, only one city chose to frame a handful of actions using the present tense, while the remainder all focused on future actions.[127] As an example of a youth demand expressed in the present tense, Sunrise Movement provides the declarative unifying principle, "We stand with other movements for change. Stopping climate change requires winning and holding power at every level of government."[128] Some youth groups' demands come in the form of a past action that aligns with their purpose such as the Australian Youth Climate Coalition, which cites their #StopAdani Campaign as a key action taken to advance their goal of "shifting the Politics to Move Australia Beyond Coal."[129]

As CAPs are inherently forward-looking, these documents may not be the best mechanism by which to communicate with youth, who detail their future demands in combination with their own past and present accomplishments in relation to their principles. It is important to note that there are other C40 programs, guidance and resources that may be better suited. For example, a more suitable method could be the C40 Declarations—a set of climate actions that cities commit to. These actions include zero waste, good food, clean air, green and healthy streets, and net zero carbon buildings.[130] Within these Declarations, there are details on both what cities have done so far and also on what actions cities will take, with references to where these actions are being laid out. This sort of context may be better suited for communicating quickly to youth about past and current actions.

CAPs address issues as they apply to direct goals, whereas youth are often asking for general commitments and acknowledgment of key issues that city climate action planners likely find to be assumed. Central to the CAP Framework, C40 mandates that cities must consider both adaptation and mitigation strategies in an integrated way by setting out an evidence-based and inclusive plan to combat climate change.[131] Using the C40 definitions of adaptation and mitigation, 57% of youth demands could not be categorized into

[122] Jeunes Volontaires Pour l'envirennement, "JVE-INTERNATIONAL," accessed March 21, 2020, http://jve-international.net/.
[123] Reaccion Climatica, "Climate Reaction - Get Informed."
[124] Homa, "Interview with Youth Representative from Fridays for Future - Pakistan."
[125] Cole, "Interview with Youth Representative from Nosotros Por La Tierra."
[126] Karl Knotoff, "Interview with Youth Representative from Klima Action Malaysia" (Phone, 2020).

[127] City of Hong Kong, "HONG KONG'S CLIMATE ACTION PLAN 2030+," 2017, https://www.enb.gov.hk/sites/default/files/pdf/ClimateActionPlanEng.pdf.
[128] Sunrise Movement, "Our Principles."
[129] Australian Youth Climate Coalition, "About AYCC."
[130] C40 Cities, "Climate Action to Address the Climate Emergency," n.d.
[131] C40 Cities, "Climate Action Planning Framework," 2018, www.c40.org/other/deadline_2020.

either definition, as youth group demands often ask for commitments related to structural or governance changes that cannot be mapped directly to either measure. In this sense, the CAP Framework encourages cities to plan their documents around these definitions by building goals to advance mitigation and adaptation measures. In contrast, youth are largely focused on fundamental acknowledgement of issues not always related to climate change directly. An example of a demand related to governance may be found in Extinction Rebellion, who demands that "government must tell the truth by declaring a climate and ecological emergency, working with other institutions to communicate the urgency for change."[132]

Youth group demands skew towards requesting visibility and awareness of fundamental issues as they relates to each theme. Regarding stakeholder engagement, youth demands trend towards suggesting a broader, more specific group of stakeholders. With relation to climate justice, youth demand that actions be taken to ensure that climate change not disproportionally affect susceptible communities. Lastly, for education, youth at a high-level call for more inclusive education and greater public awareness of the effects of climate change. These top three themes themselves include very few mitigation or adaptation measures, further supporting that youth groups are focused on fundamental issues that city planners may consider the unspoken yet understood foundation of a Climate Action Plan. In the context of a CAP, some cities might choose to re-stipulate general principles and commitments, even on issues that may seem fundamental to climate action planning. Similar to the previous finding, a more suitable program to address awareness of general commitments may be C40 Declarations.

4. Communication Approaches

Key Findings

→ The analysis suggests that youth often speak with an urgency and vigor not found in most CAPs, which may not be easily adapted or appropriate for an outward facing city planning document.

→ CAPs more often use specific language that outlines target dates and amounts, while there is evidence that youth may prefer more accessible, concise, and general language that implies commitment.

→ While CAPs could use more accessible and concise language, there are likely better platforms for communication with youth. As CAPs are intended as planning documents and do not represent a city's full timescale of climate actions, there are other channels for cities and C40 to address youth demands in a more meaningful way.

Below are some communication methods cities may want to consider either incorporating into their CAPs or acknowledging when speaking more generally with youth.

Youth speak with an urgency and vigor not found in most CAPs, which may not be easily adapted or appropriate for an outward-facing city planning document. Youth groups are known to be highly passionate stakeholders of climate action, which extends not only to their activities but also to their language choice. Youth are four times as likely to use demanding verbs such as *need*, *want*, and *demand* when describing their goals. Youth, as well, are more likely to cite urgency and immediacy in relation to their demands, using derivatives of words such as *emergency*, *crisis, urgent, now,* and *immediate.* The US Youth Climate Strike provides an example of strong language that utilizes demand verbs as well as denotes urgency in their statement, "We demand a comprehensive environmental justice-centered education plan that will greatly expand the curriculum about the climate crisis and its effects." It must be noted as well that some youth groups even call for a paradigm shift and socialization of resources, using words such as *revolution* and *imperialism* in their demands.[133] While CAPs and youth groups both use derivatives of the word *safety*, youth often use *safety* in terms of concern

[132] Extinction Rebellion Youth, "About XR Youth - The Young Voice of the Rebellion."
[133] US Youth Climate Strike, "Platform"; TierrActiva Peru, "About TierrActiva Peru," 350.org, accessed April 10, 2020, https://world.350.org/tierractivaperu/que-es-tierractiva/; Climaximo, "Glossary of Climate Activism - Climax," accessed March 21, 2020, https://climaximo.wordpress.com/2017/03/30/glossario-do-ativismo-climatico/;

Fridays for Future, "CHARGING A YOUTH-DRIVEN DECARBONISER REVOLUTION," 2019; TierrActiva Peru, "Climate Justice and Intersectionality," 350.Org, accessed April 10, 2020, https://world.350.org/tierractivaperu/justicia-climatica-e-interseccionalidad/.

and lack of surety about the future. One example is from the Pacific Island Students Fighting Climate Change youth group in their statement, "I want to live in a future where I feel safe."[134] In comparison, CAPs address *safety* as it relates to planning safe housing, transportation, disaster relief, and urban spaces. Lastly, youth groups more often demand acknowledgment and action on fundamental human rights and inclusion as they relate to both climate and non-climate issues. In contrast, cities often discuss rights as they directly apply to accessible energy, air quality, and city resources.[135] These differences in language use and frequency suggest that some topics such as safety, human rights, and the severity of climate change are central to youth's view of the problem, though they are not directly addressed in CAPs.

While youth express more urgency in their demands than cities do in their CAPs, there is some meaningful overlap in verb usage, denoting common language to express actions. **This indicates that youth groups and CAPs have some common ground in relation to language use, which CAPs may want to leverage when speaking with youth.** When verbs were mapped and compared across cities and youth groups, it was found that there were 90 verbs in common between CAPs and youth group demands, accounting for approximately 23% of the total verbs used. Cities may want to explore using language that youth themselves utilize when speaking about climate action. These verbs can be considered a collection of words that youth find accessible and familiar based on their own usage.

CAPs more often use specific language that outlines target dates and amounts, while there is evidence that youth may prefer more accessible, concise, and general language that implies commitment. When evaluating city actions and demands, cities use metrics such as target dates or specific quantities four times as frequently as youth. An illustrative example of comparable city and youth demands may be found

between London's CAP, stating that "London will be a zero carbon city by 2050, with energy efficient buildings, clean transport and clean energy," detailing the amount of reduction and year by which this goal will be met, and international youth group Earth Guardian's demand for "an immediate and rapid shift to renewable energy."[136] It must be noted that some youth groups frame all or some of their demands in terms of targets, suggesting that they have adopted target language as a means of matching messaging found in planning documents.[137]

Despite some outliers, the general youth tendency towards concise language is supported by interviews, where interviewees were asked to compare statements from a CAP with parallel statements from a youth group's central demands. When asked to evaluate the following statement, "*Develop a pathway to deliver an emissions neutral city by 2050 at the latest*" from the Melbourne CAP and "*A complete just transition away from the fossil fuel economy*" from the youth group Zero Hour, several youth chose the second phrase.[138] For example, the youth activist interviewed from Fridays for Future Portugal preferred Zero Hour's statement because it seemed "urgent and more concise."[139] The statement from the Melbourne CAP, according to the youth, was more technical and felt like something out of a brochure.[140] While not always referring to the same phrases, several interviewees chose statements that they felt were effective because they were concise and accessible.[141,142] It must be noted that a few youth in emerging countries in the Middle East and Southern Asia chose city statements with targets because they felt they were more tangible and achievable for their contexts.[143] While there is some variation in what messaging appeals to youth, there does appear to be a preference for concise, accessible language that incites urgent action. Misión Planeta, a youth group based in Mexico, dedicates a demand to the importance of effective communication of climate advances and solutions "in a simple and objective way."[144] As CAPs are meant to be planning

[134] Pacific Island Students Fighting Climate Change, "Campaign - Pacific Island Students Fighting Climate Change," accessed March 21, 2020, https://www.pacificclimateresistance.org/campaign.
[135] City of Barcelona, "Climate Plan 2018-2030," 2018, https://cdn.locomotive.works/sites/5ab410c8a2f42204838f797e/content_entry5c8ab58 51647e100801756a3/5c8bf1b11647e10080175cb2/files/Bcn_Climate_Plan.pdf?15526 75647; City of Los Angeles, "L.A.'s Green New Deal: Sustainable City PLAn"; City of Rio de Janeiro, "Resilience Strategy of the City of Rio de Janeiro."
[136] City of London, "London Environment Strategy," 2018, https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf; Earth Guardians, "Youth Climate Strikes."
[137] Zero Hour, "Letter to Politicians"; Extinction Rebellion Youth, "About XR Youth - The Young Voice of the Rebellion."
[138] City of Melbourne, "Climate Change Mitigation Strategy to 2050: Melbourne Together for 1.5°C," 2015, https://cdn.locomotive.works/sites/5ab410c8a2f42204838f797e/content_entry5ab410f

aa2f42204838f7990/5ab562aca2f4220acf45cfdb/files/climate-change-mitigation-strategy-2050.pdf?1553076997.
[139] Homa, "Interview with Youth Representative from Fridays for Future - Portugal."
[140] Homa.
[141] Homa; Blumenthal, "Interview with Youth Representative from Northern Ireland Student Climate Network."
[142] Taveras, "Interview with Youth Representative from Our Climate"; Homa, "Interview with Youth Representative from US Youth Climate Strike - New York Chapter."
[143] Blumenthal, "Interview with Youth Representative 1 from SwitchOn Foundation (India)"; Blumenthal, "Interview with Youth Representative 2 from SwitchON Foundation (India)"; Homa, "Interview with Youth Representative from US Youth Climate Strike - New York Chapter"; Kathryn Homa, "Interview with Youth Representative from Fridays for Future Azerbaijan," 2020.
[144] Mision Planeta, "Divulgación Viral," accessed February 18, 2020, http://www.misionplaneta.org/2018/04/13/divulgacion-viral/.

documents and target setting is a necessary tool to communicate goals, cities may opt for other communication channels to address youth's usage of and preference for concise and accessible language as it applies to climate action. Depending on the city context, CAPs may be able to adopt stronger language. In some contexts, however, strong language may not be appropriate for an external-facing planning document**. While CAPs could use more accessible and concise language and communicate their actions in terms** **of commitments, there are likely better platforms for communication with youth.** As CAPs are intended as planning documents, there are other means for cities and C40 to address youth demands in a way youth will find more meaningful. For example, the C40 Declaration Program may be better suited to address youth groups' preference towards concise and accessible language. Regardless, cities should understand youth's use of and preference for strong language that acknowledges the severity of climate change's effects.

Conclusions and Recommendations

Below are conclusions, based on the research findings, and connected recommendations for C40 to consider. These seek to help C40 provide guidance to cities on how to best incorporate youth movement demands in city climate action planning, both within CAPs and via other methods.

Conclusion 1: Youth want to see more inclusive stakeholder engagement in climate action planning

For youth, desired stakeholder engagement extends beyond youth involvement—they are calling for racial, economic, and gender justice and inclusion. Their desire to involve more stakeholders is tied to their view of social issues and climate justice. Youth demands are specific, expansive, and often locally-focused in the stakeholders they wish to include in climate action planning. Cities, on the other hand, often refer to stakeholders more broadly as *communities* or *citizens*. Within CAPs, equality and inclusion is discussed in broad terms.

Recommendation 1a: Consider updating the CAP Framework to require a stakeholder engagement strategy that explicitly calls for inclusion of youth in CAP stakeholder discussions

C40 should explore updating the CAP Framework to encourage cities to include a section on youth inclusion in Pillar 1.1.2: *Targeted Engagement and Consultation with Stakeholders*. Currently, Pillar 1.1.2 states that it is essential that a CAP be "informed by consultation with key government, business and civil society stakeholders (including the communities which are directly impacted by climate change)" without much specificity on which stakeholders cities should include. C40 does provide a few examples of what cities can do beyond this essential criteria, which include building a stakeholder engagement strategy, generating reports of community or stakeholder engagement, issuing pledges, or collecting letters of support from other levels of government.[145] C40 may want to broaden what they deem essential and require a stakeholder engagement strategy that specifically includes youth, as well as other groups youth care about. Youth show an immense interest in collaboration, with a focus on multi-stakeholder dialogue, public awareness, education and capacity building, and networking.[146] In this sense, cities should set goals that aim to involve youth in these ways, perhaps via town halls, public seminars on climate issues, youth-run and community-driven workshops, and city-sponsored conferences.

Recommendation 1b: Set explicit targets on a more inclusive set of stakeholders

Mirroring the specificity that cities use to express their emission reduction targets, cities should aim to use a similar format for stakeholder engagement target setting. They should list a more expansive and inclusive range of stakeholders and include target dates and amounts where applicable. This will not only signal to youth that cities care about engaging the same groups, but will also ensure that goals as they apply to these communities are prioritized and acted on in a specified timeframe. While no CAPs currently set expansive targets for the range of stakeholders that youth prioritize, some cities have meaningful examples of target setting related to social justice and stakeholder engagement. Examples include:

- **Los Angeles:** "End street homelessness by 2028" and "Reach 2 million Angelenos through outreach, education, and training programs by 2025";[147] and
- **Seoul:** "Create a culture where citizens voluntarily care for forests and streams: 130,000 green activists."[148]

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[145] C40 Cities Climate Leadership Group, "Climate Action Planning Framework."
[146] Jeunes Volontaires Pour l'environnement, "JVE-INTERNATIONAL"; Misión Planeta, "Clubs Vecinales," April 14, 2018, http://www.misionplaneta.org/2018/04/14/clubs-vecinales/; South African Youth Centre for Climate Change (SAYCCC), "Durban Youth For Climate Action"; "Climate Reaction," accessed April 10, 2020, https://reaccionclimatica.webs.com/; China Youth Climate Action Network, "China Youth Climate Action Network (CYCAN)," CAN International, accessed March 21, 2020, http://www.climatenetwork.org/profile/member/china-youth-climate-action-network-cycan; African Youth Initiative on Climate Change, "About AYICC ~ AYICC KENYA"; Baltimore Beyond Plastic, "Baltimore Beyond Plastic - Home," 2020, http://www.bmorebeyondplastic.org/; Sunrise Movement, "Our Principles."
[147] City of Los Angeles, "L.A.'s Green New Deal: Sustainable City PLAn."
[148] Seoul Metropolitan Government, "Promise of Seoul: Taking Actions against Climate Change," 2015, https://ccacoalition.org/en/resources/promise-seoul-taking-action-against-climate-change.

Recommendation 1c: Encourage cities to connect climate issues to broader social justice initiatives and provide more specificity in the CAP Framework on inclusivity best practices

In discussions about equality and inclusion, CAPs should either be more explicit in how racial, economic, and gender equality are being addressed, or should reference other city documents focused around these social issues as benchmarks. The CAP Framework is very clear in its guidance for cities to create an *inclusive* and *integrated* plan, but there is little guidance on how to ensure this is accomplished, or on how cities should communicate inclusivity and integration. Youth are specific and wide-ranging in the stakeholders they envision as part of successful engagement and see climate action as incomplete without social justice as a key consideration. Greater specificity in the Framework as to how cities can connect social and climate justice issues to their goals might help cue cities to make connections between their social justice and climate actions. Additional guidance may come in the form of a more thorough description in Section 02: *Key Components of Climate Action Planning* of the CAP Framework, or may merit a supplemental document that provides best practices and benchmark examples of cities that make these connections successfully.

Conclusion 2: Youth view education as a key tool for climate action, a topic that goes largely undiscussed by cities in CAPs

Out of the 28 youth groups surveyed, twenty groups mentioned education in at least one of their demands, whereas only 7 of the CAPs reviewed have goals that mention education. This is a considerable gap in what youth care about and what cities are including in climate action planning. Youth demands related to education are wide-ranging and include specific demands, such as reforming K-12 school curriculums to include climate justice, to broader calls for increased climate literacy and public awareness of the climate crisis and its systemic roots.[149] In addition to demands around more formal education improvements, youth are also calling for improvements in community education offerings around climate change and skill-building opportunities. Youth view education as a key tool for climate action; cities can address this demand by exploring how to better incorporate climate-related education in future climate action planning.

Recommendation 2a: Understand how member cities currently engage with their education systems

As climate-related education actions are less prevalent in CAPs, more research is needed to determine how cities can best incorporate education-related demands. Formal education curriculums are often determined at a state level, or perhaps federal level, so it is important to understand the specific context for each city in regards to how they offer and provide education to citizens. C40 can then asses how to best provide cities with guidance. C40 should also look into current city actions that address education as it relates to climate action as a point of reference. Examples include:

- **Washington, DC:** "Educating students about the environment" and "Educating community members about sustainability";[150]
- **Rio de Janeiro:** "Educate the Youth for Resilience," focusing on education related to climate change, disaster preparedness, personal defense, and sustainable consumption and resource efficiency;[151] and
- **Barcelona:** "Cultural action for the climate: Fostering climate culture and promoting public training in reducing emissions and adapting to climate change."[152]

These examples broadly address what youth are calling for in regard to education. For example, Washington, DC's city action matches youth calls for inclusion of climate change in school curriculums, and Rio de Janeiro's action speaks to youth demands for increasing youth knowledge and skills around resilience and adaptation to climate change threats. However, cities should

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[149] US Youth Climate Strike, "Platform"; Reaccion Climatica, "Climate Reaction - Get Informed"; TierrActiva Peru, "Climate Justice and Intersectionality."
[150] District of Columbia, "CLIMATE READY DC: The District of Columbia's Plan to Adapt to a Changing Climate."
[151] City of Rio de Janeiro, "Resilience Strategy of the City of Rio de Janeiro."
[152] City of Barcelona, "Climate Plan 2018-2030."

specifically look into how they can enhance education around climate justice, as this appears to be a specific demand from several youth groups.[153]

Recommendation 2b: Explore how C40 can provide educational resources to youth directly

Youth climate activists want to increase general awareness around climate change, and particularly the urgency of the climate crisis, from local communities to policymakers. They recognize education as a key tool to empower and mobilize people to take action around climate change. C40 should explore how to provide climate change educational resources to youth directly. One possible idea is to design a climate change curriculum for youth that is free and easily accessible. This should be developed and designed in partnership with youth. This could be offered virtually or as a workshop in partnership with cities and/or academic institutions. As an example, the New York State Master Teacher program (a network for schoolteachers) sponsors Youth Climate Summits for high school students across the state.[154]

Conclusion 3: Planning documents by design, CAPs may not be good mechanisms to succinctly communicate youth's desire for visibility into past action and progress

The three areas in which CAPs are not well positioned to capture youth's desires are:

1. Visibility into past action and progress;
2. Transparency around city commitments; and
3. Consistency and accessibility of language around climate action.

Given this, there are likely better platforms and channels for cities and C40 to communicate with youth as it relates to these three areas.

Recommendation 3a: Incorporate the C40 Declaration Program more fundamentally into each city's C40 profile

The C40 Declaration Program is well suited to address the three areas in which CAPs fall short on youth communication. Through the Declaration Program, C40 clearly indicates past action and progress of cities towards goals, provides transparency on commitments, and finally, creates resources with accessible language around climate action.[155,156] These resources are invaluable for increasing communication with youth climate groups and should therefore become a key aspect of member city profiles, both on the C40 website and on city climate action websites. This centralization of materials will make city declarations more accessible to youth and other stakeholders that wish to learn more about their city's actions. Linking declarations to CAPs and other relevant materials will also connect past, current, and future activities, providing youth and others with more comprehensive resources discussing how cities are addressing climate change. Additionally, C40 should consider expanding its Declaration Program to address other climate actions not already highlighted, with an emphasis on key climate actions that youth prominently advocate for, including education, stakeholder engagement, and climate/social justice.

Recommendation 3b: Explore leveraging other communications channels and forums for engagement with youth

While more research should be done to determine the most effective modes of communication outside of city declarations, there are a few potential starting points. Cities may explore creating and administering platforms (i.e., webinars, discussion forums, youth councils, etc.) for engagement between local government representatives and interested stakeholders, including youth groups. The US Environmental Protection Agency has developed a useful best practices document for incorporating youth perspectives on climate change, which includes a specific recommendation to "provide trainings and grants for organizations to

[153] Zero Hour, "Letter to Politicians"; Australian Youth Climate Coalition, "AYCC 2018 IMPACT REPORT WE'RE FIGHTING FOR CLIMATE JUSTICE"; US Youth Climate Strike, "Platform"; Italian Climate Network, "About Us," accessed March 21, 2020, https://www.italiaclima.org/en/about-us/.
[154] SUNY, "The New York State Master Teacher Program ," accessed May 2, 2020, https://www.suny.edu/media/suny/content-assets/documents/teachny/Master-Teacher-Handout.pdf.
[155] C40, "Green and Healthy Streets Fossil-Fuel-Free Declaration -- Planned Actions to Deliver Commitments," n.d.
[156] C40, "HOW CITIES ARE DRIVING THE FUTURE WE WANT: City Progress Towards Meeting Green and Healthy Streets Declaration Commitments," n.d.

employ storytelling and other youth engagement strategies" via webinars and in-person training sessions.[157] Aligned with this recommendation, cities may look to fund or sponsor the continued development and education of youth on climate issues.

Cities may also choose to emulate youth conferences such as the Youth Climate Summit held by the UN in 2019, which included programming such as roundtables with youth, intergenerational town halls, youth-led workshops, industry-sponsored seminars, social media management classes, and climate science talks.[158] This summit was viewed as successful by youth due to the wide range of topics discussed as well as the focus on youth involvement, empowerment, and skill building. Cities may also explore integrating or incorporating youth voices in public events generally marketed towards adults such as The Night of Philosophy & Ideas, hosted by the Brooklyn Public Library in February 2020, which included a youth-led panel on teenage activism as a catalyst for climate and social justice alongside frontier work by scientists, economists, and social science researchers.[159] Los Angeles provides an additional example of engagement via the Mayor's Youth Council, a one-year program for LA high school students that works to empower youth to advocate for causes relevant to the needs of their communities.[160]

C40 may also look to other communications channels to increase their familiarity with youth activists. A strong example of an organization interfacing directly with youth on social media successfully is UNICEF (@unicef), which has partnered with prominent activist Greta Thunberg through a personalized link that directs to the UNICEF website. UNICEF has also dedicated an archived collection of stories called "Youth Voices" to highlight youth activists' perspectives from around the world.[161,162] C40 may explore similar social media engagement opportunities through strategic partnerships with high-profile youth groups and individuals, social media takeovers by youth, and youth activist features.

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[157] Samantha Shattuck, "Youth Perspectives on Climate Change Best Practices for Youth Engagement and Addressing Health Impacts of Climate Change," July 2018, https://www.epa.gov/sites/production/files/2018-10/documents/nejac_youth_perspectives_on_climate_change_report.pdf.
[158] United Nations, "Youth Climate Summit Agenda," UN.org, 2019, https://www.un.org/en/climatechange/assets/pdf/Youth_Summit_Agenda.pdf.
[159] Brooklyn Public Library and Cultural Services of the French Embassy, "A Night of Philosophy and Ideas," 2020, https://nightofphilosophyandideas.com/schedule.
[160] Office of Los Angeles Mayor Eric Garcetti, "Mayor's Youth Council," lamayor.org, 2018, https://www.lamayor.org/MYC.
[161] UNICEF, "UNICEF (@unicef) Instagram Photos and Videos," Instagram.com, 2020, https://www.instagram.com/unicef/.
[162] UNICEF, "Personalized UNICEF Link for Greta Thunberg," unicef.org, 2020, uni.cf/greta-t.

Appendices

Appendix A: Youth Interview Guide (English)

Introduction

Hi [INTERVIEWEE FIRST NAME]. This is [INTERVIEWER FIRST NAME] from Columbia University, following up on my email. Is now still a good time?

If NO: Is there a better time for me to call? [RECORD TIME]

If YES: Great. Would you mind if I record our conversation for note taking purposes only?

      If YES: Thank you. [START RECORDING]

      If NO: Not a problem. Just bear with me while I take some notes as we talk.

Background

To start, I want to make sure that I have a good sense of your role as a youth climate activist.

1. Could you describe for me your involvement with [YOUTH GROUP NAME] and how long you've engaged with them?
2. What drew you to [YOUTH GROUP NAME]?
3. Where are you geographically based?

Government and Sector Engagement

Thank you! Now, I'd like to ask you about how your organization views the role of different actors in climate adaptation and mitigation.

1. What actors do you see moving the climate agenda forward most effectively? *Interviewer prompts: Local government, UN, industry, etc.*
2. In general, does [YOUR ORGANIZATION] feel like local governments are listening to youth on climate issues?
    a. How do you feel *your* local government has engaged with you in climate planning?
    b. Have you noticed any changes in local government engagement over time?
3. How would you like local government to act on [YOUTH GROUP NAME] demands?
4. Have you or your [YOUTH GROUP NAME] peers tried to work directly with local government representatives?
    a. If so, in what ways? *Interviewer prompts: Demonstrations, town halls, working groups, etc.*
    b. If not, why not? *Interviewer prompts: Culture, lack of (perceived or actual) accessibility to government leaders, etc.*
5. [OPTIONAL] How do you see *your* country's government engaging with climate issues?
    a. Have you noticed any changes in national government engagement over time?
6. [OPTIONAL] How do you see private companies engaging with climate issues?
    a. Have you noticed any changes in private company engagement over time?

Messaging Strategies

Before we wrap-up, I just want to test a couple statements with you to see how these city climate commitments resonate with you.

1. Which of these statements about greenhouse gas reduction speaks most strongly to you and why?
    - Develop a pathway to deliver an emissions neutral city by 2050 at the latest (**source:** Melbourne CAP)
    - A complete just transition away from the fossil fuel economy (**source:** Zero Hour)
    - *Interviewer prompts: Meaningful words, specific targets*
2. Which of these statements about climate justice speaks most strongly to you and why?
    - Ensure energy welfare by sharing energy with underprivileged communities vulnerable to climate change (**source:** Seoul CAP)

- **Awareness, education,**
- Lobby for policy around health disparities stemming from environmental issues (**source:** Baltimore Beyond Plastic)
- *Interviewer prompts: Language choice, climate change specificity, responsible implementer*

Closing

This has been very helpful. I just have a couple closing questions. As I mentioned in my email, my classmates and I have been working with C40 Cities Climate Leadership Group, which has been advising cities across the world on how to develop city climate actions plans.

1. Were you familiar with C40 before my email?
2. May I share your contact information with C40 for future follow-up?
3. For reporting purposes, would you mind if we identified you by name, or by group, or would you prefer to remain anonymous?
4. Is there anything else you'd like to share with us or with C40 before we end?

Thank you so much for your time. It's been a pleasure talking with you and thank you for all of the important work that you do!

Introducción

Hola [INTERVIEWEE FIRST NAME]. Soy [INTERVIEWER FIRST NAME] de la Universidad de Columbia ¿Sigue siendo un buen momento para hablar contigo?

Si no: ¿Hay un mejor momento para que llame? [RECORD TIME]

En caso afirmativo: Excelente. ¿Te importaría si grabo nuestra conversación solo para tomar notas?

    En caso afirmativo: Gracias. [start recording]

    Si no: No te preocupes. Solo ten paciencia conmigo mientras tomo algunas notas mientras hablamos.

Antecedentes

Para comenzar, quiero asegurarme de que tengo un buen sentido de tu papel como activista climático juvenil.

1. ¿Podrías darnos una descripción de tu participación en [Name of organization] y cuánto tiempo llevas trabajando con ellos?
2. ¿Qué te atrajo a [Name of organization]?
3. ¿Dónde estás basado geográficamente y en qué región trabaja [Name of youth organization]?

Compromiso del gobierno y el sector

¡Gracias! Ahora, me gustaría preguntarte cómo ve tu organización el papel de los diferentes actores en la adaptación y mitigación del clima climático.

1. ¿Qué actores ves que avanzan la agenda climática de manera más efectiva? Indicaciones para el entrevistador: gobierno local, ONU, industria, etc.
2. En general, ¿siente [Organization name] que los gobiernos locales están escuchando a los jóvenes sobre cuestiones climáticas?
   a. ¿Cómo crees que tu gobierno local se ha comprometido con vosotros en la planificación climática?
   b. si. ¿Has notado algún cambio en el compromiso del gobierno local con el tiempo?
3. ¿Cómo te gustaría que el gobierno local actúe de acuerdo con las demandas de [Name of youth organization]?
4. ¿Tu o tus compañeros de [Name of Organization] han intentado trabajar directamente con representantes del gobierno local?
   a. Si es así, ¿de qué manera? Indicaciones para el entrevistador: manifestaciones, ayuntamientos, grupos de trabajo, etc.
   b. ¿Si no, porque no? Indicaciones para el entrevistador: Cultura, falta de accesibilidad (percibida o real) a los líderes gubernamentales, etc.
5. [Optional] ¿Cómo ves que el gobierno de tu país se compromete con los problemas climáticos?
   a. . ¿Han notado algún cambio en el compromiso del gobierno nacional con el tiempo?
6. [Optional] ¿Cómo ves a las empresas privadas interactuando con los problemas climáticos?
   a. . ¿Has notado algún cambio en el compromiso de las empresas privadas con el tiempo?

Estrategias de mensajería

Antes de concluir, solo quiero probar un par de declaraciones contigo para ver cómo te hacen sentir estos compromisos climáticos de la ciudad.

1. ¿Con cual de las siguientes frases sobre la reducción de gases de efecto invernadero estas mas de acuerdo?
   a. Desarrollar un camino para entregar una ciudad con emisiones neutrales para el año 2050 (fuente: Melbourne CAP)
   b. Una transición completa y alejada de la economía de los combustibles fósiles (fuente: Zero Hour)
   c. Indicaciones para el entrevistador: palabras significativas, objetivos específicos
2. ¿Cuál de estas declaraciones sobre justicia climática estas mas de acuerdo y por qué?
   a. Asegurar el bienestar energético compartiendo energía con comunidades desfavorecidas vulnerables al cambio climático (fuente: Seúl CAP)

    b. Cabildear por políticas en torno a las disparidades de salud derivadas de problemas ambientales (fuente: Baltimore Beyond Plastic)

    c. Indicaciones para el entrevistador: elección del idioma, especificidad del cambio climático, implementador responsable

Final de la entrevista

Esto ha sido muy útil. Solo tengo un par de preguntas para finalizar la entrevista. Como mencioné en mi correo electrónico, mis compañeros de clase y yo hemos estado trabajando con el Grupo de Liderazgo Climático de Ciudades C40, que ha estado asesorando a ciudades de todo el mundo sobre cómo desarrollar planes de acciones climáticas urbanas.

1. ¿Conocías C40 antes de mi correo electrónico?
2. ¿Puedo compartir tu información de contacto con C40 para un seguimiento posterior?
3. Para fines de informes, ¿le importaría si te identificamos por tu nombre o por grupo, o preferirías permanecer anónimo?
4. ¿Hay algo más que te gustaría compartir con nosotros o con C40 antes de que terminemos?

Muchísimas gracias por tu tiempo. ¡Ha sido un placer hablar contigo y gracias por todo el trabajo importante que haces!

Appendix C: Outreach Letter for Interviews

Option A: Outreach to Adult Organizers or General Email Addresses

Dear [ADULT ORGANIZER FIRST NAME],

My name is [INTERVIEWER FULL NAME] and I am a student in the Sustainability Management Program at Columbia University in New York City. My classmates and I are working with C40 Cities Climate Leadership Group to incorporate youth climate activist demands into city climate action planning. **We want to make sure your group's voice is included in this important effort.**

To help us understand how youth climate activists want to engage with and be heard by the local government, we would like to schedule a 15-30 minute interview with one of your youth representatives at their convenience. If desired, we are happy to keep this individual's responses anonymous. If you are not able to connect us or are not the right person to speak with, we would appreciate your connecting us with another [GROUP] representative.

Please feel free to reach out to me directly with any questions at [EMAIL] or [PHONE], and I look forward to hearing from you. Thank you for the important work you are doing every day, and for the extra time you are taking now to help us and C40.

Many thanks,
[INTERVIEWER FIRST NAME]

Option B: Outreach to Individual Youth Representatives

Dear [ACTIVIST FIRST NAME],

My name is [INTERVIEWER FULL NAME] and I am a student in the Sustainability Management Program at Columbia University in New York City. My classmates and I are working with C40 Cities Climate Leadership Group to incorporate youth climate activist demands into city climate action planning. **We want to make sure your voice is included in this important effort.**

To help us understand how youth climate activists like yourself want to engage with and be heard by local government, we would like to schedule a 15-30 minute interview with you at your convenience. If desired, we are happy to keep your responses anonymous. If you are not available or not the right person to speak with, we would appreciate your connecting us with another [GROUP] representative.

Please feel free to reach out to me directly with any questions at [EMAIL] or [PHONE], and I look forward to hearing from you. Thank you for the important work you are doing every day, and for the extra time you are taking now to help us and C40.

Many thanks,
[INTERVIEWER FIRST NAME]

Appendix D: Theme Definitions

Unique Theme	Applied Definition
Air pollution	A demand or action that refers to "the release of pollutants into the air that are detrimental to human health and the planet as a whole" in discussing air quality, emission reductions, or other related topics.[163]
Biodiversity	A demand or action in line with the Rio+20 consensus reached by United Nations Member States to protect and recognize the "intrinsic value of biological diversity, as well as the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its critical role in maintaining ecosystems that provide essential services."[164]
Buildings	A demand or action that discusses "creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation and deconstruction."[165]
Campaigning/canvassing	A demand or action that discusses working "in an organized and active way toward a particular goal, typically a political or social one." Campaigning and canvassing activities may include lobbying, protesting, and other organized demonstrations related to climate action and awareness.[166]
Carbon taxation	A demand or action that refers to "a fee imposed on fossil fuels, and other primary products (e.g., refrigerants), based on the amount of greenhouse gases (GHG) they emit," or refers to "tax credits for activities that remove GHGs from the atmosphere."[167]
Circular economy	A demand or action that discusses support for an economy based on the principles of "designing out waste and pollution, keeping products and materials in use, and regenerating natural systems."[168]
Climate/social justice	A demand or action that discusses the need to link "human rights and development to achieve a human-centered approach, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly."[169] References to climate justice include but are not limited to how climate change "has a disproportionate impact on communities of color and low income communities" and the actions that should be planned as a result.[170]
Climate migration	A demand or action that discusses addressing "large-scale human migration due to resource scarcity, increased frequency of extreme weather events, and other factors, particularly in the developing countries in the earth's low latitudinal band."[171]
Coastal resilience	A demand or action that discusses the importance of "building the ability of a community to 'bounce back' after hazardous events such as hurricanes, coastal storms, and flooding – rather than simply reacting to impacts."[172]
Consensus	A demand or action that promotes "a decision achieved through negotiation whereby a hybrid resolution is arrived on an issue, dispute or disagreement, comprising typically of concessions made by all parties, and to which all parties then subscribe unanimously as an acceptable resolution," specifically as it relates to scientific consensus and general public consensus on the severity of climate change.[173]
Consumption	A demand or action that refers to "human and human-induced transformations of materials and energy" such that these "materials or energy [are] less available for future use." Discussions of consumption are often tied to discussions of extractivism, and of the need for sustainably using natural resources, energy, and other environmental goods and services.[174]
Disaster relief	A demand or action that pertains to preparedness, response to and/or recovery from natural disasters (e.g. hurricanes, heat waves, droughts, and floods) due to climate change. For example, system readiness for mega-disasters, community preparedness and engagement, vulnerability assessments, and strategies to improve disaster recovery.[175]

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163 NRDC, "Air Pollution: Everything You Need to Know," accessed April 26, 2020, https://www.nrdc.org/stories/air-pollution-everything-you-need-know.

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171 John Podesta, "The Climate Crisis, Migration, and Refugees," Brookings, July 25, 2019, https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees/.

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173 Duhaime's Law Dictionary, "Consensus Definition," accessed April 26, 2020, http://www.duhaime.org/LegalDictionary/C/Consensus.aspx.

174 Paul C. Stern, "Toward a Working Definition of Consumption for Environmental Research and Policy," in *Environmentally Significant Consumption* (National Academies Press, 1997), 12–25, https://doi.org/10.17226/5430.

175 Geoff O'Brien et al., "Climate Change and Disaster Management - O'Brien - 2006 - Disasters - Wiley Online Library," Wiley Online Library, March 1, 2006, https://onlinelibrary.wiley.com/doi/10.1111/j.1467-9523.2006.00307.x.

Education	A demand or action that encourages formal education in line with the US Department of Education's mission to promote "student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access," as well as informal education via extracurricular activities and public awareness initiatives.[176] References include improving education broadly as it relates to social justice and inclusion, as well as promoting climate education with the goal of helping communities "understand and address the impact of global warming, encourage changes in their attitudes and behavior, and adapt to climate change-related trends."[177]
Employment	A demand or action that aligns with Sustainable Development Goal 8, which states that "sustainable economic growth will require societies to create the conditions that allow people to have quality jobs that stimulate the economy while not harming the environment."[178] References to employment include but are not limited to green jobs, income opportunities, skill development, and guaranteed jobs.
Extreme heat	A demand or action that discusses "weather that is much hotter than average for a particular time and place—and sometimes more humid, too as a result for climate change." Perceptions of extreme heat may vary based on location and pre-existing climate conditions.[179]
Financial divestment	A demand or action that discusses the "reduction of investment of assets which can serve financial, ethical, or political objectives," specifically as it relates to climate change.[180] References include but are not limited to divestment from fossil fuels and extractive industries, subsidies, and offsetting.
Flooding	A demand or action that addresses increased or amplified flooding events as a result of climate change, defined as "as any high flow, overflow, or inundation by water that causes or threatens damage," as a result of "flash, urban, river, or coastal flooding."[181]
Food and agriculture	A demand or action aligned with the United Nations' vision for sustainable food and agriculture, where "food is nutritious and accessible for everyone and natural resources are managed in a way that maintain ecosystem functions to support current as well as future human needs."[182]
Fossil fuel reduction/elimination	A demand or action that focuses on the reduction or elimination of carbon-based fuels in order to reduce greenhouse gas emissions (GHGs). It also includes the transition to renewable energy alternatives such as solar, wind and other non-GHG emitting sources, as well as energy efficiency measures.[183]
Government policy	A demand or action affirming that "climate change concerns should be integrated in all areas of public policy, particularly economic and social policies."[184] References include government policy at the local, regional, national, and international levels, addressing topics ranging from carbon taxation to inclusion and reparations.
Green infrastructure	A demand or action that refers to infrastructure implemented in an urban area to "further [enhance] urban resilience to multiple social, economic and environmental stressors." Green infrastructure "may refer to the trees in the city which provide the necessary 'green' benefits, while from an engineering perspective it may involve the integration of several technical approaches (like swales, green roofs, gardens and parks) applied to facilitate various environmental benefits."[185]
Green tech	A demand or action discussing the "design, commercialization, and use of processes and products that minimize pollution, promote sustainability, and protect human health without sacrificing economic viability and efficiency." Green tech may also be thought of as green engineering.[186]

[176] US Department of Education, "Federal Role in Education," 2020, https://www2.ed.gov/about/overview/fed/role.html.

[177] UNESCO, "Climate Change Education," UNESCO.org, 2019, https://en.unesco.org/themes/education-sustainable-development/cce.

[178] United Nations Sustainable Development, "Economic Growth," UN.org, accessed April 30, 2020, https://www.un.org/sustainabledevelopment/economic-growth/.

[179] United States Environmental Protection Agency, "Climate Change and Extreme Heat: What You Can Do to Prepare," 2016, https://www.epa.gov/sites/production/files/2016-10/documents/extreme-heat-guidebook.pdf.

[180] Land Trust Alliance, "Divestment and Socially Responsible Investment - Conservation in a Changing Climate," ClimateChange.lta.org, accessed April 30, 2020, https://climatechange.lta.org/divest-sri/.

[181] U.S. Global Change Research Program, "Floods," GlobalChange.gov, 2014, https://nca2014.globalchange.gov/highlights/report-findings/extreme-weather/content/floods.

[182] Food and Agriculture Organization of the United Nations, "Background | Sustainable Food and Agriculture | Food and Agriculture Organization of the United Nations," accessed April 26, 2020, http://www.fao.org/sustainability/background/en/.

[183] Michael I. Westphal, Jan Corfee-Morlot, and Rachel Spiegel, "4 Ways to Shift from Fossil Fuels to Clean Energy | World Resources Institute," World Resources Institute, 2019, https://www.wri.org/blog/2019/01/4-ways-shift-fossil-fuels-clean-energy.

[184] OECD, "Climate Change Policies: Policy Brief," OECD.org, August 2007, http://www.oecd.org/env/cc/39111309.pdf.

[185] Shikha Ranjha, "Green Infrastructure: Planning for Sustainable and Resilient Urban Environment," UN.gov, 2016, https://sustainabledevelopment.un.org/content/documents/95599_Ranjha_Green infrastructure_planning for sustainable and resilient urban environment.pdf.

[186] United States Environmental Protection Agency, "Green Engineering | US EPA," US EPA, accessed April 26, 2020, https://www.epa.gov/green-engineering.

Human health	A demand or action that addresses human health as defined by the US Health Resources and Services Administration as "health equity and improving health outcomes [as a means of] eliminating health disparities – differences in length and quality of life and rates and severity of disease and disability."[187] In some cases, references are made to the specific impacts of climate change on human health including but not limited to "temperature-related death and illness; air quality impacts; extreme events; vector-borne diseases; water-related illness; food safety, nutrition, and distribution; and mental health and well-being."[188]
Implementation	A demand or action that discusses implementation, defined as "translating the goals and objectives of a policy into an action," specifically as it relates to climate policies and goals.[189]
Land management	A demand or action that discusses land resources being put into good effect, encompassing "all activities associated with the management of land that are required to achieve sustainable development."[190]
Opposition	A demand or action that promotes a non-violent civil disobedience strategy and/or tactics as a way to protest climate change. These tactics may include blocking roads, disrupting transit, staging sit-ins, and other forms of peaceful political protest. References also include actions to oppose multinational companies and other institutions viewed as a threat to advancing the climate agenda.[191,192]
Plastics	A demand or action that aligns with the United Nations view that bans on single use plastics such as "plastic bags and Styrofoam items can effectively counter some of the symptoms of plastic overuse," and that "better waste management systems, along with circular thinking, can help achieve long-term impacts and better address the problem of plastics in the environment."[193]
Recycling	A demand or action that discusses the "collecting and processing [of] materials that would otherwise be thrown away as trash and turning them into new products."[194]

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[187] U.S. Health Resources, "Public Health," HRSA.gov, 2017, https://www.hrsa.gov/public-health/index.html.
[188] U.S. Global Change Research Program, "THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES," GlobalChange.gov, 2016, https://s3.amazonaws.com/climatehealth2016/high/ClimateHealth2016_FullReport.pdf.
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[193] United Nations Environmental Program, "Single-Use Plastic A Roadmap for Sustainability," United Nations Environmental Program 2018, 2018, https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf.
[194] US EPA, "Recycling Basics | Reduce, Reuse, Recycle," EPA.gov, 2020, https://www.epa.gov/recycle/recycling-basics.

Renewable energy	A demand or action that supports increased adoption of renewable energy, defined as energy "derived from natural processes (e.g. sunlight and wind) that are replenished at a higher rate than they are consumed."[195]
Reparations	A demand or action that discusses "rectification of past and ongoing harms," specifically related to marginalized communities.[196]
Socialization of resources	A demand or action that affirms the "importance of constructing a social system that provides comprehensive support for sustainability" via the socialization of vital environmental resources, with a focus on public takeover of private entities such as for energy resources and land management.[197] References also include a paradigm shift to a socialist economy.
Stakeholder engagement	A demand or action that focuses on stakeholder engagement as it relates to climate change mitigation, adaptation, commitments, and adaptation, affirming that stakeholder participation is "a critical means of ensuring ownership and quality of decision-making." Engagement, or *participation*, refers to "opening up official organizational processes to include relevant and interested stakeholders to take part in decision-making and problem solving," while *stakeholder* "refers to affected and interested individuals and organizations, both public and private."[198]
Transportation	A demand or action that discusses "making transportation cleaner and more efficient," such as through "solutions that put electric drive vehicles on the road and replace oil with clean domestic fuels."[199]
Waste management	A demand or action that refers to the collection, transportation and/or disposal of waste, including the recovery of generated waste for recycling or composting. It includes waste governance, policies, and strategies; for example, reducing municipal solid waste, increasing landfill diversion, exploring waste-to-energy conversion, and increasing recycling rates.[200]
Water management	A demand or action that broadly references water management and stewardship of watersheds, aquatic and marine ecosystems, and urban stormwater management. Specifically, demands or actions with this theme should align with Sustainable Development Goal 6, which "addresses the sustainability of water and sanitation access by focusing on the quality, availability and management of freshwater resources" including wetlands, rivers, aquifers and lakes, as well as with Sustainable Development Goal 16, which affirms that "marine protected areas need to be effectively managed and well-resourced and regulations need to be put in place to reduce overfishing, marine pollution and ocean acidification."[201]

[195] United Nations Economic and Social Council, "Specifications for the Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to Renewable Energy Resources," 2016, https://www.unece.org/fileadmin/DAM/energy/se/pdfs/comm25/ECE_ENERGY_2016_4.pdf.

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[201] UNEP - UN Environment Programme, "Supporting the Sustainable Development Goals and Water," unenvironment.org, accessed April 30, 2020, https://www.unenvironment.org/explore-topics/water/what-we-do/supporting-sustainable-development-goals-and-water.