This resolution does not target all angles of sustainability: it relates to energy-related climate impacts in particular. It is based on a deep analysis of NYU's previous climate action plan and on recent science and technology developments, as well as on an understanding of the movement for climate justice. Please view the decarbonize plan

<u>here</u>.

RESOLUTION OF THE UNIVERSITY SENATE

FOR DECARBONIZATION

RECOGNIZING that almost all countries agreed in the 2015 Paris Agreement to aim to hold global average temperature increase "well below" 2 degrees Celsius, and pursue efforts to limit such rise to 1.5 degrees Celsius¹

RECOGNIZING that nations' collective pledged emissions cuts fall far short of this goal,²

RECOGNIZING that even 2 degrees Celsius of warming has been described by the Sudanese delegate to the UNFCCC as "certain death for Africa" and "a suicide pact;"³

RECOGNIZING that as of the fall of 2016, new research indicates that the coal, oil, and gas reserves already being mined and drilled contain more carbon than can be emitted into the atmosphere if we wish to retain even a one in three chance of keeping global average temperature rise below 2 degrees Celsius relative to a pre-industrial baseline,⁴

RECOGNIZING that climate change amplifies existing global injustices, disproportionately affects marginalized populations in the global south, black, brown, and indigenous people, poor people, and all who rely on natural systems for subsistence⁵

RECOGNIZING that Superstorm Sandy, strengthened by climate change, created long-lasting crises for many New York residents, from which they have yet to recover,⁶

WHEREAS NYU released a Climate Action Plan in 2009,⁷

¹ https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf

² https://www.climateinteractive.org/programs/scoreboard/

³ https://www.motherjones.com/environment/2009/12/poor-countries-g77-suicide-pact-copenhagen/

⁴ http://priceofoil.org/content/uploads/2016/09/OCI_the_skys_limit_2016_FINAL_2.pdf

⁵ http://www.unesco.org/education/tlsf/mods/theme_c/popups/mod19t04s01.html

⁶ https://superstormresearchlab.files.wordpress.com/2013/10/srl-a-tale-of-two-sandys.pdf

⁷ https://www.nyu.edu/content/dam/nyu/sustainability/documents/NYU_2009%20Climat%20Action%20Plan.pdf

NOTING that NYU has committed to reaching carbon neutrality by 2040,8

WHEREAS it is currently unclear whether NYU considers carbon neutrality to require reducing its net overall greenhouse gas (GHG) emissions—including methane and other powerful greenhouse gases—to 0,⁹ or whether NYU only plans to reduce its net carbon dioxide emissions to 0,¹⁰

WHEREAS in its first 20 years in the atmosphere, methane has a warming effect over 86 times more powerful than that of carbon dioxide,¹¹

RECOGNIZING that according to one estimate, methane emissions account for 25% of overall warming we have experienced so far,¹²

WHEREAS, carbon neutrality commitments allow for the continued burning of fossil fuels and other combustibles, and the use of carbon offsets and credits,¹³

WHEREAS carbon offsets such as afforestation are near impossible to certify as additional and permanent, as they do not move carbon from the biosphere back into the geosphere,¹⁴

WHEREAS carbon offsets have seriously impinged on indigenous sovereignty and biodiversity,¹⁵ often outsourcing the work of climate change mitigation to the Global South,

WHEREAS decarbonization, which is distinct from but complementary to carbon neutrality, consists in fully phasing out an entity's dependence on fossil fuels for power, transportation, heating, and cooling¹⁶

WHEREAS decarbonization holds entities to reaching carbon neutrality without resorting to such indirect, unreliable, and short-term accounting solutions as carbon offsets,¹⁷

RECOGNIZING that fossil fuel extraction, processing, transport, and combustion has been repeatedly demonstrated by research to be the cause of tens of thousands of annual premature deaths,¹⁸

⁸https://www.nyu.edu/about/news-publications/news/2018/september/nyu-outlines-sustainability-efforts-for-2018-19-and-beyond.html

⁹ https://ecometrica.com/assets/GHGs-CO2-CO2e-and-Carbon-What-Do-These-Mean-v2.1.pdf

¹⁰ https://www.iass-potsdam.de/sites/default/files/files/policy_brief_decarbonisation.pdf

¹¹ http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_All.pdf

¹² https://www.edf.org/climate/methane-other-important-greenhouse-gas

¹³ https://www.iass-potsdam.de/sites/default/files/files/policy_brief_decarbonisation.pdf

¹⁴ https://www.resurgence.org/magazine/article256-the-carbon-neutral-myth.html

¹⁵ http://www.ienearth.org/carbon-offsets-cause-conflict-and-colonialism/

¹⁶ https://www.iass-potsdam.de/sites/default/files/files/policy_brief_decarbonisation.pdf

¹⁷ https://www.iass-potsdam.de/sites/default/files/files/policy_brief_decarbonisation.pdf

RECOGNIZING that the Bureau of Labor Statistics data show that oil and gas extraction workers are four times as likely to be severely or fatally injured than the average worker in the U.S.,¹⁹

WHEREAS carbon neutrality commitments do not directly address the environmental injustices and localized toxic pollution resulting from fossil fuel extraction, processing, transport, and combustion,

RECOGNIZING that emissions-reduction and carbon neutrality policies that fail to incorporate decarbonization, the reduction of local pollutants, and environmental justice principles have been shown by research to *worsen or maintain* the fossil fuel-related pollution affecting black, brown, and poor communities,^{20,21}

NOTING that in 2007, in pursuit of carbon dioxide emissions reductions, and responding to the fracked gas boom, NYU made a \$125 million investment in the gas-powered Cogeneration Plant,

NOTING that the Cogeneration Plant has produced several benefits, including providing energy to NYU and its neighbors in October of 2012, when Superstorm Sandy's surge caused a blackout throughout the Lower Manhattan grid,

RECOGNIZING, however, that when NYU decided to invest in in the Cogeneration Plant, research on the polluting impacts of fracking and natural gas was in its early stages, and these impacts were not popularly understood,

RECOGNIZING that since 2007, years of research on fracking place in serious doubt whether NYU's reliance on fracked gas is a net benefit,

RECOGNIZING that two recent studies found fugitive upstream methane leaks to double the effects of natural gas on the environment,²² causing the climate impact of natural gas to be equivalent to that of coal in the short term,²³

RECOGNIZING that recent research has identified fracking as a "public health crisis,"²⁴ and the vast majority of peer-reviewed environmental

²² https://www.nature.com/articles/d41586-018-02581-2

¹⁸ https://climatenexus.org/climate-issues/health/the-localized-health-impacts-of-fossil-fuels/

¹⁹ https://www.bls.gov/news.release/pdf/cfoi.pdf

²⁰ https://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade

²¹ http://povertylaw.org/files/docs/article/chr_2010_september_october_kearney.pdf

https://www.nature.com/news/air-sampling-reveals-high-emissions-from-gas-field-1.9982

²³ http://www.sciencemag.org/news/2018/06/natural-gas-could-warm-planet-much-coal-short-term

²⁴ https://www.psr.org/wp-content/uploads/2018/04/Fracking_Science_Compendium_5.pdf

health research on fracking confirms that it releases toxic and harmful substances that into air, water, and soil,²⁵

WHEREAS being an educational institution, NYU owes its community transparent, comprehensive, and accessible reporting of its greenhouse gas and pollution impacts, in order that we may be able to track and evaluate its progress,

WHEREAS a functional and cost-effective geothermal system has provided all heating and cooling to Manhattan's St. Patrick's Cathedral since 2017,²⁶

WHEREAS 86 cities in the U.S. have committed to transitioning their communities to 100% renewable energy,²⁷

WHEREAS Boston University committed to going 100% renewable by 2050, relying heavily on indirect power purchases,²⁸

WHEREAS Maui College is building onsite renewable electricity infrastructure that will allow the campus to eliminate its fossil fuel-based energy use, making it 100% renewable in power by 2019,²⁹

WHEREAS Stanford University is set to generate enough solar power, onsite and through power purchasing agreements, to reach 100% renewable power by 2021, 20 years ahead of California's clean energy grid target,³⁰

WHEREAS while none of these abovementioned campus initiatives are perfect, and they each conform to the unique circumstances of each campus, this means that NYU can lead in designing a climate action plan unprecedented in comprehension, integrity, directness and openness,

WHEREAS the University Senate welcomes NYU's recent commitments to begin building onsite renewable capacity;³¹

WHEREAS the University Senate celebrates NYU's advances in building efficiency;

²⁵ https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0154164

²⁶ https://www.nytimes.com/2018/03/14/nyregion/st-patricks-cathedral-geothermal.html

²⁷ https://www.sierraclub.org/ready-for-100/commitments

²⁸ http://www.bu.edu/today/2017/bu-trustees-approve-aggressive-climate-action-plan/

 ²⁹ https://www.hawaii.edu/news/2018/03/19/maui-college-aims-to-be-first-100-percent-renewable-energy/
³⁰ https://news.stanford.edu/2018/12/03/stanford-go-100-percent-solar-2021/

³¹https://www.nyu.edu/about/news-publications/news/2018/september/nyu-outlines-sustainability-efforts-for-2018-19-and-beyond.html

WHEREAS the University Senate commends NYU's university-wide promotion and implementation of the online crowdsourcing platform Sustainability@NYU to collect sustainability ideas,

BE IT RESOLVED that the University Senate calls on NYU to take responsibility for effective³², just,³³ ambitious, science-based,³⁴ and comprehensive³⁵ climate action;

ON ENERGY:

BE IT RESOLVED that NYU commit³⁶ to achieving 100% renewable power, heating, cooling, and transportation by 2040;

FURTHER BE IT RESOLVED that NYU commit to only purchasing electric vehicles in the future in order to achieve a 100% electric fleet as soon as possible;

FURTHER BE IT RESOLVED that NYU invite, hire or commission students, faculty, alumni and/or staff to reassess and publicize the climate and toxic pollution impacts of the Cogeneration Plant through a study or studies of the upstream effects of natural gas and hydraulic fracking;

Intergovernmental Panel on Climate Change (IPCC)."

³² Definition of effective: "environmental effectiveness as a concept makes the eradication or prevention of environmental degradation its priority." See <u>http://www.gmu.edu/programs/icar/ijps/vol5_1/kutting.htm</u>

³³ See a discussion of environmental justice in the Decarbonize Plan document at nyudivest.com/decarbonize.

[&]quot;To counteract the historically disproportionate burden that environmental harms have borne upon marginalized people and nonhumans, our decisions must adhere to environmental justice, the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Environmental justice also requires that polluters are held accountable for the damage and risk to which communities are exposed...Decarbonization plans must optimize for more than cheapness and efficiency. A just transition to renewable energy means phasing out the fossil fuel economy in a way that actively works to build a just and healthy society. A just transition would ensure that fossil fuel workers are provided with good jobs after the closure of fossil fuel operations, and that renewable energy developments do not harm nearby communities...the benefits in employment, cost savings, and environmental cobene ts must be distributed equitably to local communities, especially those on the frontlines of the climate crisis-people of color, low income communities, women, youth, and indigenous people. These people should not be penalized in any way by the transition to renewable energy." See also https://climatejusticealliance.org/about/ and https://www.ejnet.org/ej/principles.html ³⁴ "Targets adopted by companies to reduce GHG emissions are considered "science-based" if they are in line with the level of decarbonization required to keep global temperature increase below 2°C compared to preindustrial temperatures, as described in the Fifth Assessment Report of the

see https://www.wri.org/our-work/project/science-based-targets-initiative

³⁵Comprehensive climate action strives to include climate mitigation in all aspects of human life, and to reduce all important sources of emissions, not just the most direct and well-known. For an example of comprehensive climate action, see thttps://www.drawdown.org

³⁶ See Appendix A for a clarification of the difference between commitments and priorities.

FURTHER BE IT RESOLVED that based on its findings, NYU ultimately phase out energy generation through combustion in the gas-powered Cogeneration Plant and considers installing renewable heat pumps such as Geothermal systems to meet its heating and cooling needs;

FURTHER BE IT RESOLVED that NYU consult with geothermal engineers and set up a field evaluation to explore possibilities in geothermal systems and heat pumps to meet its heating and cooling needs;

FURTHER BE IT RESOLVED that NYU consider the impacts both upstream and downstream of electricity generation, not just end-of-pipe pollutants, as well as the cumulative impacts of relevant pollutants;

FURTHER BE IT RESOLVED that to meet its targets, NYU maximize its reliance on onsite and grid renewable capacity, and if needed, rely on the following accounting measures in order of preference: power purchasing agreements, renewable energy certificates, and offsets, while minimizing or avoiding a reliance on these accounting measures.

ON PARTICIPATION:

BE IT RESOLVED that the Office of Sustainability create a regular, inperson forum³⁷ for input, discussion, and coordination open and publicized to the entire NYU Community;

FURTHER BE IT RESOLVED that the Office of Sustainability plan local stakeholder consultations and invite local Environmental Justice community organizations³⁸ to envision NYU's role in climate justice through concrete restorative justice partnerships and projects that employ NYU's research, health, volunteering, technological, and other capacities; to inform the planning and evaluation of NYU's climate commitments;

FURTHER BE IT RESOLVED that any climate action initiative be extended to cover the Shanghai Campus, the Abu Dhabi Campus, all Global Sites, and the NYU Medical Corridor except Langone which lies outside the jurisdiction of the Office of Sustainability;

ON REPORTING:

³⁷ For alternative recommendations, see Appendix C

³⁸ For a list of local organizations, visit nyudivest.com/decarbonize Additionally, see <u>Food and Water Watch</u>, <u>Climate Justice Alliance</u>, <u>Indigenous Environmental Network</u>, <u>It</u> <u>Takes Roots</u>, <u>People's Climate Movement</u>

FURTHER BE IT RESOLVED that the Office of Sustainability count, publicly report, and reduce all major greenhouse gas emissions, not just carbon, as well as local pollutants;³⁹

FURTHER BE IT RESOLVED that NYU account for, publicize, and work to reduce its greenhouse gas emissions from air travel;

FURTHER BE IT RESOLVED that NYU make any and all emissions, pollution, efficiency, and energy mix information easily accessible online to the NYU Community, both as raw data and through visualizations, ideally interactive ;

FURTHER BE IT RESOLVED, that NYU share as much energy procurement information as possible without endangering its contracts;

FURTHER BE IT RESOLVED that the Office of Sustainability release a preliminary Climate Action Report which includes all of the data requested here, actionable steps, and potential pathways to meeting the aforementioned commitments, ideally by the end of the 2018-2019 academic year.

FURTHER BE IT RESOLVED that the Office of Sustainability release a full Climate Action Plan that transparently documents the Office's reasonings in prioritizing different sustainability measures as soon as technically possible and without delay, ideally by the end of 2019.

³⁹ See Appendix B for justification and examples of existing reporting protocols.

Appendix A: Clarifications regarding language

"FURTHER BE IT RESOLVED that NYU commit [to something]" shall be defined, in this document, as a mandate to release a public written commitment in the near term and to complete the following action in the long term.

All other action items shall be defined, in this document, as considerations to be prioritized by NYU.

Appendix B: Emissions reporting and greenhouse gas and environmental accounting protocols

Comprehensive emissions and pollutant accounting, including upstream impacts, would be challenging without a preexisting accounting framework. While multiple frameworks for varying applications exist, neither NYU Divest nor University Senate have extensively investigated which framework would be best for NYU.

Most colleges and universities use the SIMAP⁴⁰ framework. The framework appears flexible but comprehensive enough that NYU Sustainability could—to the best of its ability–tailor its inventory to the information requested in this resolution. Some data reporting might be static or periodical while other data reporting can be continuous. Other services include the GHG protocol⁴¹ and the CDP.⁴²

The advantages and disadvantages of various accounting strategies can be discussed at an open roundtable or forum.

Currently, NYU reports cogeneration plant emissions under its EPA permit. These emissions data can be made accessible to the NYU Community.

The upstream impacts of natural gas, though widely studied and increasingly understood, are not fully monitored by a single authority.⁴³ This is why a single, retrospective study by students, faculty, and staff on the upstream effects of NYU's reliance on fracked gas–whether primarily quantitative or qualitative– is an appropriate substitute for traditional accounting.

As an educational institution, NYU owes its students and broader community information about its campus energy mix–the combination and proportion of energy types that our campus relies on. Not only is the energy mix a matter of political and existential importance that many people care about, it is also an object of extensive study, and NYU's students and scholars would benefit from understanding their institution's energy dependencies.

⁴⁰ https://unhsimap.org/sites/default/files/user-

uploads/SIMAP%20User%20Guide_DRAFT6.2_2.21.2018.pdf

⁴¹ https://ghgprotocol.org

⁴² https://www.cdp.net/en

⁴³ https://crsreports.congress.gov/product/pdf/R/R42986/25

Appendix C: Recommendation regarding funding

It is recommended that NYU allocate more funding, authority, and staffing to the Office of Sustainability in the service of a more powerful and comprehensive Climate Action Plan and other environmental programs.

Alternative or additional opportunities for community outreach include a publicly promoted and easily accessible web forum for comments on the Office's policies, expanding upon the model of Sustainability at NYU, and/or regular Sustainability office hours open to all members of the NYU Community.