

December 10, 2019 City Wide Meeting #2: A Green New Deal for Philly

On 9/26/19 City Council passed the Ready for 100 Resolution, “Urging the City of Philadelphia to take measures to achieve fair and equitable transition to the use of 100% Clean Renewable Energy by 2050.” While it’s a positive step which sets the tone for the newly elected Council, resolutions are non-binding. Concerns have been expressed that 2050 is only relevant, if critically important changes have been achieved by 2030.

Environmental activists from 3 groups decided to hold 3 city wide meetings, of which this is the 2nd. Environmental, social justice, allied union organizations, individual activists, academics, and students are invited to agree on what changes must be made in Philadelphia in the coming decade, and establish incremental benchmark goal posts over those 10 years.

It's important for us to find agreement on a timeline so that we are not divided, and so the City does not find loopholes between us, to justify dismissing needed changes. Our facilitator is neutral and not a member of any of our groups.

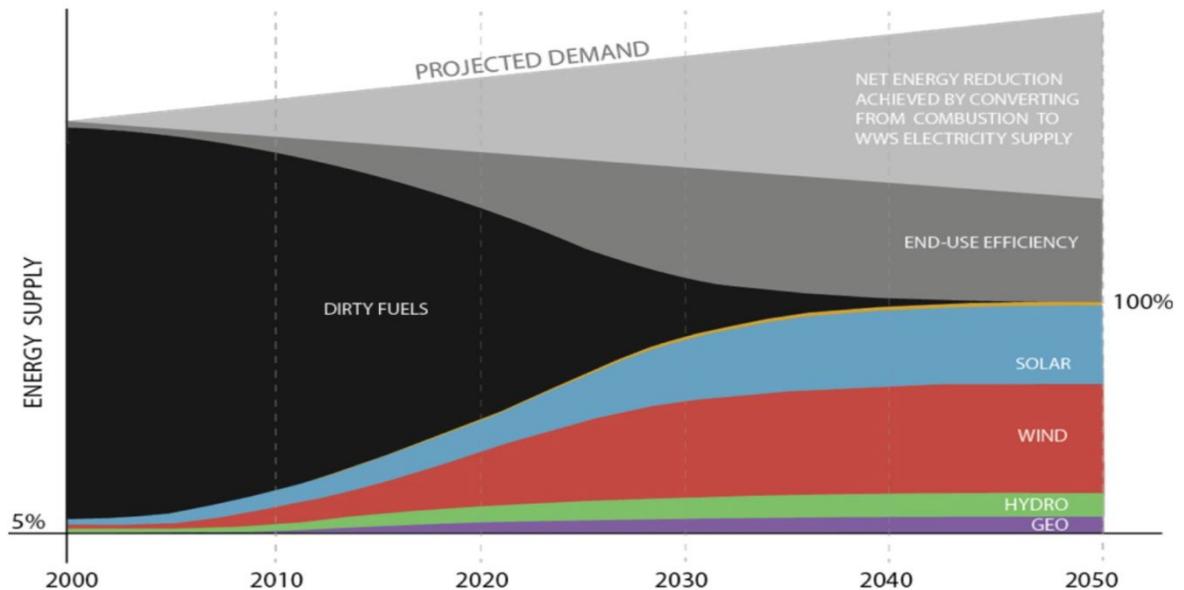
We need the city to deeply address toxic exposure and environmental justice. We need to make sure that the economic apartheid system is dismantled, and that social equity can be built, partly through dignified employment, equity in education, healthy food, safe homes and other buildings, as the world, including Philadelphia, moves into a changing climate reality.

We know that whatever Philadelphia does will have significant influence on the climate, local health, and our local economy. It will also affect the political will of other more conservative cities and towns, as to whether they choose to act in time to help keep global warming below 1.5 degrees celsius.

Suggested Topics for Break-out Groups in Today's Meeting

1. Transition to renewable electricity
2. Local energy generation
3. Transition our **Utilities**
4. Buildings -- make 'em efficient & electric, and save money
5. Transportation -- make it just, efficient & electric
6. Urban Agriculture / Green Spaces / Trees
7. Solid **Waste** Mgmt, Waste Water Mgmt
8. Industrial Processes
9. Economic Development & Innovation
10. Labor & Equity & Funding

Energy Use Goal - 100% Renewable



Input from these many groups, and many many individuals

- 350 Philly
- [5th Square](#)
- ADAPT
- [Alliance for a Just Phila](#) - People's Platform
- [All Together Now PA](#)
- Atlanta
- [Bicycle Coalition of Greater Philadelphia](#) (BCGP)
- Bike New Deal
- City of Phila - [Building Energy Performance Policy](#)
- City of Phila - Clean Fleet Plan
- City of Phila - Office of Transpo & Infrastructure Systems - [Connect: Philadelphia's Strategic Transportation Plan](#)
- City of Phila - Office of Sus - [Municipal Energy Master Plan](#)
- City of Phila - Office of Sus - Powering Our Future
- City of Phila - Zero Waste & Litter Plan
- Clean Air Council (CAC)
- ClimateStrikePA
- ESWA
- GND Phila
- Neighbors Against the Gas Plants (NAGP)
- NW Philly - Climate Action Ntwk
- NYC Climate Mobilization Act
- Penn Environment
- Penn Future
- Pittsburgh
- Phila 3.0
- Philadelphia Unemployment Project
- Philly DSA
- Philly Thrive
- [Philly Mag](#) November 2019 - opinion on what Philly should do about climate
- POWER
- PSR Philadelphia
- Ready for 100 Philly's 2017 Action Plan
- Reclaim Phila
- Sunrise Philly

1. Transition to 100% renewable electricity

Commitment to no new fossil fuel infrastructure

1. City Council should call for an immediate **moratorium on all fossil fuel infrastructure development**, starting with the cancellation of the proposed PGW liquefied natural gas plant. (**Alliance for a Just Phila**). Recently OK'd LNG plant (Meenal)
 - 1.1. I think we need a powerful "stop-the-lip-service" resolution from Phila City Council committing to following the current climate science. They are trying to have it both ways -- they say they believe in the science and are committed to addressing CC but they keep approving fossil fuel projects. If they're on the record with a climate science resolution then for each project they approve they will be forced to explain why they're ignoring what the science requires. (**Brent G, All Together Now PA**)
2. Commit to no new fossil fuel projects, such as Passyunk Energy Center / LNG plant (**GND for Phila**)
3. Pass a moratorium on the development of fossil fuel infrastructure in Philadelphia (**Alliance for a Just Phila**)
4. The City of Philadelphia shall place an immediate **moratorium on construction of new fossil fuel powered plants**; and also require all existing plants to have carbon capture and storage technology by 2030 (during their phase-out). (**2017 Ready for 100 Action Plan**)
5. A ban on all new fossil fuel infrastructure in the City of Philadelphia. (**ClimateStrikePA**)
6. Passing large-scale right to breathe legislation and ensuring the right to clean water. (**ClimateStrikePA**)
7. All candidates (and elected people) must sign the [No Fossil Fuel Money](#) pledge. (**Sunrise Movement Phila**)
8. Take urgent action to combat climate change and its impacts (Sustainable Development Goal # 13, **Freyda, ESWA**)
9. Amend Air Management Service's permitting process to adopt a Cumulative Impacts Analysis & a Health Impacts Analysis (**Alliance for a Just Phila, POWER, NAGP, PSR Phila**)
10. The City of Philadelphia shall prohibit usage of non-electric leaf blowers. (**Mehdi, Ready for 100**)

Future of refinery site

It is not the purpose of this working group to come up with a specific plan for this. It's a process that activists have been working on. (Lynn R, NAGP)

1. Advocate that Attorney General Josh Shapiro collect state back taxes owed by the Philadelphia Energy Solutions oil refinery and enforce clean-up of toxics from Sunoco's ownership (**Alliance for a Just Phila, GND for Phila**)
2. Transition the Philadelphia Energy Solutions oil refinery to restored public land and community-owned renewable energy projects (**Alliance for a Just Phila**)
3. Hold polluters accountable and collect back-taxes owed, such as PES refinery (**GND for Phila**)
4. Strong-arm the blown out South Philly refinery into becoming a green energy complex (**Nov '19 Philly Mag**)
5. Demand transparent bidding for the refinery. (**Philly Thrive, POWER, 350 Philadelphia, NAGP, several other groups**)
 - a. We could thank our City representatives for their initiative in participating in the bankruptcy process; for their continued pressure on fossil fuel companies that may want to buy the refinery site; for considering all of our concerns voiced over the many community meetings this summer and fall. (**Meenal, Philly Talks Climate**)
 - b. We know there are bidders. And we know there's to be hearing in bankruptcy court on January 17th. In the interim, we can continue reminding our City representatives to remove all tax incentives and zoning that allowed this refinery for as long as it has; to watch for zoning changes submitted to L&I, and review them with a climate lens; to remove designation of Keystone Opportunity Zone for any parcel of this site; to publicly announce that the City wants to sign a power purchase agreement for large scale solar generated electricity from this site; to publicly announce that we don't want any project that includes combustion; to ask the DEP to "declare a re-opener" of the remediation agreement with Sunoco and Evergreen. (**Meenal, Philly Talks Climate**)
6. Support a Good Neighbor Agreement between the Philadelphia Energy Solutions with surrounding neighborhoods as a precondition to the RNG Energy biogas development (**Alliance for a Just Phila**) This is controversial so it needs more detail. What types of biogas from which sources? Maybe more research on biogas needs to be required before saying a general OK?" (**Lynn R, NAGP**)

"Correct. do we support investing in using the fuel from landfill, which will exist for

a long time? This is at least not new gas, like that which is fracked. It might be helpful to know the cost. This is more of a transition fuel than fracking, anyway. At some point, this resource might actually go away." (**Tanya S, GND for Phila**)

7. Activists can encourage offshore wind energy manufacturers to bid on the site. (**Lynn R from NAGP, Peter Winslow, Lisa Hastings and others, working with Philly Thrive and other groups.**)
8. Encourage the city to use eminent domain to seize land along the river and restore it. (**Lynn R, NAGP**) Not a good idea until it is remediated. Until then, it's a liability for the City. (**Meenal, Ready for 100**)

2. Local energy generation

eg. solar, geothermal, microgrid, wind -- on-site non-burning generation

The City's Powering Our Future section for this is called "Growing the Clean Energy Programs"

Residential buildings

1. Incentivize rooftop solar (**GND for Phila**)
2. Simplify the Power Purchase Agreement process for solar PV systems on the smaller rooftops. (**Mehdi, Ready for 100**) Explain why. (**Lynn R, NAGP**)
3. Simplify and shorten the process to obtain permits and permission to interconnect for solar PV systems on rooftops. (**Mehdi, Ready for 100**)
4. Home Energy Use Disclosure Requirement (page 47 of **Powering Our Future**)

Commercial buildings

1. Commercial PACE (page 43 of **Powering Our Future**)
2. Landlord Disclosure Requirement (page 47 of **Powering Our Future**)
3. New Development Incentives (page 33 & 44 of **Powering Our Future**)

Municipal buildings

1. Install solar on every viable school roof, library, and recreation center (**GND for Phila**) All Garages too (**Lynn R, NAGP**)
2. Advocate that any Rebuild Phila projects incorporate solar and microgrids to provide emergency power in times of storms (**Alliance for a Just Phila**)
3. Ready public spaces as cooling centers and as demonstration center (**GND for Phila**)
 - a. "Underground areas are easier to be cool in, because of the steady 50 degree temperature. But many basements in Philadelphia battle moisture and mold. Maybe a solution to basement issues and making basements living spaces in summer, may help solve the problem, though basements are really not far enough underground to be that much cooler. If HVAC pumps can't cool a whole house, in extreme heat, they may be able to handle a basement in extreme heat. I like the inexpensive solutions, but if the heat index is 130F, air conditioned cooling stations will be necessary

unless homes are set up to handle it. " (**Lynn R, NAGP**) This comment needs to be elsewhere, with residential upgrades, not public spaces. (**Meenal, Ready for 100**) Explain: Solar powered? Is this about energy generation? (**Lynn R, NAGP**)

4. Utilize geothermal exchange and solar hot water systems for cost-effective implementation at City municipal facilities that fit these technologies. Eg police, library, rec center (**Mehdi, Ready for 100**)
5. Solar canopies shall be installed on large municipal-run parking lots in areas that receive adequate sunlight. (**2017 Ready for 100 Action Plan**) Move to section on Local Energy Generation (**Meenal, Ready for 100**)

3. Transition our utilities

1. Advocate for a federal Green New Deal to advance efforts to move Philadelphia towards a democratically controlled 100% renewable energy system by 2030 through unionized job creation that prioritizes hiring Philadelphia's working class and people of color (**Alliance for a Just Phila**)
2. Develop a democratically controlled 100% renewable energy system by 2030 (**GND for Phila**)
3. Demand that the City invest in and prioritize community-owned renewable energy projects by Black, Brown, and poor communities in its energy procurement portfolio. (**Alliance for a Just Phila**)
4. The City shall prioritize community-based development of renewable energy infrastructure and will make investments in community facing organizations to build capacity to lead such development. (**2017 Ready for 100 Action Plan**)
5. The City of Philadelphia urges utility companies to maximize energy efficiency, demand control technologies, energy storage, and renewable energy and avoid any new commitments to ownership of or long-term contracts for electricity derived from fossil-fuel power plants. (**2017 Ready for 100 Action Plan**)
6. The City of Philadelphia calls on the Pennsylvania Public Utility Commission (PUC) to expand rules that will enable and not prohibit municipalities from achieving their goals of renewable energy transition. (**2017 Ready for 100 Action Plan**)
7. The City of Philadelphia calls on the PUC to increase future funding for the Act 129 program that enables utilities to run programs like SmartIdeas to help residents and businesses reduce their electricity demand and expand to include stakeholders not currently included in Act 129. (**2017 Ready for 100 Action Plan**)
8. Setup a Climate Policy Advisory Council, with citizen membership, like the Food Policy Advisory Council. (**Meenal, Ready for 100 & Nidhi Krishan, FPAC**)

PGW

1. City of Philadelphia leaders shall work with PGW towards establishing a new business chart of transitioning existing gas infrastructure and building a stable clean energy infrastructure by 2050, and consider including large building energy storage, managing large city-sited solar projects (airport), and managing major

energy efficiency projects. **(2017 Ready for 100 Action Plan)** This is off topic for a 10 year timeline. What can be done by 2030? Research hydrogen and make a choice between fixing pipes and using hydrogen or abandoning pipes and PGW either helps with the transition and facilitates localized solar community grids or the city shuts it down. **(Lynn R, NAGP)**

2. Bring city stakeholders together and turn a crisis into an opportunity -- - PGW responsible for 22% emissions - transition PGW **(Nov '19 Philly Mag)**
3. Commission & fund community-labor led studies on transitioning Philadelphia Gas Works to 100% renewable energy **(Alliance for a Just Phila)**
4. PGW Business Operations Evaluation, page 53 of **Powering our Future**
5. Install geothermal energy systems beneath our streets **(GND for Phila)**
6. After 2020, upgrades in residential and commercial HVAC and appliances shall be electric or powered by other sustainable energy source to wean off gas from PGW **(2017 Ready for 100 Action Plan)** Move to Electrification or PGW section. **(Meenal, Ready for 100)**
7. The Labour Party in the UK is proposing a [massive transition to heat pumps and solar thermal](#), starting with low income households. There will need to be incentives (on-bill financing?) to make this happen. **(Brent G, All Together Now PA)**

PECO

1. The City of Philadelphia shall call on PECO to work with city leaders to achieve the goal of a 100% renewable electricity grid by 2030. **(2017 Ready for 100 Action Plan)**
2. Commission and fund a public and participatory study to take community control of PECO - perhaps transform PGW to electric utility **(Alliance for a Just Phila, Reclaim Phila)**
3. Set up variable time-of-use billing rates to encourage electricity use at off-peak time, such as night-time. **(GND for Phila)**
4. Set up variable vehicle-to-grid billing rates to encourage electric vehicle charging at off-peak times. **(GND for Phila)**

4. Buildings -- make 'em efficient, & electric, and save money

63% of City-wide emissions -- 9.7 million metric tons of CO2

According to the [Halfway There](#) report, we could cut energy use and emissions in half by 2050, by just being smart, by focusing on energy efficiency. Just for the building sector, this could reduce emissions by 33% How? By replacing with efficient appliances, zero energy buildings, building improvements, smart buildings, and electrification of space & water heating.

1. Energy efficiency shall be used to reach a goal of 50% reduction in energy usage of existing buildings citywide by 2050, compared to 2006. **(2017 Ready for 100 Action Plan)** Look at # 10. NYC is better!! We need to at least aim for NYC levels, which were arrived at through compromise. We should actually aim higher, knowing our asks will be eroded. 50% by 2030. 95% by 2050 **(Lynn R, NAGP)**
2. Priority shall be given to energy efficiency measures including weatherization, cogeneration, district heating and cooling, decentralized electricity generation and smart grids/microgrids, the use of industrial waste heat, building controls, automated lighting, solar-powered hot water heating and programs that create an energy saving culture in the City of Philadelphia. **(2017 Ready for 100 Action Plan)** Is cogeneration same as CHP (combined heat and power)? **(Lynn R, NAGP)**
3. The City of Philadelphia shall continue to adopt updated ICC (International Code Council) building codes. **(2017 Ready for 100 Action Plan)**
4. Big building efficiency to reduce emissions 40% by 2030, 80% by 2050 **(NYC Climate Mobilization Act)**
5. In construction begun after 2020, all appliances must be powered by electricity or other sustainable energy system. **(2017 Ready for 100 Action Plan)**
6. Heating and cooling systems must be powered by non-fossil fuel systems in all new construction. **(2017 Ready for 100 Action Plan)**
7. Incentivize new construction to exceed current codes and aim for net zero energy construction. **(Meenal, Ready for 100)**
 - a. Get zoning and permit applications expedited if designed for LEED Zero.
 - b. If we must have a tax abatement, offer only for net zero energy buildings

- c. Demand Net Zero Energy Buildings – This is for new buildings, whether residential or commercial, which can be built so that they don't need much energy. How? Make 'em tight, make 'em electric, and what little energy they need would be electricity from rooftop solar panels.

Residential buildings

1. Invest in energy efficiency and buildings apprentice programs and expand basic service repair projects to support energy efficiency and decrease energy burden in communities (**Alliance for a Just Phila**)
2. The City of Philadelphia shall develop a program to provide incentives for landlords to weatherize/create efficiency for their low-income properties. (**2017 Ready for 100 Action Plan**)
3. The City of Philadelphia shall require all new high-rise construction to enable remote operations and networking of HVAC building controls. (**Mehdi, Ready for 100**) People in condominiums and apartments will fight you on this if a remote server determines temperature. (**Lynn R, NAGP**)
4. End fossil fuel use in private homes - no new gas lines - efficient appliances (**Emily D, Ready for 100**) By when? Does this mean ALL homes or new homes. Timeline needs to be created by the group. (**Lynn R, NAGP**)
5. Electrification of space & water heating — As with efficient appliances, when replacing heating systems, consider the electric option instead of the gas option. (Meenal. Ready for 100)
6. Electrify appliances in homes
 - a. Incentivize electrification of everything -- Offer financial incentives such as tax credits or rebates for purchasing efficient new electric appliances. (**GND for Phila**)
 - b. Ensure that new construction is fully electric, energy efficient, and fossil fuel free. (**GND for Phila**)
 - c. All newly built public and publicly subsidized low-income housing shall only use clean renewable energy sources by 2030. (**2017 Ready for 100 Action Plan**)
 - d. Efficient appliances – We know that when we're replacing any appliance, we need to check that yellow EnergyStar tag, and select one within our budget, and one that uses less energy & water, and is electric. (**Meenal, Ready for 100**)
 - e. Make the tax abatement green (**Dave M, Ready for 100**) Encourage LEED Zero - tax reduction based on certification. (**Nov '19 Philly Mag**)

Many people want to end it. Important to put this last, if at all. A potential rabbit hole tangent. Some people want to keep the abatement only for restoring historic buildings. Financial incentives could be offered other ways, and not for 10 years. **(Lynn R, NAGP)**

- f. Transition to renewable heating systems. **(GND for Phila)**
 - i. Is geothermal too difficult and expensive in urban settings? You need large open areas for horizontal runs for shallow GSHP (ground-source heat pumps) or you have to drill very deep to get the same amount of heat transferred and that's expensive. Air-source heat pumps are not nearly as efficient but they're still efficient (and electric) and much cheaper. This needs more research. **(Brent G, All Together Now PA)**
 - ii. Renewable heating systems would be either geothermal district heating geothermal or geothermal heat pumps. Since district heating relies on a naturally occurring near surface hot water supply, geothermal heat pumps are probably what should be emphasized here. Geothermal heat pumps can heat and cool but require some electricity (20-40% less energy used overall), ideally renewably sourced, to power the compressor, pump, emergency heat, and fan. Ideally install requires a yard or lot to bury pipes that circulate water in, but a vertical loop occupying a smaller footprint is possible but more costly. The main benefit being the ability to get off natural gas, so better air quality and more hvac jobs too. And that the technology is ready to go--this is a solution for today. **(Caleb C, Philly DSA)**
- g. Educational Campaigns for energy audits, for weatherizing, for LED lighting **(Jim W, Ready for 100)**
- h. When replacing, replace with hi-efficiency and electric options **(Jim W, Ready for 100)**
- i. Incentives for occupancy sensors & programmable thermostats **(Jim W, Ready for 100)**

Commercial buildings

- 1. Retrofitting commercial buildings have a negative cost. Need to highlight this, and the Building Tuneup Program (page 46 of **Powering Our Future**) that has been translated to the [Building Energy Performance Policy](#), signed by Mayor today, 12/10/19. This bill requires owners of large buildings to tune-up energy &

water systems in their buildings. It means they would need to regularly check on thermostats, motion sensors, HVAC systems and more, saving the owners money, use less energy & water, and reduce emissions. They also make the space more comfortable. Office buildings, hospitals, college buildings, school buildings, retail buildings, and hotels are some types of large buildings, each with a large carbon footprint. If over 50,000 square feet, they would be required to do a tuneup. **(Meenal, Ready for 100)**

2. Zero Energy Buildings – This is for new buildings, whether residential or commercial, which can be built so that they don't need much energy. How? Make 'em tight, make 'em electric, and what little energy they need would be electricity from rooftop solar panels. **(Meenal, Ready for 100)**
3. Smart buildings — You may know of thermostats that learn our patterns of coming and going, going into energy savings mode when we're away. For commercial spaces, there are fancier tools to reduce energy use. **(Meenal, Ready for 100)**

Municipal buildings

1. Improve and expand building energy monitoring using utility bill management software, benchmarking, metering, control system infrastructure, communication with building operators, and other integrated approaches for all City buildings with that capacity. **(Mehdi, Ready for 100)** All City government buildings? Non profits? Schools? Hospitals? Houses of worship? How about all commercial buildings, and all multi-story, multi-family buildings above 5 floors? **(Lynn R, NAGP)**
2. Enable remote operations and networking of HVAC building controls for all City buildings with that capacity. **(Mehdi, Ready for 100)** Is this remote control of the temperature in all city owned buildings? **(Lynn R, NAGP)**
3. Municipally owned or managed facilities, to include the airport and water department, shall reduce their energy use in the built environment 20% by 2030. **(2017 Ready for 100 Action Plan)**
 - a. "I recommend breaking it down into phases. E.g. 30% by 2021, 50% by 2025 80% by 2028 & 100% by 2030" **(Mehdi, Ready for 100)**
 - b. "I think the PPA gets municipal buildings to 22% by 2021, so perhaps 40% by 2024, 60% by 2026, 80% by 2018 & 100% by 2030." **(Dave M, Ready for 100)**
 - c. I think it's not realistic to achieve any major change in one year. 50% by 2024. 70% by 2026, 90% by 2028, 100% by 2030. **(Lynn R, NAGP)**

4. Municipally owned or managed facilities, to include the airport and water department, shall generate or purchase electricity from 100% renewable sources by 2030. **(2017 Ready for 100 Action Plan)** Purchases of electricity from 100% renewable by 2025. This requires no new infrastructure at the facilities. No need to wait unless off shore wind power gets delayed. Adjust goals later, if not possible. **(Lynn R, NAGP)**
5. The City shall prioritize direct investments of renewable resources over the purchase of RECs, any RECs purchased must be from projects built during or after 2018 and within the PJM market, and the City shall reduce its reliance on RECs during the transition to 100 percent renewable resources over time. **(2017 Ready for 100 Action Plan)** "How is the city reliant on RECs?" **(Mehdi, Ready for 100)** DEFINE RECs Reliable Energy Certificates? Few people will understand this. Please explain. **(Lynn R, Ready for 100)**
6. The City of Philadelphia avoid any new commitments to ownership of or long-term contracts for electricity derived from fossil-fuel or nuclear power plants. **(Mehdi, Ready for 100)** Do NOT leave nuclear power electricity, until we can transition to non fossil electricity. We CAN NOT afford to increase burning right now. **(Lynn R, NAGP)**
7. Utilize geothermal exchange and solar hot water systems for cost-effective implementation at City municipal facilities that fit these technologies. Eg police, library, rec center **(Mehdi, Ready for 100)**
8. How does this line up with the Municipal Energy Master Plan? **(Meenal, Ready for 100)**

5. Transportation -- make it just, efficient & electric

24% of City-wide emissions -- 3.7 million metric tons of CO2

According to the [Halfway There](#) report, we could cut energy use and emissions in half by 2050, by just being smart, by focusing on energy efficiency. Just for the transportation sector, this could reduce emissions by 46%. How? By driving less, by transitioning to electric vehicles, by flying less and moving our stuff around smarter.

Tele-commuting

1. Support each other to traveling less. Use phones, Facetime & Zoom more. How to turn into a policy?

Walking & cycling

1. Encourage active transportation such as walking and cycling (**GND for Phila**)
2. Implement Vision Zero - no pedestrian or cyclist fatalities by automobiles (**GND for Phila**)
3. Fund Vision Zero for bicycle safety (**Alliance for a Just Phila**)
4. By 2050 all streets currently supporting 2 lanes for traffic shall have one protected lane for bicycles. (**2017 Ready for 100 Action Plan**) Sooner, please! (**Lynn R, NAGP**)

Transit

1. Increase transit ridership with fair fares (**5th Square**)
 - a. free transfers -- A more efficient commute without paying an extra \$1
 - b. better access for cash users -- SEPTA Key kiosks at libraries, community centers, more bus loops
 - c. fare capping for passes -- Pay for your pass over a week or month instead of all at once
 - d. increase key card flexibility -- Multiple riders on one card, discounted/free youth fares
 - e. improve institutional contracts -- More flexible quick trips, bulk contracts w employers
2. free transit for kids under 12, free transfers on SEPTA (**GND for Phila, 5th Sq**)
3. Free public transit for all. Begin with free transfers for all people in 2020. If SEPTA has \$500,000 for lawyers to fight the people, they can afford free

transfers. Add more frequent regional trains. Quiet electric buses may be more pleasant. Also there could be smaller, more pleasant buses, used in off peak hours and to supplement the large buses in peak hours. **(Lynn R, NAGP)**

4. Zero-emission all-electric buses by 2032 **(GND for Phila)**
5. Advocate that SEPTA prioritize the procurement of electric buses in low-income, EJ communities **(Alliance for a Just Phila)** Do it everywhere!! Riders travel across communities. **(Lynn R, NAGP)**
6. Free public transportation for low-income people and students, including ending the transfer fare. **(Alliance for a Just Phila)** Free transit for all **(Meenal Raval, Ready for 100)**
7. Increase access to all transportation for people using wheelchairs, taxis, ride-sharing, SEPTA, hotel vans and all vans that travel to and from the airport. **(Alliance for a Just Phila)**
8. SEPTA shall transition to a fleet of zero carbon emission vehicles by 2035, with first priority given to routes where the greatest air pollution levels exist within the City of Philadelphia in order to reduce emissions in areas with high asthma rates and health vulnerabilities. **(2017 Ready for 100 Action Plan)** Sooner please! 2030! **(Lynn R, NAGP)**
9. Accessibility at every SEPTA station **(ADAPT)**
10. Functional speakers & displays on all transit **(ADAPT)**
11. A faster, better organized CCT service **(ADAPT)**
12. City developed the Connect plan.
13. Reduce bus stops in Center City

Delivery vehicles

1. Tax truck deliveries for local and distant locations **(Tanya, GND for Phila)**
2. Electrify local delivery trucks **(Lynn R, NAGP)**
3. Develop an anti-idling campaign that rewards citizens for reporting idling diesel trucks & buses **(Meenal, Ready for 100)**
4. [Cut traffic congestion by fixing trash policy](#). Example of one shared trash compactor and pick-up location is saving 30 trash truck trips a week (four per day) just for one city block. Fewer trash truck trips = less congestion, also less emissions. An example of moving our stuff (including trash) smarter. (Phila 3.0)

City fleet

1. Define policy for car-sharing, to reduce size of fleet **(Meenal, Ready for 100)**
2. Add bikes to City fleet **(Meenal, Ready for 100)**

3. Electrify city fleet, school buses, transit fleets, and in-city delivery trucks (**GND for Phila**) 100% by 2025 (**Lynn R, NAGP**)
4. The City of Philadelphia shall transition their vehicles to zero carbon emission by 2035. (**2017 Ready for 100 Action Plan**) Sooner, please! (**Lynn R, NAGP**)
5. Transition City fleet to zero-emissions by 2035; starting 2020, replace all highly used vehicles; starting 2023, replace all vehicles with Electric Vehicles (**2017 Ready for 100 Action Plan**)
6. Clean Fleet Plan by City to transition the over 6000 vehicles.
7. The city shall post signage about the vehicle anti-idling law throughout Philadelphia and encourage reporting of gas and diesel vehicle idling, especially delivery trucks & buses (**2017 Ready for 100 Action Plan**)
8. The City of Philadelphia shall place an immediate moratorium on construction of drive-thru for fast food restaurants to prevent cars from idling. (**Mehdi, Ready for 100**) We should try not to make the entire business community resent us. All hands on deck for electric vehicles. (**Lynn R, NAGP**)
9. Charge people to drive in the City. And use the money to make SEPTA better. Perhaps free? 24% of emissions - congestion fee (**Nov '19 Philly Mag**) This would be a regressive tax on low income drivers: Just make ride sharing and public transit more affordable and pleasant. Bicycle taxis anyone? (**Lynn R, NAGP**)
10. City Council shall create incentives for all motor vehicles (ie - city, commercial, and personal) operating in the City of Philadelphia to have zero carbon emissions by 2050. (**2017 Ready for 100 Action Plan**) "I think this too far out. Perhaps 80% by 2030." (**Mehdi, Ready for 100**) 100% by 2030 (**Lynn R, NAGP**)
11. The City Council shall create incentives for car-sharing and taxi cabs to switch to EVs. (**Mehdi, Ready for 100**) "what have other cities done? zero interest loans? how to keep from blocking bus lanes, bicycle lanes?" (**Meenal, Ready for 100**)

Private vehicles

1. Promote car sharing (**GND for Phila**)
2. Support reverse-commuting by carpool, vanpool, and public transit for people working outside Philly (**GND for Phila, Philadelphia Unemployment Project**)
3. Discourage fossil-fuel powered vehicles, including automobiles, especially in Center City by increasing parking fees and making it harder to drive a gasoline car into Greater Center City (**GND for Phila**)
4. Build more low-car multi-family housing close to public transit (**5th Square**)

5. Eliminate mandatory minimum parking requirements [for new construction] (**5th Square**)

Public electric vehicle charging infrastructure

1. Invest in public curbside electric vehicle (EV) charging (**GND for Phila**)
2. Require EV charging stations in parking lots and garages (**GND for Phila**) This is a good idea but not enough. Residents with EV's need a strategy from the city for charging. It's not sustainable to pay for parking in a garage plus charge fee. Why are we so allergic to innovation or stealing some other city's innovation? One [example](#) (**Brent G, All Together Now PA**)
3. Make it easier to own an electric car - 386,000 drive to work - 135 public plugs - more public EV chargers (**Nov '19 Philly Mag**)
4. All commercial and residential parking lots shall be required to provide parking spaces with Electric Vehicle (EV) charging docks. A portion of these spaces shall be dedicated to shared vehicles and some to private vehicles. (**2017 Ready for 100 Action Plan**)
5. A portion of on-street parking spaces shall have EV charging facilities. (**2017 Ready for 100 Action Plan**) "We should associate it with a date." (**Mehdi, Ready for 100**) If electric car owners can charge up at home, gas stations can be replaced with charging stations. That is an easier switch. (**Lynn R, NAGP**)

6. Urban Agriculture / Green Spaces / Trees

Urban Agriculture

1. Encourage local agriculture, especially urban farms (**GND for Phila**)
2. City agencies must purchase food that is nutritious, sustainably sourced, values work-force, and locally sourced agriculture. To do this we need the city to divest from unhealthy, unsustainably sourced, labor exploiting, corporate food (**Alliance for a Just Phila**)
3. Prioritize black & brown growers when investing in support & infrastructure for growing Good Food AND when purchasing Good Food (**Alliance for a Just Phila**) The word prioritize in relation to skin pigmentation might create trouble. It also assumes that competition for receiving support with urban farming with occur. Let all working class urban farmers get assistance. So, we might form farming coops, and we will hopefully be mixed races. (**Lynn R, NAGP**)
4. Increase reliance on non-meat foods (**Judy M, NWP-CAP**), reduce beef consumption by 30% (**Pittsburgh**) Trend setting is key. Not a government thing to do. (**Lynn R, NAGP**)
5. Increase urban ag / vertical farming practices (**Atlanta**)
6. Reduce food deserts w mobile markets (**Atlanta**) Food trucks? How about farmers markets for all the urban farmers? (**Lynn R, NAGP**)
7. Increase food donation systems (**Pittsburgh**)
8. Cooking education (**Pittsburgh**)
9. Garden donation programs (**Pittsburgh**)
10. Create cottage food laws (**Pittsburgh**)

Green Spaces

1. bring in PennFuture's asks about [green stormwater](#) infrastructure (source?)

Trees

1. Draw down greenhouse gases with large-scale shade-tree planting combined with tree care, street-sweeping, and litter collection. Think of trees as infrastructure. (**GND for Phila**)
2. Plant more trees in low-income neighborhoods (**Nov '19 Philly Mag**) Also plant flowers as well as bushes and other large plants that filter air, make oxygen, add beauty. Window box projects. (**Lynn R, NAGP**)

3. Maintain / increase urban canopy & tree protection (**Atlanta**)
4. Quantify trees and carbon sequestration (**Atlanta**)

7. Solid Waste Mgmt, Waste Water Mgmt

3.9% of City-wide emissions -- 601,000 metric tons of CO2

Solid Waste Mgmt

1. Goals

- a. Embrace a Zero Waste by 2035 goal (**GND for Phila, Zero Waste & Litter Plan by City**) Sooner, please! 2030? (**Lynn R, NAGP**)
- b. Zero Waste Boston to divert 90% of waste from landfills and combustors. Diversion includes source reduction, reuse, repair, recycling, and biological treatment of organics.
 - i.

2. Reduce

- a. Eliminate single-use plastics (**GND for Phila**)
 - i. Incentives for: less plastic packaging of food, promotion within stores of products with no plastic packaging (**Lynn R, NAGP**)

3. Reuse

4. Recycle

- a. Close the loop locally, by making products from the collected recyclables material. (**GND for Phila**)
- b. Who knows rules re: Philly [Commercial Recycling](#) requirements? Looks like all businesses, including restaurants are required to recycle, that's not what I've seen. This should be required if it isn't and facilitated and/or policed if it is. (**Brent G, All Together Now PA**)
- c. Set up a revived deposit system for glass containers so glass is simply cleaned and reused, not melted down. (**Lynn R, NAGP**)

5. Compost

- a. Incentivize backyard and neighborhood-scale composting (**GND for Phila**)
- b. Invest in waste reduction, including supporting community-led composting enterprises and municipal composting and requiring all city agencies and departments to compost (**Alliance for a Just Phila**) Philly just announced [first city-wide composting facility](#). Good news, but not enough, need to pressure them to evaluate quickly and start pilot for larger roll-out. (**Brent G, All Together Now PA**)

- c. Community Composting (**Pittsburgh**)
- d. The city can collect compost from homes and businesses that are not composting on site. The city is doing a composting trial project of some sort right now. (**Lynn R, NAGP**)

Waste Water Mgmt

- 1. Wide publication on a regular basis and TV ads are needed with rules for car repair on city streets and how/why spilling oil and other liquids damages the river and ocean. (**Lynn R, NAGP**)

8. Industrial Processes

9% of City-wide emissions -- 1.4 million metric tons of CO2

According to the [Halfway There](#) report, we could cut energy use and emissions in half by 2050, by just being smart, by focusing on energy efficiency. Just for the industrial sector, this could reduce emissions by 20%.

1. Implement local and sustainable purchasing practices by the City (**GND for Phila**)
2. How is the 9% derived? Does “city wide emissions” include energy production outside of Philadelphia which serves the city? (**Lynn R, NAGP**)
3. What percent of toxic pollution inside the city comes from industrial processes? This would include the refinery. (**Lynn R, NAGP**)

9. Economic Development & Innovation

1. The City of Philadelphia shall encourage businesses to consider their environmental, social and economic impact upon the residents, environment and global community. **(2017 Ready for 100 Action Plan)** Businesses must act, not just consider their impact on society, their labor force, and the environment. **(Lynn R, NAGP)**
2. The City of Philadelphia shall support clean energy innovators through the processes of business and technology research, incubation, acceleration, and demonstration by grants and academic partnerships. **(2017 Ready for 100 Action Plan)** Not clear. Does this say that the City will support as in pay money to energy innovators or does it say that the City will lend support by doing business and tech research and all the rest? **(Lynn R, NAGP)**
3. The City of Philadelphia shall increase green developer tax credits. **(2017 Ready for 100 Action Plan)**
4. The City of Philadelphia shall review and revise existing zoning ordinances with the aim of prioritizing green development in underutilized areas and properties. **(2017 Ready for 100 Action Plan)** If an area is underutilized, green development could also mean urban farming or a park. **(Lynn R, NAGP)**
5. The City of Philadelphia shall engage in educating businesses on the business case for renewable energy opportunities, including on-site generation, renewable energy sourcing and energy efficiency measures, and provide support for removing financial and technical barriers in new technologies, prioritizing small and local businesses. **(2017 Ready for 100 Action Plan)**
6. The City of Philadelphia shall hold businesses responsible for the energy efficiency and energy sourcing of their facilities requiring new construction to meet all city codes. **(2017 Ready for 100 Action Plan)** Yes! What are the consequences for breaking the law? A business can lose their license to operate if they do not comply. What does the code currently say? **(Lynn R, NAGP)**
7. The City Council shall prioritize zoning waivers of new development contracts to those companies who prioritize energy efficiency (above and beyond what is required by code), clean renewable sources of energy, and toxin-free materials in their construction and residential/retail occupancies. These waivers should also encourage engagement with the local community in which companies seek to develop throughout their process, prioritizing any available retail units to new local businesses in the community. **(2017 Ready for 100 Action Plan)** How is this different from #4? **(Lynn R, NAGP)**

10. Labor & Equity & Funding

Labor

1. Workers who have been downsized from fossil fuel industries should be supported with transition benefits, job training, and a just transition to new jobs, especially in energy efficiency and renewable energy. **(2017 Ready for 100 Action Plan)**
2. Renewable energy training and educational programs within the school district and community college shall be supported by City Council. **(2017 Ready for 100 Action Plan)**
3. What Philly can learn from Copenhagen ([OTIS article](#)) **(source?)**
4. Local workers when hiring for union jobs, reflecting city demographics **(source?)**

Equity

1. The City of Philadelphia shall create structured mechanisms to include low-income citizens in the benefits to be derived from the energy transition, including creating quality careers in weatherization, energy efficiency, and solar power, adhering to local source hiring, a just transition for workers displaced by fossil fuel reduction, equitable access through ownership and benefits to new opportunity for historically marginalized communities, and affordable clean energy options. **(2017 Ready for 100 Action Plan)** “ownership of what? benefits to new opportunity for what?” **(Lynn R, NAGP)**
2. All newly built public and publicly subsidized low-income housing shall only use clean renewable energy sources by 2030. **(2017 Ready for 100 Action Plan)**
3. The City Council shall create a diverse and representative advisory committee to serve as an accessible intermediary between the above-mentioned communities first impacted by climate change and City Council. The advisory committee shall work to ensure that all members of the communities have an opportunity to participate in the planning and transition process. This process shall be transparent and open, with frequent and timely opportunities for public comment, review of draft materials, and collaboration. The advisory committee shall emphasize engagement with community organizations, such as Community Development Corporations, Neighborhood Advisory Committees, and nonprofits that serve vulnerable communities. **(2017 Ready for 100 Action Plan)** Any advisory committee needs to have meetings to accommodate work schedules

and be held in a convenient place for the community. Low income residents are often working multiple jobs and also care for children. Child care must be provided at meetings. **(Lynn R, NAGP)**

4. The City Council shall mandate that the resources to train and hire people in any renewable energy jobs in Philadelphia during the transition prioritize those from the aforementioned communities, and by 2020 set robust and measurable goals and metrics to track progress. This includes existing municipal and private programs that provide high-school and adult job training (ie - The Philadelphia Energy Campaign, Solarize Philly), the city's Rebuild program, green union work, and veteran/housing insecure/formerly incarcerated re-entry job training (Ready Willing & Able Philadelphia and the Re-Entry Office of the Mayor). **(2017 Ready for 100 Action Plan)** "This is an example by which we are making the success of transitioning to clean energy to be contingent on something else that may delay the progress." **(Mehdi, Ready for 100)**
5. The City Council shall create a "minimum livability code," (the "Code") prioritizing increase in the resilience of communities most vulnerable to the impacts of climate change by creating climate-ready infrastructure in those communities, as well as instituting requirements for property resilience, efficiency, and weatherization. The Code shall also include, but is not limited to, climate-related emergency planning, flood prevention infrastructure, requiring weather-resilient building materials in municipal and new city development contracts, white roofs, green roofs, increased tree cover, increased green spaces, more protected bike lanes, solar canopies, and disincentivizing fossil fuel auto transportation. **(2017 Ready for 100 Action Plan)** Grants will have to be created for low income property owners. Otherwise, they will be run out of their homes with expensive changes. **(Lynn R, NAGP)**
6. The City of Philadelphia shall develop a program to provide incentives for landlords to weatherize/create efficiency for their low-income properties. **(2017 Ready for 100 Action Plan)** Begin with incentive, then make it law. **(Lynn R, NAGP)**
7. The City Council shall
 - a. advocate to the Public Utility Commission for renewable energy to be the default supplier choice for PECO Customer Assistance Program (CAP) participants at rates comparable to fossil fuel market rates or provide a subsidy to mitigate the higher cost. **(2017 Ready for 100 Philly Action Plan)** The cost per kWh of renewable energy is few cents higher than other sources. How is this then going to be enforced? **(Mehdi, Ready for**

100) Community solar would be cheaper; we ask for that instead.

(Meenal, Ready for 100)

- b. or provide a subsidy to mitigate the higher cost. **(2017 Ready for 100 Action Plan)** "Where will the money come from? wouldn't this subsidy create a backlash against the whole initiative?" **(Mehdi, Ready for 100)** "If more people are using wind and solar, the price should come down. City Council and State legislators could be encouraged to find ways to resist the State subsidizing fracked gas. Most legislators support the gas industry at this time." **(Lynn R, NAGP)**
8. The City shall prioritize community-based development of renewable energy infrastructure and will make investments in community facing organizations to build capacity to lead such development. **(2017 Ready for 100 Action Plan)**
9. The City shall prioritize minority-owned, women-owned, and emerging small businesses and pursue additional policies and partnerships for workforce equity to include low-income residents in the economic, social, and environmental benefits to be derived from the clean energy transition. **(2017 Ready for 100 Action Plan)** "In my view, we are mixing multiple causes together which results in slow progress or a costly initiative." **(Mehdi, Ready for 100)** "What does the City prioritizing community-based development of renewable energy infrastructure look like? It could mean that the city encourages neighborhoods to leave the PECO grid by providing a list of companies to do the work? What is even allowed right now? Should the technical background required to understand local energy production be required instruction in schools?" **(Lynn R, NAGP)**
10. Ensure access to affordable, reliable, sustainable and modern energy for all. (Sustainable Development Goal #7, **Freyda, ESWA**)
11. The use of new funds to implement environmental education in school curriculums. **(ClimateStrikePA)**

Funding

1. Divest from fossil fuel investments in the City Pension Fund and reinvest in a just transition from fossil fuel efforts that center labor and environmental justice communities **(Alliance for a Just Phila)**
2. Divest from fossil fuels at every level, Reinvest locally via a public bank. **(GND for Phila)**
3. Charge large nonprofit orgs property use fee PILOT **(Lynn R, NAGP)**

4. Public bank, green bank, divestment of City pension funds, green mutual funds (**source?**)
5. Paying for the needed transition (**source?**)
6. Revolving loan fund for energy efficiency & renewable energy for low income households. (**Meenal, Ready for 100**)