USDN urban sustainability directors network Urban Sustainability Innovation Report

February 2017

Carbon Neutral Cities Alliance: Year Two Provides a Solid Foundation on which to Grow the Innovation Fund

CNCA is a collaboration of leading global cities working to cut greenhouse gas emissions (GHG) by 80% or more by 2050 or sooner. The most aggressive GHG reduction targets undertaken by any cities across the globe are supported in part by CNCA's Innovation Fund, which is poised to expand.

> The full CNCA Innovation Fund 2016 Annual Report can be accessed here. The following summarizes highlights from this report.

> The CNCA Innovation Fund was created in 2015 to invest in high-potential, city-led projects that develop, test, implement and amplify deep urban decarbonization strategies and practices, building a portfolio of tested tools for cities to use to achieve deep carbon reduction goals. To date, the Alliance has invested \$1.7 million in 17 early-stage innovation projects.

CNCA Member Cities. Current Alliance members include:

Adelaide, Australia	London, UK	Portland (OR), USA	Sydney, Australia
Berlin, Germany	Melbourne, Australia	Rio de Janeiro, Brazil	Toronto, Canada
Boston, USA	Minneapolis, USA	San Francisco, USA	Vancouver, Canada
Boulder, USA	New York City, USA	Seattle, USA	Washington DC, USA
Copenhagen, Den.	Oslo, Norway	Stockholm, Sweden	Yokohama, Japan

These cities collaborate to share lessons in planning for and implementing deep carbon reductions and agreed upon opportunities to accelerate best practices in deep decarbonization.

Title	Lead City/ies	Other Participating Cities	Description
Food and Energy in a Circular Economy	Stockholm	Beijing, Paris	Conduct a feasibility study for a large-scale pilot project at the Stockholm Royal Seaport flagship project to determine the technical preconditions for a source separated wastewater system, how to optimize energy recovery from wastewater, and proposed management structure.
How to Scale Corporate Renewable	Melbourne	Adelaide, Sydney, Yarra	Scale models for aggregating municipal, institutional and commercial customers to enable them to purchase utility-scale

Round 2 (2016) Funded CNCA Projects

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Electricity PPAs in Australia			renewables and drive new investments in large-scale renewable energy through corporate off-take agreements backed by large corporate and institutional customers.
Scandinavian Green Public Procurement Alliance	Copenhagen	Oslo, Stockholm, Boston, Boulder, Hamburg, London, Minneapolis, New York, Portland, San Francisco, Vancouver	Create a "Green Public Procurement Alliance" for procuring Non-Road Mobile Machinery (NRMM) in the cities of Copenhagen, Stockholm and Oslo to dramatically reduce CO ₂ , NOx and PM in those cities.
Capitalizing Carbon to Accelerate EV Charging Investments	Portland	Adelaide, Minneapolis, New York, Palo Alto, San Francisco, Seattle, Sydney, Vancouver	Establish a Verified Carbon Standard- accredited electric vehicle (EV) charging station carbon credit methodology to establish a voluntary carbon credit market for EV charging installations and accelerate the spread of EV charging infrastructure.
The Thermal Break Shear Wall: Simultaneous Energy Efficiency and Seismic Resiliency Improvements in Standard Housing Stock	Portland	Auckland, Copenhagen, Oakland, San Francisco, Seattle, Vancouver	Test the use of the emerging "Thermal Break Shear" wall (TBS) approach to improving the energy efficiency and seismic resiliency in older housing stock in wood-framed single family and multifamily dwellings across multiple jurisdictions, climate zones and seismic zones.
Bringing Renewable Thermal Solutions to Scale in New England	Boston	Boulder, Northampton, Portland (ME), Providence, Somerville	Develop and implement pilot programs for five New England cities in the U.S. to expand the early adoption of renewable thermal energy systems in existing residential buildings.
London Energiesprong Trial Project	London	Copenhagen, New York City, Rio, San Francisco, Sydney,	Build on the Dutch " <i>Energiesprong</i> " concept by trialing the first ten net-zero energy Energiesprong refurbishments in

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		Toronto, Vancouver, Washington DC	the UK, and sharing data and learnings to other cities interested in exploring the model. (This project builds on London's Round One-funded project.)
ReallZE: Bringing the Clean Industrial Revolution to Existing Residential Buildings	San Francisco	Ann Arbor, Boulder, Dearborn, London, Madison, Montpelier, Palo Alto, Rio de Janeiro, San Carlos, Toronto, Vancouver, Washington DC	Develop a business model for bringing <i>"Energiesprong"</i> to San Francisco and other jurisdictions in North America.

CNCA members say the Fund fills a critical need as a deep decarbonization research and development (R&D) tool for cities. The first two years provide a solid foundation for building a global, urban network of applied R&D laboratories for climate innovation. In 2017, CNCA will begin to foster greater capacity to implement critical, groundbreaking work that advances the global field of deep urban decarbonization by expanding the CNCA Innovation Fund to \$15-20 million (USD) annually.

The expanded Fund will become a significant facilitator of key decarbonization innovations, providing leading cities with tested, practical ways to undertake system transformation more quickly and deeply. CNCA members are currently developing the Fund's expansion strategy. Fundraising to expand the Fund is underway. Implementation is anticipated to begin in mid-to-late 2017.