

MEMORANDUM

Sharon Bronson Chair, Pima County Board of Supervisors

To: Clerk of the Board of Supervisors

Date: June 2, 2017

From: Sharon Bronson

Chair Pima County Board of Supervisors

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Re: Agenda Item for June 6, 2017 Meeting

Please place the following items on the agenda for the Board of Supervisors meeting on June 6, 2017.

New Business

AGENDA ITEM

Please place the attached Climate Change resolution and corresponding Memo dated June 6, 2017 from County Administrator Chuck Huckelberry on the June 6, 2017 BOS Agenda.

Discussion/Action







Board of Supervisors Memorandum

June 6, 2017

Resolution 2017-____ Reaffirming Pima County's Commitment and Efforts to Address Climate Change

On June 1, 2017, President Donald Trump announced his decision to withdraw the United States (US) from the Paris Climate Accord, a nonbinding agreement signed by 195 countries that directs each nation to develop their own plans to reduce greenhouse gas emissions with the goal of limiting global temperature increases to 1.5° C above pre-industrial period levels. President Trump directed the federal government to immediately "cease all implementation of" the agreement and to use the official withdrawal process outlined in the agreement, which could take up to four years to complete.

Climate change threatens many of the County's conservation initiatives, including the awardwinning Sonoran Desert Conservation Plan. It greatly increases the risk of increased heat, prolonged drought, devastating wildfires, and increased flooding and is already increasing stress on the native plant and animal species protected under the SDCP. Climate change also increases the likelihood Pima County will fall out of attainment with state and federal air quality standards, thereby making it more costly and difficult for businesses to operate and expand in Pima County.

Pima County has already recognized the need to take action on climate change. In 2007, the Board of Supervisors passed Resolution 2007-84 to support County sustainability initiatives, stating that, *"Pima County recognizes that the scientific community has developed a consensus that increasing emissions of carbon dioxide, methane and other greenhouse gases into the atmosphere is affecting the Earth's climate."*

This resolution paved the way for the development and implementation of the *Sustainable Action Plan for County Operations*. This plan represents a systematic approach to integrating the goals of sustainability into virtually all facets of the way Pima County government operates—from the cars we drive, to the energy and water we consume, to the construction of our buildings, to the products we purchase, to the way in which we view and handle our "used" materials.

In 2015, the Board unanimously passed the County's comprehensive plan, *Pima Prospers*. Within the Plan are numerous items that bolster the County's climate mitigation and adaptation efforts. These include reducing carbon emissions through the increased use of cost-effective clean energy alternatives, encouraging transportation alternatives, reducing the adverse health impacts related to air quality, and preparing for climate change and reducing risk in vulnerable communities.

The Honorable Chair and Members, Pima County Board of Supervisors Re: Resolution 2017-____ Reaffirming Pima County's Commitment and Efforts to Address Climate Change June 6, 2017 Page 2

Through the implementation of these Board-approved programs, Pima County has strived to set an example for other communities to achieve a high quality of life for their residents, protect their natural environment, and provide for meaningful and sustainable economic opportunities. Pima County is well positioned to become a leader in addressing climate change and in this region.

Recommendation

I recommend the Board of Supervisors adopt Resolution 2017-____ reaffirming Pima County's commitment and efforts to address climate change.

Respectfully submitted,

C. Duletbury

C.H. Huckelberry County Administrator

CHH/mjk - June 2, 2017

Attachment

RESOLUTION 2017 - ____

RESOLUTION OF THE PIMA COUNTY BOARD OF SUPERVISORS RECOGNIZING THE IMPORTANCE OF THE THREATS OF CLIMATE CHANGE AND REAFFIRMING PIMA COUNTY'S COMMITMENTS TO CLIMATE PROTECTION, THE SUSTAINABLE ACTION PLAN FOR COUNTY OPERATIONS AND GREEN HOUSE GAS EMISSIONS AND WATER AND WASTE REDUCTION TARGETS FOR COUNTY SERVICES AND OPERATIONS

The Board of Supervisors of Pima County, Arizona finds:

- Concentrations of the greenhouse gases carbon dioxide, methane, and nitrous oxide in the atmosphere have all increased since 1750;¹ and
- 2. The Intergovernmental Panel on Climate Change, the leading international body for the assessment of climate change, has found with very high confidence that the rates of increase in these greenhouse gases over the past century are unprecedented,² and
- August 2016 was the hottest August ever recorded (following 2014 and 2015) making it the 11th straight month to break the previous monthly heat record, and it tied July 2016 as the hottest month ever recorded;³ and
- 4. The Information Statement produced by the American Meteorological Society Council on August 20, 2012 concludes, "There is unequivocal evidence that Earth's lower atmosphere, ocean, and land surface are warming; sea level is rising; and snow cover, mountain glaciers, and Arctic sea ice are shrinking. The dominant cause of the warming since the 1950s is human activities. This scientific finding is based on a large and persuasive body of research. The observed warming will be irreversible for many

years into the future, and even larger temperature increases will occur as greenhouse gases continue to accumulate in the atmosphere. Avoiding this future warming will require a large and rapid reduction in global greenhouse gas emissions. The ongoing warming will increase risks and stresses to human societies, economies, ecosystems, and wildlife through the 21st century and beyond, making it imperative that society respond to a changing climate.⁴

- 5. Ninety-seven percent of global climate scientists agree that climate warming trends are very likely due to human activities;⁵ and
- 6. Carbon dioxide levels in the atmosphere have risen to 409 parts per million (PPM)⁶ (from 320 PPM in 1965, the course of one human lifespan), which climate scientists agree is well beyond the safe operating space (350 PPM or below⁷) for humanity to avoid catastrophic and irreversible climate change;⁸ and
- 7. Limiting climate change will require substantial and sustained reductions of greenhouse gas emissions;⁹ and
- International efforts to address climate change began in earnest with the UN Framework Convention on Climate Change (UNFCCC), a treaty which entered into force in 1994;¹⁰ and

- 9. International efforts to implement the UNFCC have continued over the last 25 years with the 1997 Kyoto Protocol¹¹ and most recently with the 2015 Paris Agreement, which has been signed by over 190 countries and calls for nationally-determined contributions toward the goal of limiting global temperature increases to 1.5° C above pre-industrial levels;¹² and
- 10. In 2007 the U.S. Supreme Court ruled the Environmental Protection Agency has the authority to regulate greenhouse gas emissions;¹³ and
- 11. In 2015, the U.S. government announced the Clean Power Plan, a new federal policy aimed at combatting climate change by reducing greenhouse gas emissions from US power stations and increasing the use of renewable energy and energy conservation;¹⁴ and Tucson Electric Power states in their 2017 Draft Integrated Resource Plan it "will continue to diversify its generation portfolio and reduce its significant reliance on coal by expanding cost-effective renewable resources, particularly solar. Our goal is to serve at least 30 percent of our retail load from renewable resources by 2030 twice the level TEP must achieve by 2025 under Arizona's Renewable Energy Standard."¹⁵
- 12. State governments have pursued their own policies aimed at reducing greenhouse gas emissions, including the Regional Greenhouse Gas Initiative, a cooperative effort of nine northeastern and mid-Atlantic states to cap and reduce greenhouse gas emissions from power stations,¹⁶ and California's groundbreaking 2016 legislation

requiring all state agencies to take steps to reduce greenhouse gas pollution 40 percent by 2030;¹⁷ and

- 13. On January 28, 2016, the Pima Association of Governments' Regional Council approved Resolution 2016-7 which "commends the region and its jurisdictions for developing climate resilience strategies that safeguard transportation, water, energy, health, the environment, and food security in the region" and "encourages proactive regional collaboration on climate resilience activities through information sharing and combining resources that benefit our community, and in particular, address the needs of our vulnerable populations."¹⁸
- 14. The U.S. Conference of Mayors issued a statement on Executive Order 13783: Promoting Energy Independence and Economic Growth, advocating the need to address climate change and support for the Paris agreement, to position the world's nations, including the United States, to be energy independent, self-reliant, and resilient. The Mayors further committed their cities to address climate change by investing in renewable energy, increasing the energy efficiency of buildings, addressing the water-energy nexus, and providing more energy-efficient transportation options.¹⁹
- 15. Pima County has a long-term history of taking action to preserve natural resources for current and future generations and is committed to sustainability; and

- 16. Global climate change is one of the most significant threats facing the County and will affect the future social, environmental and economic well-being of its residents; and
- 17. Recognizing the magnitude and severity of these impacts, as well as reducing County operating costs through increased energy efficiency, renewable energy production, green building standards, alternative fuel use, waste reduction, and green purchasing, the Board of Supervisors adopted Resolution 2007-84, which was the basis for the 2008 and 2014 "Sustainable Action Plan for County Operations," setting targets for reduced greenhouse gas emissions.

NOW, THEREFORE, BE IT RESOLVED that the Pima County Board of Supervisors:

- Supports the Paris Agreement's central aim, "to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below
 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change."²⁰
- 2. Affirms that climate change will increase stress on the County's rich diversity of plant and animal species, including those protected by the Sonoran Desert Conservation Plan. The County is incredibly fortunate to encompass portions of both the Sonoran Desert, the most biologically diverse desert in the United States that includes the

greatest diversity of plants found anywhere in the world, and the Sky Island mountain region, considered a global biodiversity hotspot that is home to species found nowhere else. Prolonged drought, increased wildfires, and widespread tree death, which already have caused millions of dollars in economic losses, are projected to increase, forcing wholesale changes to desert, forest, and grassland ecosystems, landscapes, and the plant, animal, and human communities that depend on them.²¹

- 3. Affirms that climate change will affect tourism and recreation revenues through increased heat and lower air quality, reduced stream flow and shorter snow seasons.²²
- 4. Concludes that beyond the numerous social and environmental benefits accrued through participating in the Paris Agreement, additional opportunities to realize enormous economic benefits in the "next economy" revolving around clean energy technologies, sustainable food production, and energy and water efficiency to produce cost savings and new business growth is vital to our region.
- 5. Finds that through aligning efforts with the Paris Agreement, Pima County will also avoid numerous costs associated with lower worker productivity and medical, social and behavioral health services from climate-related illnesses precipitated by worsening air quality, increased heat, greater exposure to harmful disease vectors and increased behavioral health stressors.

- 6. Finds that human activities causing the release of greenhouse gases, including those by County operations, pose a threat to infrastructure, food production, human health and the economy.
- 7. Authorizes and directs the County Administrator and staff to prioritize and align efforts with the Paris Agreement by convening a taskforce to identify which climate adaptation and mitigation needs should be given the highest operational priorities based on scientific evidence, community health and economic co-benefits through:
 - a) Implementing the greenhouse gas and carbon and water intensity reduction targets and actions in the adopted 2014 Sustainable Action Plan for Pima County Operations (SAPCO) (Resolutions 2007-84 and 2014-63), which states, "Climate change is one of the greatest challenges facing society," in acknowledgement that human activities causing the release of greenhouse gases, including those by County operations, pose a threat to infrastructure, food production, human health and the economy.
 - a) Implementing the climate adaptation and mitigation elements of the adopted Pima Prospers, the County's Comprehensive Plan (Resolution 2015-62), which states "Climate impact mitigation measures were created to address impacts on our unique desert environment and population" and that "sustaining healthy communities means addressing climate resiliency".

b) Taking a leadership role in regional collaborative efforts to develop solutions and policy recommendations to address the Fourth National Climate Assessment's Southwest Chapter upcoming report findings (estimated delivery, December 2017).23

Passed, adopted and approved, this day of , 2017.

Sharon Bronson, Chair Pima County Board of Supervisors

ATTEST:

Julie Castañeda, Clerk of the Board

APPROVED AS TO FORM: County Attorney i wea VER

¹ IPCC, 2013; Summary for Policymakers, In: Climate Change 2013; The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA (p. 11). ² Id.

³ "NASA Finds August 2016 Another Record Month." National Aeronautics and Space Administration (NASA) Goddard Institute for Space Studies. September 12, 2016. Accessed June 1, 2017. https://data.giss.nasa.gov/gistemp/news/20160912/

⁴ "An Information Statement of the American Meteorological Society." The American Meteorological Society website. August 2012. Accessed June 1, 2017. https://www.ametsoc.org/ams/index.cfm/about-ams/amsstatements/statements-of-the-ams-in-force/climate-change/ ⁵ /d.

⁶ "Vial Signs of the Planet." NASA Global Climate Change website. Accessed June 1, 2017. https://climate.nasa.gov/vital-signs/carbon-dioxide/

⁷ See Rockstrom, J., W. Steffen, K. Noone, A. Persson, F.S. Chapin, E.F. Lambin, T.M. Lenton, M. Scheffer, C. Folke, H.J. Schellnhuber, B. Nykvist, C.A. deWit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sorlin, P.K. Snyder, R.

Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R.W. Corell, V.J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen, and J.A. Foley. 2009. A safe operating space for humanity. Nature 461:472-475 and Hansen, J., M. Sato, P. Kharecha, D. Beerling, V. Masson-Delmotte, M. Pagani, M. Raymo, D.L. Royer, and J.C. Zachos. 2008. Target atmospheric CO2: Where should humanity aim? Open Atmospheric Science Journal 2:217-231. ⁸ Id.

⁹ IPCC, 2013; Summary for Policymakers, In: Climate Change 2013; The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D.

Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)}. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA (p. 19).

¹⁰ "Timeline of Major UN Climate Negotiations." Environmental and Energy Study Institute website. Accessed June 1, 2017. http://www.eesi.org/policy/international

¹¹ Id.

¹² "Paris Agreement." United Nations Treaty Collection. July 8, 2016. Accessed June 1, 2017. http://www.consilium.europa.eu/en/policies/climate-change/international-agreements-climate-action/

¹³ Massachusetts v. Environmental Protection Agency, 549 U.S. 497 (2007).

¹⁴ "Climate change: Obama unveils Clean Power Plan," BBC News. August 3, 2015. Accessed June 1, 2017. http://www.bbc.com/news/world-us-canada-33753067

¹⁵ "2017 Integrated Resource Plan." Tucson Electric Power Company. April 3, 2017. Accessed June 1, 2017.

https://www.tep.com/wp-content/uploads/2016/04/TEP-2017-Integrated-Resource-FINAL-Low-Resolution.pdf ¹⁶ Regional Greenhouse Gas Initiative website. Accessed June 1, 2017. <u>http://www.rggi.org/</u>

¹⁷ "California's New Climate Rules, Explained." Climate Central website. August 25, 2016. Accessed June 1, 2017. http://www.climatecentral.org/news/californias-new-climate-rules-explained-20639

18 "Resolution 2016-7: Regional Resilience to Climate and Weather Variability." Pima Associations of Governments. January 28, 2016. Accessed June 1, 2017.

http://www.pagnet.org/documents/committees/management/2016/Management-2016-01-13-Item-3-RegionalClimateResiliencyResolution.pdf

19 "The U.S. Conference of Mayors issues Statement on Energy Independence and Economic Growth Executive Order." The United States Conference of Mayors website. March 29, 2017. Accessed June 1, 2017.

https://www.usmayors.org/2017/03/29/the-u-s-conference-of-mayors-issues-statement-on-energy-independence-andeconomic-growth-executive-order/

²⁰ "Paris Agreement: essential elements." United Nations Framework Convention on Climate Change. Accessed June 1, 2017. http://unfccc.int/paris_agreement/items/9485.php

²¹ "Climate Change Impacts in the United States: Chapter 20: Southwest." National Climate Assessment. 2014. Accessed June 1, 2017. http://nca2014.globalchange.gov/report/regions/southwest ²² Id.

²³ Id.