Page 1: Overview

Q1
Local/Tribal Government
Broward County

Q2
County
Broward County

Q3
Key Staff Contact
Name: Jason Liechty
Title: Senior Environmental Project Coordinator
Email Address: jliechty@broward.org

Page 3: Greenhouse Gas Emission Mitigation Priority Action #1 (GHG Targets)

Q4
Is your local/tribal government advancing activities related to Mitigation Action #1? Yes

Page 4: Greenhouse Gas Emission Mitigation Priority Action #1 (GHG Targets)

Q5
Please indicate as to why you've been unable to advance activities related to Mitigation Action #1? Please select all that apply. 
Respondent skipped this question

Q6
What resources could assist you in advancing this action? 
Respondent skipped this question
Q7

Is your local/tribal government advancing Mitigation Action #1 through assessment/planning methods?

Yes

Q8

Provide a brief description of how Mitigation Action #1 is being advanced through assessment/planning methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County conducted operational GHG inventories for the years 2008-2020.

Community-wide GHG inventories were taken in 2007, 2008, 2010, and 2011-2014. The 2011-2014 inventory was reported to the Carbon Disclosure Project.

Broward County has released three Climate Change Action Plans, in 2010, 2015, and 2020.

Broward County has also participated in the development of both Compact Regional Climate Action Plans, in 2012 and 2017.
Q9

Is equity being embedded into Mitigation Action #1 through assessment/planning methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. For more guidance, visit the full document on the Compact website. Hire a staff person from within the community to manage projects related to this activity. Dedicate funds for multilingual communications and outreach. Provide multilingual reporting efforts (print and spoken word). Connect with other municipal departments providing services for low-income or elderly residents and explicitly investigate opportunities for mutual benefits. Ensure goals are shared with administration to create opportunities for collaboration. Provide racial equity training for key administrators. Ensure the inventory and/or goal setting document(s) is/are publicly available and is interpreted for commonly spoken languages in the municipality as well as screen-reader compatible. Provide a means to measure and compare results. Provide local communities the technology and infrastructure to ensure equal access to information. Include raw numbers in report to allow for independent analysis by community members. Create a public website with open data. To achieve mitigation goals, plan any project/program implementation to first benefit parts of the community which are most energy cost-burdened and/or exposed to air pollution impacts and ensure no additional costs are imposed on them related to implementation.

Q10

Please provide a brief explanation of the ways in which you are embedding equity into this action's assessment/planning methods?

Respondent skipped this question.

Q11

Is your local/tribal government advancing Mitigation Action #1 through program development methods?

Yes.
Q12
Provide a brief description of how Mitigation Action #1 is being advanced through program development methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward routinely convenes an internal Government Operations Workgroup to discuss and track efforts to reduce GHG emissions.

Q13
Is equity being embedded into Mitigation Action #1 through program development methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Build partnerships with community-based organizations, HOAs, and community-based forums to help define, design, and advance the work as well as spread the word. Ensure that your partnerships have significant diversity at the table, representing different age groups, neighborhoods, and races/ethnicities present in your community. Prioritize neighborhoods historically home to communities of color that may have been left out of decision making. Include stakeholders from economic sectors in the community. Prioritize partnerships with others such as Florida Power & Light to purposefully deploy renewable energy in low- and moderate-income areas of municipality first. Stormwater ponds adjacent to major highways are an opportunity for this.

Q14
Please provide a brief explanation of the ways in which you are embedding equity into this action’s program development methods?

Respondent skipped this question.

Q15
Is your local/tribal government advancing Mitigation Action #1 through policy methods?

Yes.
Q16

Provide a brief description of how Mitigation Action #1 is being advanced through policy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward’s existing GHG emissions reduction goal, for both operational and countywide emissions, is 80% below 2007 levels by 2050, and net zero by 2050.

In 2018, Broward County joined the Under2 Coalition of subnational governments committed to climate action limiting global warming to less than 2 degrees Celsius. As part of its accession to the Coalition, the County agreed to set a Targeted Challenge for itself of purchasing only zero-emissions vehicles for its fleet after 2030.

On September 21, 2021, the Broward County Commission adopted a resolution to increase its ambition and achieve net zero emissions in its operations and countywide by 2050.

In addition, Broward established a goal to power at least 20% of its electricity needs with renewable energy. It is currently exceeding this goal, generating electricity from solar panels on County facilities, and purchasing solar energy through FPL’s SolarTogether program.

Q17

Is equity being embedded into Mitigation Action #1 through policy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.

Use a Racial Equity Toolkit to consider impacts before taking on any project. Establish a mechanism to regularly present progress to the residents/businesses to increase accountability and transparency. Ensure an equity first framework, so that GHG emission reductions do not come at the expense of low-income and/or communities of color. Seek out solutions with multiple benefits and explain what those are in your plan. This will help build bridges across municipal departments and lift up the relevance of climate actions across the community. Identify those entities within communities that are the highest producers of GHG and provide incentives for correction.

Q18

Please provide a brief explanation of the ways in which you are embedding equity into this action’s policy methods?

Respondent skipped this question.
Q19
Is your local/tribal government advancing Mitigation Action #1 through budget/investment methods?

Yes

Q20
Provide a brief description of how Mitigation Action #1 is being advanced through budget/investment methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Following the adoption of a 2050 net-zero goal by the County Commission on September 21, 2021, Broward County staff intend to request engagement of a consulting firm to aid in the development of a plan for reaching net-zero emissions.

Q21
Is equity being embedded into Mitigation Action #1 through budget/investment methods?

Yes

Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.

Overlay any expenditures to advance this goal with census data on maps to ensure that expenditures/ investments are occurring in all areas of the municipality, positively impacting communities of all demographic make-ups. This will help a community stay accountable to not only investing in the area where they receive the most tax revenue or receive the most complaints. Ensure that investments related to this action are prioritized in communities that have the most need and/or have been disinvested. Include stipends/payments for volunteers in your budget. Make sure budgeted meeting costs include childcare, meals, and/or interpretation service.

Q22
Please provide a brief explanation of the ways in which you are embedding equity into this action's budget/investment methods?

The net-zero plan will prioritize policies and investments that provide benefits/co-benefits to low-/moderate-income residents and/or predominantly minority communities.
Q23

Is your local/tribal government advancing Mitigation Action #1 through education/outreach/advocacy methods?

Yes

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Q24

Provide a brief description of how Mitigation Action #1 is being advanced through education/outreach/advocacy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County highlighted its net-zero plans at the annual Broward Leaders Resilience Roundtable on October 1, 2021, and challenged the County’s municipalities and tribal governments to adopt their own 2050 net-zero goals, targeting adoption by 75% of municipalities/tribes, representing 75% of the population, by the 2022 Roundtable.

The County routinely participates in the planning and implementation of Compact communications and events, including newsletters, reports, surveys, website content, and workshops.

Broward County staff routinely make presentations to business and community groups on climate and resilience issues, including GHG and renewable energy goals.
Q25

Is equity being embedded into Mitigation Action #1 through education/outreach/advocacy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Ensure that there are at least monthly community meetings seeking input, not just education, through the life of the planning process, as well as annual update meetings on the municipality’s progress during implementation. These meetings should take place at a variety of times, including evenings, and offer food and childcare to reduce barriers to attendance and participation. The meetings should be advertised by a community-based communications and outreach consultant who is from the community(ies) that you seek to target. The advertising efforts should include a variety of mediums and start at least a week prior to the meeting. The communications/outreach consultant should reach at least 300 people in advertising for the meeting. Ensure that education and outreach is available in multiple languages and information on the web is screen-reader compatible. Consider letting a community-based organization co-host a meeting or provide “meeting in a box” tools to let community-based organizations host their own event and report back. Utilize multiple engagement methods, e.g. online and in-person. Utilize existing relationships with other municipal departments. Devote resources to outreach in populations/neighborhoods frequently unengaged by government. Hire a volunteer that lives in that neighborhood or a community-based organization that works with that population. Acknowledge that elderly and low-income populations are less likely to engage with online promotion. Utilize in-person outreach (flyers, canvassing, announcement at an existing meeting, radio stations, TV, flyers at churches or community center, etc.) for these groups.

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Q26

Respondent skipped this question

Please provide a brief explanation of the ways in which you are embedding equity into this action's education/outreach/advocacy methods?

Page 20: Greenhouse Gas Emission Mitigation Priority Action #1 (GHG Targets)
Q27
Please provide any supporting documents for the various methods that you answered Yes under Mitigation Action #1.

2021-452 Race to Zero Resolution adopted 09-21-21.pdf (112.6KB)

Q28
Is your local/tribal government advancing activities related to Mitigation Action #2:
Yes

Q29
Please indicate as to why you've been unable to make progress on Mitigation Action #2? Select all that apply.
Respondent skipped this question

Q30
What resource could assist you in advancing this action?
Respondent skipped this question

Q31
Is your local/tribal government advancing Mitigation Action #2 through assessment/planning methods?
Yes

Q32
Provide a brief description of how Mitigation Action #2 is being advanced through assessment/planning methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County adopted a Community Energy Strategic Plan in 2015, which identified energy efficiency as a key countywide theme, including objectives to launch an energy awareness campaign and increase energy efficiency and conservation in buildings.

Broward County approved Energy Audit and Performance Consultant Services agreements with Siemens and ENGIE Services US (formerly OpTerra) in 2017 and received investment-grade audit reports from each company in 2019. Efficiency improvements based on the audit findings have been or will be implemented.

Earlier, in 2010, the Commission approved an agreement for an energy audit of the North Regional Wastewater Treatment Plant, which ultimately led to implementation of a waste-case cogeneration project at the plant. (See Budget/Investment section.)
Q33

Is equity being embedded into Mitigation Action #2 through assessment/planning methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. If possible, prioritize hiring a people of color or women-owned local contractor or contractors for municipal energy efficiency programs. Require any municipal funding related to energy efficiency retrofits to be prioritized in communities that have been disinvested first. Encourage the use of EnergyStar Portfolio Manager, a free and publicly available online tool, for assessing energy efficiency of buildings. Have an explicit plan/criteria for site prioritization to avoid political pet projects. Conduct an assessment to identify energy use trends those who are most energy-cost burdened; prioritize areas which are most energy-cost burdened first. Identify areas with substandard housing and work to improve conditions, which can impact quality of life and energy cost burden. Engage communities most impacted by energy inefficiency in planning and prioritizing community projects/action. Include considerations for renters in programming/recommendations (non-construction projects).

Q34

Please provide a brief explanation of the ways in which you are embedding equity into this action’s assessment/planning methods?

Respondent skipped this question.

Q35

Is your local/tribal government advancing Mitigation Action #2 through program development methods?

Yes
Q36
Provide a brief description of how Mitigation Action #2 is being advanced through program development methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The County’s EnergySense program conducts public outreach at events and has distributed products that reduce energy consumption.

The County’s Seal of Sustainability program certifies County programs and projects that meet the triple bottom line of sustainability – environment, economy, and community – and display a “Go Green Seal of Sustainability” to publicize such efforts.

Broward County created a Property Assessed Clean Energy program, which can be used to finance energy and water efficiency projects in residential and commercial properties, in 2016. See details under Mitigation Action #3 section.

Q37
Is equity being embedded into Mitigation Action #2 through program development methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Develop municipal partnership with the Solar Energy Loan Fund program (already in several municipalities across the state) in order to provide safe financing for low- and moderate-income communities. Develop partnerships with community members or organizations to help track energy efficiency data and prioritize improvements. Involve the people most impacted by energy inefficiency, build relationships, and co-create paths forward. Partner with community-based organizations and organizations that provide direct services. Often times they are the first line of communication with community members and are great starting point for outreach to populations frequently unengaged by government. Partner with a Commissioner/Mayor to retrofit an affordable housing building. Target energy efficiency programs to parts of the community with the greatest need (defined as level of energy burden) as well as those large consumers. Invite community input early in the program development process. Host listening sessions, focus groups, and workshops to understand the energy needs in communities and what obstacles they are facing when trying to lower their energy usage and bills. Use this information to build programs and improve existing programs to address the identified needs.

No
Q38
Please provide a brief explanation of the ways in which you are embedding equity into this action’s program development methods?

Respondent skipped this question

Q39
Is your local/tribal government advancing Mitigation Action #2 through policy methods?

Yes

Page 29: Greenhouse Gas Emission Mitigation Priority Action #2 (Building Efficiency)

Q40
Provide a brief description of how Mitigation Action #2 is being advanced through policy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County has adopted local building code amendments to improve water efficiency (requiring a minimum of eight cycles of concentration for cooling towers and the use of high-efficiency plumbing fixtures in buildings). By reducing water consumption, the energy needed to treat, transport, and dispose of potable water is reduced.

Broward County is currently collaborating with Miami-Dade County on efforts to increase cool-roof standards for new and substantially-renovated commercial buildings.

In 2008, Broward County adopted an Administrative Code requirement that all new County buildings achieve a minimum LEED certification of “LEED certified.”

Broward County created a Property Assessed Clean Energy program, which can be used to finance energy and water efficiency projects in residential and commercial properties, in 2016. See details under Mitigation Action #3 section.
Is equity being embedded into Mitigation Action #2 through policy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Include extreme heat as a climate hazard to consider in any municipal resiliency plans. Institute cooling centers in the communities facing high indoor heat burden, air pollution, or urban heat island effect. Commit municipal savings from solar and energy efficiency being reinvested in wealth-building initiatives in disinvested communities. Ensure policies/permits for energy saving installations (green roofs, rooftop solar, storm hardening) are feasible, and if possible expedited and fee-free. Push for mandatory requirements over incentives in new construction. Provide property tax breaks for landlords who install energy conservation measures in rental housing. Require rental units to meet baseline levels of energy efficiency and make more stringent over time. Provide financial incentives for energy savings/alternative sources for qualified affordable housing providers/developers with an ultimate goal of having all affordable housing operating at net zero or better in 15 years.

Q42

Please provide a brief explanation of the ways in which you are embedding equity into this action's policy methods?

Respondent skipped this question

Q43

Is your local/tribal government advancing Mitigation Action #2 through budget/investment methods?

Yes
Q44

Provide a brief description of how Mitigation Action #2 is being advanced through budget/investment methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

In 2019, Broward County entered into performance-based agreements with two contractors for energy conservation measures at 69 facilities. One contract had a potential cost of $7,026,000, with a potential guaranteed savings of $7,195,000, over 16 years; the other, potential cost of $8,766,000, potential guaranteed savings of $9,090,000, also over 16 years. Combined, these contracts were guaranteed to save 8.3 million kilowatt-hours (kWh) of electricity in the first year following implementation, and produce 1.3 million kWh of electricity from new solar panels installed under the agreements.

Broward also entered into a performance-based energy service contract to implement a cogeneration system at the County’s North Regional Wastewater Treatment Plant, the single largest electricity user in the entire county, using biogas produced during the water treatment process and additional biogas generated from fats, oils, and grease diverted from wastewater flows. The cogeneration facility produces both heat needed for the water treatment process and electricity that offsets the plant’s energy consumption by 30%. The project cost $20 million to implement but was guaranteed to save more than $26 million over 17 years.

Q45

Is equity being embedded into Mitigation Action #2 through budget/investment methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.

- Allocate funds annually to pay for outreach campaigns to ensure all communities are aware of energy efficiency programs and assistance.
- Offer financial incentives or financing programs to assist small business owners and/or cash strapped households in efficiency upgrades, and ensure people are aware of incentives.
- Establish a municipality-based weatherization grant program (in addition to County programs) and fund it (to include weather strapping and caulking to improve air seals, replacing or installing insulation, replacing windows, installing energy efficient air conditioning where it is not otherwise available, and other similar repairs free of charge).
- Fund energy efficient giveaways (LED light bulbs, smart power strips, weather stripping, etc.) at no cost to the resident and automatically provide to residents who are having a hard time paying their bills or have had utility shut-off.
- Ensure maintenance of green infrastructure is considered in proposal so benefits endure.
- Consider creating a Tax Increment Financing (TIF) program or other finance mechanism from successful economic sectors.

Q46

Please provide a brief explanation of the ways in which you are embedding equity into this action’s budget/investment methods?

Respondent skipped this question.
Q47  Yes
Is your local/tribal government advancing Mitigation Action #2 through education/outreach/advocacy methods?

Q48
Provide a brief description of how Mitigation Action #2 is being advanced through education/outreach/advocacy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The County’s EnergySense program conducts public outreach at events and has distributed products that reduce energy consumption.

The County administers several programs that reduce energy consumption by reducing water consumption:
• The NatureScape educational and outreach program promotes Florida-friendly landscape practices that require less water to homeowners, schools, and municipalities.
• The NatureScape Irrigation Service provides water-use audits of large irrigation systems (parks, golf courses, etc.) and provides recommendations for system improvements to lower water consumption.
• The ConservationPay$ program offers rebates on high-efficiency toilets and free faucet aerators, low-flow showerheads, and efficient pre-rinse spray valves for commercial kitchens.

Broward County maintains a webpage providing information about its Property Assessed Clean Energy program and has made presentations to municipalities and other groups to educate the public about PACE.
Q49

Is equity being embedded into Mitigation Action #2 through education/outreach/advocacy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Ensure the elderly population, low-income communities, and others facing a high energy burden are aware of energy efficient options available to them (FPL rebates for programmable thermostats etc.) Ensure any information about this program is available in languages commonly spoken in the community and is also accessible to screen readers. Ensure that outreach goes beyond posting a page on the website or a flyer. Conduct direct outreach to target communities that are most in need of programming. This could include robo-calls or text alerts to seniors, contact sheets from other social services, radio programs, piggybacking as part of public-school outreach efforts to parents, etc. All of these direct outreach approaches should be done in a multilingual format. Work with local community-based organizations to be an education partner on energy efficiency behaviors and techniques/installations. Provide educational resources and technical assistance to industry professionals, building owners and managers, and residents on all aspects of energy efficient building design, retrofits, and operations for new and existing buildings. Create or adapt existing apprentice programs to build a skilled front-line workforce, focusing on building and maintaining alternative energy production and energy saving technologies. Give preference to people and projects in the areas of greatest un- and under-employment. Advance the use and adoption of solar energy within government operations and community-wide.

Page 37: Greenhouse Gas Emissions Priority Mitigation Action #2 (Building Efficiency)

Q50

Please provide a brief explanation of the ways in which you are embedding equity into this action's education/outreach/advocacy methods?

Respondent skipped this question

Page 38: Greenhouse Gas Emission Mitigation Priority Action #2 (Building Efficiency)

Q51

Please provide any supporting documents to the various methods that you have answered Yes under Mitigation Action #2.

CommunityEnergyStrategicPlan.pdf (1MB)
Q52 Is your local/tribal government advancing activities related to Mitigation Action #3: Yes

Q53 Please indicate as to why you've been unable to make progress on Mitigation Action #3? Select all that apply. Respondent skipped this question

Q54 What resources could assist you in advancing this action? Respondent skipped this question

Q55 Is your local/tribal government advancing Mitigation Action #3 through assessment/planning methods? Yes

Q56 Provide a brief description of how Mitigation Action #3 is being advanced through assessment/planning methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County adopted a Community Energy Strategic Plan in 2015, identifying solar energy as a key countywide theme, including objectives to promote community awareness and education and remove barriers to renewable energy installations.

The County’s Renewable Energy Action Plan, adopted in 2014, recommended several actions to foster installation of renewable energy systems on the County’s own facilities, including:

- Amending the Capital Budget Justification Form to require integration of renewable energy as part of project proposals. (Implemented.)
- Requiring cost-benefit analyses of renewable energy in pre-design or design phases of new capital projects/major renovations. (Implemented, with subsequent administrative action that exceeds this recommendation. See Local Policy below.)
- Seeking to include renewable energy components in energy service contracts (ESCOs). (Implemented.)
- Budgeting annual appropriations to support engineering, lifecycle, structural, and electrical review of county facilities for renewable energy retrofits. (Implemented)
- Initial assessments for renewable energy installations on various County facilities. (Implemented, see below.)

Subsequently, Broward conducted additional assessments of renewable energy potential on various facilities, ultimately leading to solar installations using a state contract for solar services. (See below.)
Q57
Is equity being embedded into Mitigation Action #3 through assessment/planning methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. For more guidance, visit the full document on the Compact website. If possible, prioritize hiring a people of color or women-owned local contractor or contractors or solar installation company. Require any municipal funding related to solar energy installations be prioritized in communities that have been disinvested. Assess the solar potential of all sites within the community in an equitable manner. Solar potential scores should not be based on property values or historic investments in the area, but rather on the potential for solar energy production and benefits to the surrounding community. Conduct solar feasibility assessment for all affordable housing owned by the municipality. Conduct solar feasibility for all critical infrastructure especially cooling centers/resilience hubs. Conduct an assessment to identify energy use trends, those within the community who are most energy-cost burdened, and prioritize projects for those areas/people. Identify areas with substandard housing and work to improve conditions which can impact quality of life and energy-cost burden. Consider establishing microgrids on municipally owned-owned properties (such as public housing, libraries, and schools). The municipality should model best practices regarding solar energy i.e. identifying which parks, public places, or schools currently utilize or plan to utilize solar energy. Record the savings before and after installation.

Page 43: Greenhouse Gas Emission Mitigation Priority Action #3 (Solar Energy)

Q58
Please provide a brief explanation of the ways in which you are embedding equity into this action's assessment/planning methods?

The County is looking closely at solar opportunities at emergency shelters and other critical facilities.

Page 44: Greenhouse Gas Emission Mitigation Priority Action #3 (Solar Energy)

Q59
Is your local/tribal government advancing Mitigation Action #3 through program development methods?

Yes
Q60
Provide a brief description of how Mitigation Action #3 is being advanced through program development methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County received two rounds of funding under the Department of Energy’s SunShot Initiative Rooftop Solar Challenge for its GoSolar Florida program, which developed a streamlined solar plans design system for local governments and conducted extensive education and outreach to local governments, residents, and businesses.

Broward County has partnered with Solar United Neighbors to offer solar co-op programs in 2019, 2020, and 2021, to allow interested homeowners to access bulk discounts on solar equipment and installations.

Broward County achieved Bronze-level designation through the SolSmart program in 2018.

Q61
Is equity being embedded into Mitigation Action #3 through program development methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Work with companies like FPL to establish solar microgrids in low- to moderate-income areas of the municipality Develop municipal partnership with Solar Energy Loan Fund (already in several municipalities across the state) in order to provide safe financing for low and middle-income communities Partner with local organizations who are working on energy issues to help with outreach Include community leaders and members in program design Prioritize spending in municipal-owned affordable housing first, then buildings that provide resources/ services to low- and moderate-income, majority Black residents Consider ways renters can reap benefits of solar, e.g. community solar projects Install solar and battery storage in locations that will serve as resilience hubs or cooling centers Identify what buildings/services will be needed to serve the community in the case of a blackout

Yes

Q62
Please provide a brief explanation of the ways in which you are embedding equity into this action’s program development methods?

The County’s GoSolar Florida program and SolSmart designation have helped reduce soft costs and other barriers to solar installations.
Q63
Is your local/tribal government advancing Mitigation Action #3 through policy methods?

Yes

Q64
Provide a brief description of how Mitigation Action #3 is being advanced through policy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

In 2008, Broward County adopted an Administrative Code requirement that all new County buildings achieve a minimum LEED certification of “LEED certified.”

County Administration has directed that solar panels should be included on all new County facilities, absent extenuating circumstances.

In 2016, Broward County created a Property Assessed Clean Energy program, which can be used to finance solar projects on residential and commercial properties, in 2016.

The Broward County Commission adopted a 100% clean energy goal for its own operations via its request for a 100% solar offset from FPL’s SolarTogether program.

Q65
Is equity being embedded into Mitigation Action #3 through policy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Participate in programs like SolSmart to reduce barriers to solar installation and reduce soft costs. Encourage the creation of solar energy jobs (with living wages) within the municipality. Commit that municipality’s savings from solar and energy efficiency be reinvested in wealth-building initiatives in disinvested communities. Solar permitting should be expedited and fee-free.

No

Q66
Please provide a brief explanation of the ways in which you are embedding equity into this action’s policy methods?

Respondent skipped this question
Q67

Is your local/tribal government advancing Mitigation Action #3 through budget/investment methods?

Yes

Q68

Provide a brief description of how Mitigation Action #3 is being advanced through budget/investment methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

To date, Broward County has completed installation of 3.4 megawatts of solar photovoltaic systems on its facilities. Projects adding a further 3.0 megawatts are pending, with yet another 3 projects comprising 0.5 megawatts in negotiation. These projects have been constructed by “piggybacking” off a solar services contract established by the State of Florida. On average, projects will offset approximately 50% of the metered energy consumption associated with these sites.

The nine completed or under-construction projects include large-scale rooftop installations:

- Stirling Road Branch Library in Hollywood
- Broward Logistics Center in Fort Lauderdale, Copans Transit Facility, Pompano Beach
- Ravenswood Transit Facility, Dania Beach

as well as five solar parking canopies:

- Broward Addiction and Recovery Center (BARC) in Fort Lauderdale
- Central Broward Park in Lauderhill
- C.B. Smith Park in Pembroke Pines
- Terminal 4 Heron Parking Garage at Port Everglades
- Governmental Center West (GCW) Parking Garage in Plantation.

Two additional County facilities are set to receive solar photovoltaic (PV) systems soon: West Regional Courthouse in Plantation, and the Broward Animal Care and Adoption Center in Fort Lauderdale.

Broward County requested a 132 MW subscription from FPL’s SolarTogether program, which would offset 100% of the electricity used by County operations. Broward has received a subscription of 85 MW from FPL to date.
Q69
Is equity being embedded into Mitigation Action #3 through budget/investment methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.
- Waive permit fees for residential solar installation
- Prioritize procurement of government operations solar installations from people of color and women owned businesses if possible
- Commit that municipality’s savings from solar and energy efficiency be reinvested in wealth-building initiatives in disinvested communities
- Devote money/personnel to support and promote solar co-ops
- Ensure funding for roof hardening/weatherization/insulation is included especially in older, lower quality affordable housing
- Include funding for battery storage where possible to provide energy redundancy

Q70
Please provide a brief explanation of the ways in which you are embedding equity into this action's budget/investment methods?

Respondent skipped this question

Q71
Is your local/tribal government advancing Mitigation Action #3 through education/outreach/advocacy methods?

Yes

Q72
Provide a brief description of how Mitigation Action #3 is being advanced through education/outreach/advocacy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward maintains its GoSolar Florida initiative webpages, with solar information for homeowners and businesses.

In addition, it has widely publicized the Broward solar co-ops.

The County also maintains a webpage providing information about its Property Assessed Clean Energy program and has made presentations to municipalities and other groups to educate the public about PACE.
Q73  Yes
Is equity being embedded into Mitigation Action #3 through education/outreach/advocacy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Provide education on lower cost ways for residents to go solar, such as SolarTogether and existing solar co-ops. Communicate savings due to solar installation. Provide education on the energy system in general. Support legislation proposed by local groups to make solar more accessible in Florida.

Page 55: Greenhouse Gas Emission Mitigation Priority Action #3 (Solar Energy)

Q74
Please provide a brief explanation of the ways in which you are embedding equity into this action’s education/outreach/advocacy methods?

The County provides information on lower-cost solar installation opportunities and potential savings. Broward has also strongly supported legislation to improve access to solar energy in Florida (and the US), including legalization of third-party sales of electricity/power purchase agreements and consumer incentives.

Page 56: Greenhouse Gas Emission Mitigation Priority Action #3 (Solar Energy)

Q75
Please provide any supporting documents to the various methods that you have answered Yes under Mitigation Action #3.

Broward Renewable Energy Action Plan.pdf (861.7KB)

Page 57: Greenhouse Gas Emission Mitigation Priority Action #4 (Electric Vehicles)

Q76  Yes
Is your local/tribal government advancing activities related to Mitigation Action #4:

Page 58: Greenhouse Gas Emission Mitigation Priority Action #4 (Electric Vehicles)

Q77  Respondent skipped this question
Please indicate as to why you’ve been unable to make progress on Mitigation Action #4? Select all that apply.
Q78

What resources could assist you in advancing this action?

Respondent skipped this question

Q79

Is your local/tribal government advancing Mitigation Action #4 through assessment/planning methods?

Yes

Q80

Provide a brief description of how Mitigation Action #4 is being advanced through assessment/planning methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions

Broward County adopted a Community Energy Strategic Plan in 2014, identifying transportation as a key countywide theme, including objectives to improve the efficiency of the transportation system and take steps to create a fully functional transportation system.

The centerpiece of the County’s operational EV strategy is our adoption of a goal to purchase only zero-emissions vehicles (wherever practicable) by no later than 2030.

The County commissioned an analysis of existing electrical infrastructure and expected needs under three scenarios of EV charger deployment at four large facilities: garages at the Government Center East and West buildings and two fleet services campuses.

County staff plan to request authorization to procure a countywide EV charging needs analysis and deployment plan, covering additional County facilities as well as important sites in the community, including employment centers, multifamily housing, and low- and moderate-income communities.
Q81
Is equity being embedded into Mitigation Action #4 through assessment/planning methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. For more guidance, visit the full document on the Compact website. If possible, prioritize hiring a people of color and women-owned contractor for EV infrastructure. If possible, donate EVs and PHEVs to community-based organizations once phased out of the municipal fleet. Commit to providing EV charging for free for at least a few years, if not indefinitely. Involve the community in evaluation of this action's progress. Assess success in this alongside data about demographics, location, and number of users. Assess the benefit and accessibility of proposed or existing EV infrastructure to low- and moderate-income communities and communities of color. Evaluate how low-income and/or communities of color access mobility and their relative air pollution exposure burden, and utilize this information to inform any EV strategy for the municipality. Ensure groups/individuals representing low-income communities, communities of color, and those with limited mobility are at the decision-making table.

Q82
Please provide a brief explanation of the ways in which you are embedding equity into this action's assessment/planning methods?

The planned EV charging needs analysis and deployment plan will consider how to increase access to EV charging in low- and moderate-income communities and multifamily housing complexes to allow more residents to take advantage of electric vehicles for their personal transportation.

Q83
Is your local/tribal government advancing Mitigation Action #4 through program development methods?

Yes
Q84

Provide a brief description of how Mitigation Action #4 is being advanced through program development methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The County is ramping up its vehicle electrification program, with plans to replace 1,000 gas- and diesel-powered light-duty vehicles with EVs by the end of the decade, along with procurements of EV supply equipment (aka EV chargers) and EV charging network management software. Broward plans to issue a request for quotes, in order to have a wide variety of qualified EV chargers available for purchase and comparative testing and use. They will be required to be open-source, so that they can be managed by a single network management software application.

Electrification of the transit bus fleet is also underway, with 11 buses already ordered and delivered.

Q85

Is equity being embedded into Mitigation Action #4 through program development methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Build partnerships between community-based organizations, the municipality, transportation agencies, and other stakeholders Offer technical assistance to community groups working to advance this goal Include a partnership with a community-based organization that focuses on job training in disinvested communities to help inform this project Include community leaders and members in program design Install chargers in public parking lots and high-use municipal facilities (parks, administration building) Ensure EV charging is available (and free including parking) for municipal employees Invest in electric busses

Q86

Please provide a brief explanation of the ways in which you are embedding equity into this action's program development methods?

The County’s fleet electrification efforts include replacement of diesel transit buses with electric models.

Q87

Is your local/tribal government advancing Mitigation Action #4 through policy methods?

Yes
Q88
Provide a brief description of how Mitigation Action #4 is being advanced through policy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

In 2018, Broward County adopted the Under2 Coalition ZEV Targeted Challenge, pledging to purchase only ZEVs by 2030 (or earlier).

Earlier this year, the Fleet Services Division issued a memo requiring light-duty vehicles to be replaced with EV models. Exceptions require justification and explicit approval.

As fleet EV chargers come online, County employees will be allowed to use surplus chargers (i.e., those not needed for fleet vehicles) for their own EVs. This policy was formally incorporated into the County Administrative Policies and Procedures.

Q89
Is equity being embedded into Mitigation Action #4 through policy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Mandate EV charging infrastructure in future commercial & multi-family developments Deploy public EV charging infrastructure in low- and moderate-income parts of the community and with top employers Waive parking fees when an EV is paying for charging in that space Create a tiered procurement policy that ensures that plug-in hybrids and EVs are considered before any internal combustion engine vehicle Offer streamlined permitting, lower to no fees, and other incentives for EV charging projects

Q90
Please provide a brief explanation of the ways in which you are embedding equity into this action's policy methods?

The County now requires that fleet vehicles be replaced with electric models, absent justification and explicit exemption.

Q91
Is your local/tribal government advancing Mitigation Action #4 through budget/investment methods?

Yes
Q92

Provide a brief description of how Mitigation Action #4 is being advanced through budget/investment methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

To date, the County has purchased and accepted delivery of 11 electric buses and acquired 20 light-duty electric vehicles. There are plans to purchase dozens of additional electric buses and hundreds of light-duty EVs by the end of the decade.

Over the next decade, Broward County plans to invest millions in purchases of EVs, charging infrastructure, and software. This investment includes funds that would have been budgeted anyway for vehicle replacements, as well as additional monies to support fleet electrification.

Q93

Is equity being embedded into Mitigation Action #4 through budget/investment methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.

- Use EV vehicle tax rebate to invest in chargers
- Analyze fuel and maintenance savings from EV switch and use the savings to create a charger fund
- Subsidize the cost of charger installation in affordable housing development
- Create a group purchase program for residents to receive deep discounts on EVs
- Partner with car and lease dealerships to provide incentives for purchase of EVs by municipal residents
- Pilot with those neighborhoods with the greatest disinvestment and/or those neighborhoods with the greatest VMT potential

Q94

Please provide a brief explanation of the ways in which you are embedding equity into this action's budget/investment methods?

Respondent skipped this question

Q95

Is your local/tribal government advancing Mitigation Action #4 through education/outreach/advocacy methods?

Yes
Q96
Provide a brief description of how Mitigation Action #4 is being advanced through education/outreach/advocacy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County participates in Drive Electric events, displaying electric buses and fleet vehicles. In addition, county buses and EVs are wrapped to inform the public that they are electric and part of the County green initiatives.

Q97
Is equity being embedded into Mitigation Action #4 through education/outreach/advocacy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Provide multi-lingual and ADA accessible workshops educating the public on the benefits of EVs and how they can pay for themselves over time despite the higher upfront cost. Meetings/workshops for education/outreach should take place at a variety of times, including evenings, offer food and childcare to reduce barriers to attendance and participation. The meetings should be advertised by a community-based communications and outreach consultant/partner who is from the targeted community(ies). The advertising efforts should include a variety of mediums and start at least a week prior to the meeting. The communications/outreach consultant should reach at least 300 people in advertising for the meeting. Create/promote a charger network map. Make sure this map is well-promoted so people will feel comfortable making the switch.

Q98
Please provide a brief explanation of the ways in which you are embedding equity into this action's education/outreach/advocacy methods?

Q99
Please provide any supporting documents for the various methods that you answered YES under Mitigation Action #4.

Broward County - Zero Emission Vehicles Challenge.pdf (189.3KB)
Q100
Is your local/tribal government advancing activities related to Mitigation Action #5?
Yes

Q101
Please indicate as to why you've been unable to make progress on Mitigation Action #5? Select all that apply.
Respondent skipped this question

Q102
What resources could assist you in advancing this action?
Respondent skipped this question

Q103
Is your local/tribal government advancing Mitigation Action #5 through assessment/planning methods?
Yes

Q104
Provide a brief description of how Mitigation Action #5 is being advanced through assessment/planning advocacy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County adopted a Community Energy Strategic Plan in 2014, identifying transportation as a key countywide theme, including objectives to improve the efficiency of the transportation system and take steps to create a fully functional transportation system.

The County has a Mobility Advancement Plan (MAP), funded by a one-percent sales tax approved by County voters in November 2018. Among its goals is provision of better, more frequent public transit.
Q105

Is equity being embedded into Mitigation Action #5 through assessment/planning methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Implement policy/norms to allow for flexible scheduling and working from home. Provide employees and managers with training to ensure this is successful and respectful. Promote transit benefits. Work with employers and transit agencies to develop ways to incentivize employee ridership (e.g. rebates for employees who gave up use of employer parking facilities). Choose a bus stop design that provides shelter from the sun and rain and ensure proper maintenance throughout the lifespan of the infrastructure. Explore different modes of transportation, not just buses (and if so, consider electrification of the local bus system), but also expand train routes especially to lower income communities. Identify high air pollution areas due to transit (e.g. bus lots) and prioritize electrified transit in those areas. Meaningfully include community members who rely on public transit as a primary form of transportation at the decision-making table when it comes to accessing mobility needs and planning future changes/improvements.

Q106

Please provide a brief explanation of the ways in which you are embedding equity into this action's assessment/planning methods?

See Local Policy and Budget/Investment sections.

Q107

Is your local/tribal government advancing Mitigation Action #5 through program development methods?

Yes
Q108
Provide a brief description of how Mitigation Action #5 is being advanced through program development methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The County’s Mobility Advancement Program oversees the Mobility Advancement Plan of eligible county and municipal transportation projects funded by a 1-percent sales tax for 30 years.

During the COVID-19 pandemic, Broward County launched a pilot teleworking program, allowing many County employees to work from home, which significantly reduced the number of vehicle miles traveled by employees.

Q109
Is equity being embedded into Mitigation Action #5 through program development methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Partner and develop relationships with co-working space providers To encourage adoption of working from home to reduce overall VMT, partner with telecommunications company to ensure there is access throughout the municipality to high-speed internet and that communities are not left behind in the digital divide Work with transit operators and those who maintain our public transportation systems. Include community leaders and members in program design Ensure whoever is designing programs to reduce VMT rides transit from all parts of the municipality to become aware of difficulties that may exist in some parts of the municipality but not others (e.g. no sidewalks, no shade, etc.)

Q110
Please provide a brief explanation of the ways in which you are embedding equity into this action’s program development methods?

Respondent skipped this question

Q111
Is your local/tribal government advancing Mitigation Action #5 through policy methods?

Yes
Q112

Provide a brief description of how Mitigation Action #5 is being advanced through policy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Objective T2.5 of the Transportation Element of the Broward County Comprehensive Plan (2019) states that “Broward County shall advance transportation and land use choices that: reduce fossil fuel use and vehicle miles traveled.”

Policy 2.14.10 of the BrowardNext Land Use Plan (2017) seeks better coordination of “multi-modal transportation and mixed land uses, which encourage a reduction in vehicle miles traveled....”

Complete Streets policies have been included in the County Comprehensive Plan since 2014 and are also a top strategy within the BrowardNext Land Use Plan.

Complete Streets are included in County road projects, wherever appropriate.

Broward voters approved the Penny for Transportation referendum in November 2018, under which a 1-percent local option sales tax will fund transportation and mobility improvements for 30 years.

Q113

Is equity being embedded into Mitigation Action #5 through policy methods? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.

- Develop codes or policies encouraging the use of pedestrian-friendly planning options like complete streets and parks no less than ‘x’ miles from every home
- Have fare free days with extreme heat or high air pollution to encourage less cars on the road
- Amend municipal code to mandate long-term bike parking facilities and shower facilities at places of employment to encourage bike transportation

Yes

Q114

Please provide a brief explanation of the ways in which you are embedding equity into this action's policy methods?

Objective T2.6 of the Transportation Element of the Broward County Comprehensive Plan (2019) states that “Broward County, in collaboration with transportation and public health stakeholders will prioritize and evaluate equity and health outcomes in transportation decision-making to avoid disproportionate and disparate burdens on traditionally disadvantaged communities.” This includes performing equity analyses to ensure that predominantly minority and low-income communities benefit equally from transportation improvements.

The County Commission adopted a 30 percent small business participation goal for Mobility Advancement Plan projects.
Q115
Is your local/tribal government advancing Mitigation Action #5 through budget/investment methods? Yes

Q116
Provide a brief description of how Mitigation Action #5 is being advanced through budget/investment methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The Penny for Transportation sales tax is expected to generate well over $10 billion over its 30-year lifespan. Approximately 40 percent of the funds will support transit operations and maintenance. Complete Streets projects on both County and municipal roads are also eligible for funding.

Q117
Is equity being embedded into Mitigation Action #5 through budget/investment methods? Yes

Below are several suggested ways that a local government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list.

- Consider incentives for the public to ride transportation, e.g. discount or make ridership free during rush hours
- Develop grants and provide financial resources for the installation of infrastructure necessary to support telecommuting
- Ensure annual budget allocation to maintain sidewalks and build them where they don't exist to connect low-income communities or communities of color to transit stops
- Pay transit workers a living wage

Q118
Please provide a brief explanation of the ways in which you are embedding equity into this action's budget/investment methods?

Stable funding for transit and plans for expansion promote equity in Broward. Low- and moderate-income residents and residents from frontline communities disproportionately depend on transit, so better, more frequent service promotes equitable access to jobs, services, and recreation.

Q119
Is your local/tribal government advancing Mitigation Action #5 through education/outreach/advocacy methods? Yes
Q120
Provide a brief description of how Mitigation Action #5 is being advanced through education/outreach/advocacy methods. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The Mobility Advancement Program issues reports, maintains a full website, and works with other county agencies and municipalities to inform the public of its plans and investments.

Q121
Is equity being embedded into Mitigation Action #5 through education/outreach/advocacy methods? Below is a suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. Respondents can include actions not included in this list. Host listening sessions, focus groups, and workshops to understand what is and isn’t working. Prioritize riders but also those that are unable to use public transit to understand obstacles to ridership. Build programs around these solutions and include transit workers in these discussions.

Q122
Please provide a brief explanation of the ways in which you are embedding equity into this action’s education/outreach/advocacy methods?

Q123
Please provide any supporting documents for the various methods that you answered Yes under Mitigation Action #5.

Transportation Element - Broward County Comprehensive Plan.pdf (5.6MB)
Q124

Is your local/tribal government advancing activities related to Adaptation Action #1? This should include identifying potential staff and financial resources/capacity. In some cases, staff/resources may already be supporting activities and projects that help support and advance adaptation/resilience, but not identified as such. Should sufficient internal capacity not exist, seek support from your county, other municipalities, and other potential partners and develop a plan for how your city will prioritize capacity for adaptation/resilience-building work.

Yes

Q125

Please indicate as to why you've been unable to make progress in Adaptation Action #1? Select all that apply.

Respondent skipped this question

Q126

What resources could assist you in advancing this action?

Respondent skipped this question

Q127

Provide a brief description of the work you are advancing related to Adaptation Action #1. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County continually evaluates its organizational capacity to respond effectively to climate and resilience challenges.

In 2021, Broward County formed a 10-person Climate Resilience Unit within the newly-renamed Resilient Environment Department to focus on climate and resilience issues, including water and energy. The Department's new name also reflects the County's prioritization of “resilience” as a key operational and community value.

The County’s Chief Resilience Officer/Deputy Department Director meets regularly not only with Division Directors within the Department, but also presents to and consults with top leadership across all County agencies.

County climate staff members conducted over a dozen Climate Change Toolbox Trainings for County employees over the course of several years, including climate science basics, likely regional impacts, and expected impacts on County operations.

County staff from a variety of divisions and departments regularly attend implementation workshops to build their capacity. (County staff also frequently participate in workshop planning.)
Q128

Is equity being embedded into Adaptation Action #1? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Assess the capacity to include equity considerations, including community engagement & outreach. Assessment includes consideration of how well prepared the community is to advance adaptation initiatives in more vulnerable/disinvested communities. Assess agency understanding of inequity and historic environmental wrongs in the community (and how inequities may be exacerbated by government practices/policies). Provide training for staff, emphasizing the importance of correcting these issues and avoiding further harms in the future. Assess areas of the municipality that have been disinvested or are low-income. Staff has worked to build and maintain relationships and trust with community-based organizations, key thought leaders, and residents in the areas of the municipality which have been disinvested. Assess and collaborate with Departments that provide/direct social services to residents or that work on equity as adaptation partners.

Yes

Q129

Please provide a brief explanation of the ways in which you are embedding equity into this adaptation action?

Staff in the Climate Resilience Unit and throughout the Department, as well as from many other county agencies, have participated in Dismantling Racism workshops presented by the Racial Equity Institute.

Q130

Please provide any supporting documents under Adaptation Priority Action #1.

Respondent skipped this question

Page 98: Adaptation Priority Action #1 (Internal Capacity Assessment)
Q131

Is your local/tribal government advancing activities related to Adaptation Action #2? Conduct vulnerability analysis of hazards related to climate change including, but not limited to, sea level rise, tidal flooding, saltwater intrusion, extreme weather, heat. The analysis should assess exposure and sensitivity of various assets including, but not limited to critical infrastructure, communities/populations, historic/cultural assets, transportation, natural resources, and economic assets. Assessment should seek to identify what factors contribute to elevated exposure and sensitivity, and what physical, social, institutional, human, and financial capacities exist to adapt, and where there are gaps.

Q132

Please indicate as to why you’ve been unable to make progress in Adaptation Action #2? Select all that apply.

Q133

What resources could assist you in advancing this action?

Q134

Provide a brief description of the work you are advancing related to Adaptation Action #2. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The County has conducted multiple vulnerability assessments and has additional work planned.

Analyses conducted to date include:

- Countywide vulnerability assessments in 2012 (part of the Compact regional vuln. Assessment) and 2021 (in progress).
- Priority Planning Area maps for areas subject to future SLR inundation in 2012, 2015, and 2019.
- Vulnerability assessments prepared by County staff for coastal/tidally-influenced municipalities in Broward (2014).
- Delineation of saltwater intrusion area (2014).
- Urban heat island analysis of the county (2020).
- Flood Risk Management Study for Tidally-Influenced Coastal Areas, conducted in cooperation with the US Army Corps of Engineers (2018)
- Future Conditions Map Series (2017)
  >> Groundwater table
  >> 100-year flood map
Q135

Is equity being embedded into Adaptation Action #2? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Consider all properties, people, and communities equally in the Vulnerability Analysis or Assessment. The methodology should not prioritize or focus on areas with higher taxable value. If study scope includes proposing adaptation strategies, those strategies considered should be prioritized based on potential to reduce risk to human life and other key indicators based on community members’ experiences. Include opportunities for meaningful community input as part of the vulnerability analysis process. Use community feedback and information based on stakeholder experiences in the data analysis. Incorporate community feedback via asset-mapping exercises, seek assistance with prioritizing/weighting criteria for the vulnerability assessment, ground-truth the findings of the analysis, etc. Include a social vulnerability assessment as part of the overall vulnerability assessment. At minimum, Federal SOVI or SVI maps can be used, but ideally the assessment should be rooted in the community itself. Depending on the type of project, the following social factors may be relevant to include in your analysis: redlining, low- and moderate-income populations, energy burden, rent/cost of living burden, language spoken at home, vehicles per household, elderly residents, average year built of housing, and tree canopy, among others. Include an assessment of organizations in the community that may help advance the municipality’s adaptive capacity, or organizations which will help communicate with populations frequently unengaged by government.

Page 102: Adaptation Priority Action #2 (Vulnerability Analysis)

Q136

Please provide a brief explanation of the ways in which you are embedding equity into this adaptation action?

Page 103: Adaptation Priority Action #2 (Vulnerability Analysis)

Q137

Please provide any supporting documents under Adaptation Priority Action #2.

Page 104: Adaptation Priority Action #3 (Resilience Plan)
Is your local/tribal government advancing activities related to Adaptation Action #3?  

Yes

Please indicate as to why you’ve been unable to make progress on Adaptation Action #3? Select all that apply.

Respondent skipped this question

What resources could assist you in advancing this action?

Respondent skipped this question

Broward County has released three Climate Change Action Plans, in 2010, 2015, and 2020, all of which have included adaptation and resilience actions.

The County is preparing to award a $3 million consulting contract to assist with the development Countywide Risk Assessment and Resilience Plan, which will look at specific risks and resilient investment needs in subareas of the county.

The County has created an Adaptation Action Area for the Port Everglades Inlet, to support implementation of a sand bypass project to collect sand deposited north of the inlet and move it to the south side of the inlet. This will allow the sand to continue its natural migration south, nourishing beaches in Dania Beach, Hollywood, and Hallandale Beach.

The County has active beach nourishment programs and installs dunes wherever practicable, with a goal of 80 percent shoreline coverage.

The BrowardNEXT Comprehensive and Land Use Plans include many adaptation and resilience policies.
Q142

Is equity being embedded into Adaptation Action #3? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Provide multiple benefits or co-benefits in disinvested communities based upon community input. Prioritize the solutions/resources in the Plan by their potential to reduce risk rather than by geography, property values, or income. Engage and collaborate with the community as part of the development of the Plan. Ensure at least 50% of the solutions come directly from community members and/or organizations that represent community members from disinvested communities. Use an Equity Toolkit to identify and correct any unintended impacts (and potential benefits) of actions within that Plan on low-income disinvested communities, or communities of color. Ensure the toolkit for each action is made public for accountability and discussion. Develop metrics and milestones that are reported on publicly so the municipality can be held accountable. Set expectations with the community on the format and frequency of reporting. Ensure solutions sufficiently address all climate threats. Take into consideration how climate threats affect individuals and neighborhoods differently (based on various factors including social determinants of health). Include a mix of solutions including a mix of policy and capita projects. Capital projects should include a plan and budget for upkeep and maintenance. Include strategies that protect the lives and health of outdoor workers.

Page 107: Adaptation Priority Action #3 (Resilience Plan)

Q143

Please provide a brief explanation of the ways in which you are embedding equity into this adaptation action?

The Broward County Climate Change Action Plan contains numerous actions related to public health, community resilience, and equity.

Page 108: Adaptation Priority Action #3 (Resilience Plan)

Q144

Please provide any supporting documents under Adaptation Priority Action #3.

CCAP_2020_ADA.pdf (2.3MB)

Page 109: Adaptation Priority Action #4 (Risk Reduction & Planning)
Q145

Is your local/tribal government advancing activities related to Adaptation Action #4? This may include comprehensive plans, housing initiatives, post-disaster redevelopment plans, stormwater management plans, transportation plans, and land development regulations, inclusive of low-impact development. Sea Level Rise projections should be included in all planning activities.

Yes

Page 110: Adaptation Priority Action #4 (Risk Reduction & Planning)

Q146

Please indicate as to why you've been unable to make progress on Adaptation Action #4? Select all that apply.

Respondent skipped this question

Q147

What resources could assist you in advancing this action?

Respondent skipped this question

Page 111: Adaptation Priority Action #4 (Risk Reduction & Planning)

Q148

Provide a brief description of the work you are advancing related to Adaptation Action #4. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County has officially adopted each version of the Compact Unified Sea Level Rise projection and requires its agencies to use it in all planning and investment decisions.

Community resilience is a major priority for Broward County; accordingly, it is considered in virtually all planning and decision making across agencies, especially those connected to the natural or built environment.

The BrowardNEXT Comprehensive and Land Use Plans mandate use of the Compact SLR projection. Resilience policies are woven throughout both documents. The Broward County Charter requires municipal land use plans to conform to the county’s land use plan; accordingly, these policies also apply to Broward cities.
Q149

Is equity being embedded into Adaptation Action #4? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Engage and collaborate with the community as part of the development of the Plan. Ensure at least 50% of the solutions come directly from community members and/or organizations that represent community members from disinvested communities. Design and write the Plan to protect all communities equally and encourage risk reduction in areas most vulnerable to the impacts of climate change. The Plan also takes into account unintended consequences—such as gentrification—and provides solutions to mitigate/diminish negative impacts posed by solutions. Include an equity statement and explicitly state how equity was included in the development of the Plan and how equity was integrated into the recommendations. For redevelopment-specific actions or plans, ensure they are designed to improve conditions and resilience for burdened or disinvested communities rather than restore them to their current condition. Use an Equity Toolkit to identify and correct any unintended impacts (and potential benefits) of any Plan, policy, or budget decision on low-income disinvested communities, or communities of color. Ensure the toolkit for each policy/plan/budget decision is made public for accountability and discussion. List the affirmative steps made to incorporate and to include community input. Proactively consider equitable relocation strategies wherever it may be necessary. Include ways to minimize/eliminate displacement and incorporate equitable outcomes for existing communities in all relevant Plans.

Q150

Please provide a brief explanation of the ways in which you are embedding equity into this adaptation action?

Q151

Please provide any supporting documents under Adaptation Priority Action #4.

Page 114: Adaptation Priority Action #5 (Policy)
Q152
Is your local/tribal government advancing activities related to Adaptation Action #5? This may include improving stormwater management practices, adopting urban heat policies, updating infrastructure standards, conducting remediation of contaminated sites, and updating building codes.

Yes

Page 115: Adaptation Priority Action #5 (Policy)

Q153
Please indicate as to why you’ve been unable to make progress in advancing Adaptation Action #5? Select all that apply.

Respondent skipped this question

Q154
What resources could assist you in advancing this action?

Respondent skipped this question

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Q155
Provide a brief description of the work you are advancing related to Adaptation Action #5. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

Broward County has adopted a number of resilience standards, based on the County’s modeling and planning efforts, over the past several years:

- Drainage infrastructure (2017)
- Tidal flood barriers (2020), requiring a seawall elevation of 5 feet NAVD by 2050, allowing 4 feet NAVD until 2035
- 100-year flood elevations (2021)
- Design storms (2021)
Q156

Is equity being embedded into Adaptation Action #5? Below are several suggested ways that a local/tribal government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Engage and collaborate with the community as part of the development of the Plan. Ensure at least 50% of the solutions come directly from community members and/or organizations that represent community members from disinvested communities. Ensure policy is written to protect all communities equally and that it encourages risk reduction in areas most vulnerable to the impacts of climate change. The policy should also take into account unintended consequences—such as gentrification—and provide solutions to mitigate/diminish negative impacts posed by solutions. Policies are written to improve the resilience of disinvested communities. Policies are written to ensure equal access to new or proposed technology (e.g. public EV charging locations). Policies are written to improve conditions for disinvested communities through stronger remediation requirements or stormwater considerations. Ensure contamination is not a barrier to adaptation. Remediate past harms while working to adapt to future threats, and take those future threats (like flooding) into consideration when selecting clean-up alternatives. Apply for EPA Brownfields grants if funding is the major obstacle. Use an Equity Toolkit to identify and correct any unintended impacts (and potential benefits) of any policy on low-income disinvested communities or communities of color. Ensure the toolkit for each policy decision is made public for accountability and discussion.

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Q157

Please provide a brief explanation of the ways in which you are embedding equity into this adaptation action?

The County is pursuing risk reduction and community resilience actions in frontline communities. For example, since the late 1990s, Broward has worked to improve the North Fork of the New River, which runs through in a predominantly minority community. These efforts include shoreline and habitat improvements, water quality initiatives, replacement of exotic plants with native species, and greater public access and outreach. Volunteer events to clean up and restore these areas continues to the present day. Benefits include a higher-quality green space for residents, but also a greater ability for the area to store and treat stormwater, potentially mitigating flooding and pollution problems.

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Q158

Please provide any supporting documents under Adaptation Priority Action #5.

Respondent skipped this question

Q159

Is your local/tribal government advancing activities related to Adaptation Action #6? This may include living shorelines, water infrastructure, resilience hubs, parks & open spaces, urban greening, tidal valves, pump stations, road/bridge elevation.

Yes

Q160

Please indicate as to why you've been unable to make progress on Adaptation Action #6? Select all that apply.

Respondent skipped this question

Q161

What resources could assist you in advancing this action?

Respondent skipped this question

Q162

Provide a brief description of the work you are advancing related to Adaptation Action #6. This is not meant to be an exhaustive list, but rather a list of the most impactful actions.

The Broward County Climate Change Action Plans have included actions to support green infrastructure, green spaces, and a resilient built environment.

The Countywide Risk Assessment and Resilience Plan will provide the basis for large, sustained, coordinated capital investments in resilient infrastructure by all levels of government, businesses and other institutions, and residents. Special attention will be paid to the risks to frontline and low-/moderate-income communities.
Q163

Is equity being embedded into Adaptation Action #6? Below are several suggested ways that a local/local government can embed equity into this climate action provided as supportive guidance. This is not meant to be exhaustive of every possible action. Respondents can include actions not included in this list. Engage and collaborate with the community as part of the development of the Plan. Ensure at least 50% of the solutions come directly from community members and/or organizations that represent community members from disinvested communities. Capital projects benefit all community members equally. Low-income disinvested communities, or communities of color are prioritized (i.e. for green spaces, resilience hubs, parks etc.) Prioritize resilience capital projects by the potential to reduce risk to human life and critical infrastructure rather than based on income or tax value. Display resilience capital projects on a map with underlying layers showing demographics such as race, income, etc. to visually show that investments are not only being made to benefit high-tax value and/or waterfront properties. This map should also speak to the amount of investment in different parts of the municipality, including disinvested areas. Use an Equity Toolkit to identify and correct any unintended impacts (and potential benefits) of any capital project on low-income, disinvested communities, or communities of color. Ensure the toolkit for each project is made public for accountability and discussion. Ensure capital projects also take into account unintended consequences such as gentrification and provide solutions to mitigate/diminish negative impacts posed by solutions. Ensure the burden of public funding for capital projects is equitable across communities. Include a plan for upkeep and maintenance for any capital project. List the affirmative acts of community outreach.

Q164

Please provide a brief explanation of the ways in which you are embedding equity into this adaptation action?

The Housing Finance and Community Redevelopment Division has added air conditioning as an eligible project in its Minor Home Repair Program, to bring AC to more low- and moderate-income households.

Q165

Please provide any supporting documents under Adaptation Priority Action #6.

Respondent skipped this question