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ELLIOTT SCHOOL OF INTERNATIONAL AFFAIRS

Sustainability in U.S. STI Strategy

Nicholas S. Vonortas

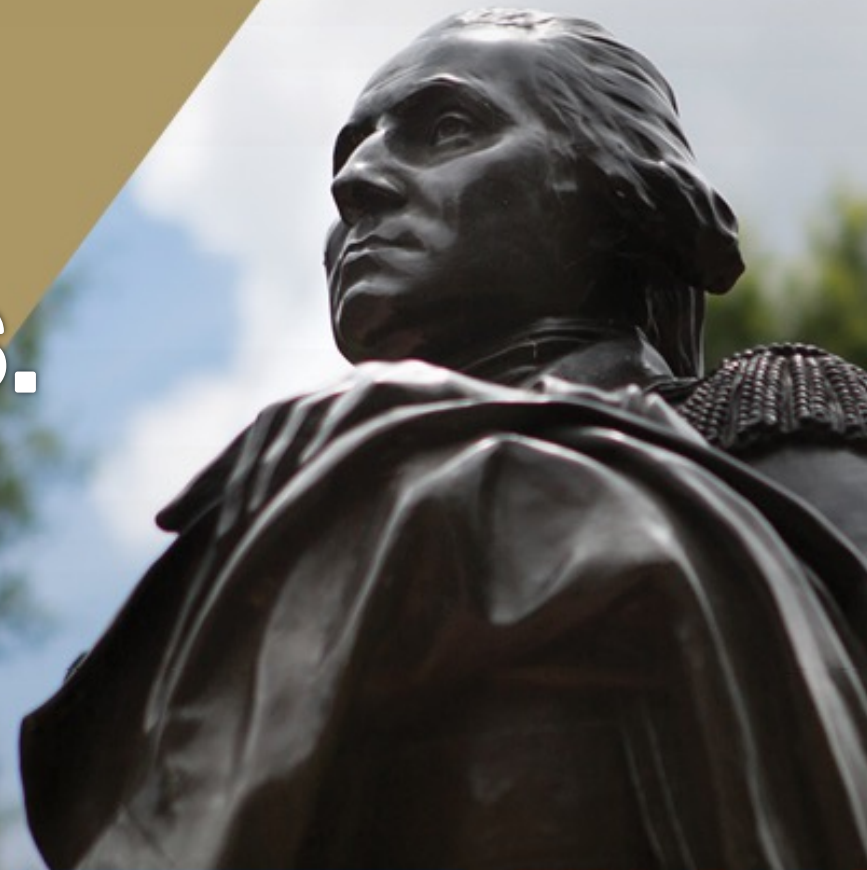
IISTP & Department of Economics

São Paulo Excellence Chair (SPEC) - UNICAMP

Entrepreneurial Mobilization for Innovation (MEI)

Sustainability and Innovation Working Group

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Executive Order 14008 (1/27/2021)

As soon as he took office, President Biden issued an Executive Order on “Tackling the Climate Crisis at Home and Abroad”.

Part 1. Putting the climate crisis at the center of US foreign policy and national security – created new Special Presidential Envoy for Climate

Part 2. Taking a government-wide approach to the climate crisis

Use of the Federal government’s buying power and real property and asset management

Empowering workers:

- Through rebuilding infrastructure for a sustainable economy.
- By advancing conservation, agriculture and reforestation
- Through revitalizing energy communities

Securing environmental justice and spurring economic opportunity

Executive Order 14057 (12/08/2021)

Ten months later, President Biden issues an Executive Order on “Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability”. On the same date, he also issued the *Federal Sustainability Plan*. The Plan directs the Federal government to achieve net zero emissions by 2050. Transition Federal infrastructure to zero-emission vehicles and energy efficient buildings.

The Office of the Federal Chief Sustainability Officer (CSO) is leading the implementation of this EO. It also issued the Federal Sustainability Plan. [Andrew Mayock CSO]

The Office of the CSO is part of the White House Council on Environmental Quality (CEQ), which coordinates the federal efforts to improve, preserve and protect the country’s public health and environment.

Created in 1969, CEQ advises the President and develops policies on climate change, environmental justice, federal sustainability, public lands, oceans, and wildlife conservation, among others. CEQ is part of the Executive Office of the President (<https://www.whitehouse.gov/administration/executive-office-of-the-president/>)

Federal Sustainability Plan

Catalyzing America's Clean Energy Industries and Jobs

December 2021



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		Actions	CFE	Fleet	Buildings	Procurement	Adaptation	Net-Zero Emmissions Operations by 2050
1	100% Carbon Pollution-Free Electricity (CFE) by 2030, including 50% on a 24/7 basis	Aggregate CFE purchases across regions and agencies	•	•	•	•	•	•
		Seek ways to pilot and accelerate promising CFE sources	•		•	•	•	•
		Develop public and private sector partnerships	•			•		•
		Establish the 100% 24/7 CFE Federal Leaders Working Group	•			•		•
2	100% Zero-Emission Vehicle (ZEV) Acquisitions by 2035, including 100% light-duty acquisitions by 2027	Optimize agency fleet management		•	•	•	•	•
		Align financial planning		•	•	•		•
		Expand vehicle charging infrastructure	•	•	•	•	•	•
		Improve workforce understanding and effect cultural change		•	•	•		•
		Provide State, Tribal, and local government fleets opportunities to benefit from Federal efforts		•		•		
		Establish the ZEV Fleets Federal Leaders Working Group	•					•
3	Net-Zero Emissions Buildings by 2045, including a 50% reduction by 2032	Build for net-zero emissions	•	•	•	•	•	•
		Implement the Federal Building Performance Standards	•		•	•		•
		Increase energy and water efficiency	•	•	•	•	•	•
		Reduce waste, minimize use of toxic materials, and drive markets for recycled products			•	•		•
		Achieve higher levels of sustainability in owned and leased buildings	•	•	•	•	•	•
		Leverage private sector investment	•	•	•	•	•	•
		Drive sustainable and equitable siting	•	•	•			
		Establish the Net-Zero Emissions Buildings Federal Leaders Working Group			•			•

								Net-Zero Emissions Operations by 2050
Actions			CFE	Fleet	Buildings	Procurement	Adaptation	
4	Net-Zero Emissions Procurement by 2050	Require major Federal suppliers to publicly disclose GHG emissions and climate risks, and set science-based targets to reduce emissions	•	•	•	•		•
		Launch a Buy Clean initiative for low-carbon materials		•	•	•		•
		Change Federal procurement rules to minimize the risk of climate change, including factoring in the social cost of GHG in to procurement decisions	•	•	•	•	•	•
		Maximize the procurement of sustainable products and services	•	•	•	•	•	•
		Establish the Net-Zero Emissions Procurement Federal Leaders Working Group, including a Buy Clean Task Force	•	•	•	•	•	•
5	Net-Zero Emissions Operations by 2050, including a 65% reduction by 2030	Use 100% CFE by 2030, including 50% on a 24/7 basis	•					•
		Achieve 100% ZEV Acquisitions by 2035		•				•
		Achieve Net-Zero Emissions Buildings by 2045			•			•
		Achieve Net-Zero Emissions Procurement by 2050				•		•
		Partner with public, private, and nonprofit sector leaders	•	•	•	•		•
6	Climate Resilient Infrastructure and Operations	Routinely assess climate vulnerabilities and risks	•	•	•	•		•
		Modernize Federal policy, programs, operations, and infrastructure to support climate resilient investment	•	•	•	•		•
		Establish the Climate Adaptation and Resilience Federal Leaders Working Group	•	•	•	•		•

EO 14057 Federal Procurement Goals

In order to achieve net-zero emissions by 2050, the Executive Order and an accompanying “[Federal Sustainability Plan](#)” set four primary goals:

1. *Power*: 100 percent carbon pollution-free electricity on a net annual basis by 2030;
2. *Vehicles*: 100 percent zero-emission vehicle acquisitions by 2035, including 100 percent zero-emission light-duty vehicle acquisitions by 2027;
3. *Buildings*: A net-zero emissions building portfolio by 2045, including a 50 percent emissions reduction by 2032; and
4. *Materials*: Net-zero emissions from federal procurement no later than 2050, including a Buy Clean policy to promote use of construction materials with lower embodied emissions.

Public Procurement for Innovation

'This is a very timely book! Public procurement for innovation has become a prominent tool of demand side innovation policy in recent years. A better understanding of the underlying assumptions and intentions, as well as the opportunities of this bundle of instruments and their limitations, is highly relevant for both innovation policy analysts, students and practitioners.'

The book presents the latest knowledge and insights of world-leading experts in the field of public procurement for innovation.'

– Stefan Kuhlmann, University of Twente, the Netherlands,
President of the European Forum for Studies of
Policies for Research and Innovation

Public procurement for innovation (PPI) is a demand side innovation policy instrument. It occurs when a public organisation places an order for the fulfillment of certain functions or needs, which cannot be met at that moment or within a reasonable period of time through a new or improved product.

Providing evidence of the benefits to public and private actors from selective use of this policy instrument, this book illustrates the requirements and constraints for its operationalization. It significantly improves our knowledge of the key determinants of effective public procurement aiming to promote innovative capabilities in the supplying sectors and beyond. It also provides case studies and conceptual contributions that help extend the frontier of our understanding in areas where there are still significant knowledge gaps.

Scholars interested in the study of innovation policies and practitioners involved in the design, implementation and evaluation of PPI will benefit from this state-of-the-art exploration.

Charles Edquist is Professor at CIRCLE, Lund University, Sweden, Nicholas S. Vonortas is Professor at the Center for International Science and Technology Policy & Department of Economics, The George Washington University, USA, Jon Mikel Zabala-Iturriagagoitia is Researcher at Deusto Business School, University of Deusto, Spain and Jakob Edler is Professor at Manchester Institute of Innovation Research, University of Manchester, UK.



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A FAMILY BUSINESS IN INTERNATIONAL PUBLISHING

The Lyptatts, 15 Lansdown Road, Cheltenham, Glos GL50 2JA, UK
Tel: + 44 (0) 1242 226934 Fax: + 44 (0) 1242 262111 Email: info@e-elgar.co.uk

William Pratt House, 9 Dewey Court, Northampton, MA 01060, USA
Tel: +1 413 584 5551 Fax: +1 413 584 9933 Email: elgarinfo@e-elgar.com

www.e-elgar.com www.elgaronline.com



Public Procurement for Innovation

CHARLES EDQUIST, NICHOLAS S. VONORTAS,
JON MIKEL ZABALA-ITURRIAGAGOITIA
and JAKOB EDLER



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Edited by

CHARLES EDQUIST, NICHOLAS S. VONORTAS,
JON MIKEL ZABALA-ITURRIAGAGOITIA
and JAKOB EDLER

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vonortas@gwu.edu
<https://iistp.elliott.gwu.edu>
<https://economics.columbian.gwu.edu>
&
<https://www.ige.unicamp.br/insyspo/>