



ECA network

Public procurement for innovation

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Mongolia: Ozone and climate-friendly procurement guide (April 2014)

- Mongolia's ozone officer requested the Head of the "New Ulaanbaatar International Airport Construction" **not to procure RAC systems with HCFCs or HCFC blends.**
- Same request was sent to the **Public Procurement Department** – the implementation agency of the Government of Mongolia, as well as **15 other Ministries:**
 - Foreign Affairs, Finance, Justice, Construction and Urban Development, Health, Energy, Economic Development, Population Development and Social Protection, Labor, Mining, Defense, Education and Science, Roads and Transportation, Culture, Sports and Tourism, Industry and Agriculture.
- **Mongolia's ozone and climate-friendly procurement guide**



Domestic RAC sector

- R-600a (isobutane)
- R-290 (propane)
- Low GWP HFC refrigerants such as R-32 and other blends that are low GWP
- HFO-1234yf, other unsaturated fluorochemicals and as well as blends

Commercial RAC sector

- hydrocarbons— isobutane (R-600a), propane (R-290), and propylene (R-1270)
- ammonia (R-717)
- carbon dioxide (R-744)
- Low GWP HFC refrigerants such as R-32 and other blends that are low GWP
- HFO-1234yf, other unsaturated fluorochemicals and as well as blends

Foam blowing sector

- Cyclopentane blends
- HFO-1234ze and other HFO blends
- Methylal
- Methyl formate

Foam applications in the building sector

- Hydrocarbons (cyclopentane, cyclopentane blends, isobutane, and n-pentane)
- Carbon dioxide
- Di-methyl ether
- Methyl formate
- Methylal
- HFOs (HFO-1234ze, others)

Not-in-kind technologies

- Solar driven RAC systems
- Trigeneration, district cooling etc
- Stand-alone commercial refrigeration equipment



US Verification Guide for Federal Purchasers of Sustainable Products - developed by the General Services Administration (GSA) and the Department of Energy (DOE)

US Environmental Protection Agency's Significant New Alternatives Policy (SNAP) for ozone depleting substances:


➤ Covered Product Types

- Adhesives, Coatings, and Inks
- Aerosols
- Cleaning Solvents
- Fire Suppression and Explosion Protection
- Foam Blowing Agents
- Refrigeration & Air Conditioning**
- Sterilants

➤ Compliance Determination:

- Does the product documentation confirms that product is an **acceptable substitute** for an ozone-depleting substance or high-global warming potential substance ?
- SNAP website (<http://www.epa.gov/ozone/snap/lists/index.html>) lists acceptable substitutes for each product type.
- If not, **work with contractor** to use an acceptable substitute as listed on the website.






China's HCFC phase-out management plan stage I (April 2015)

Demonstration project: Green public procurement policy in the city of Shenzhen

- Developed by Shenzhen Habitat and Environment Commission (SHEC), Municipal Government Procurement Center (MGPC) and Finance Bureau (FB)
- Stakeholder consultations with local enterprises and organizations
- Approved by the Municipal Government of Shenzhen in April 2015
- **Purchase of 243 sets of air-conditioners using R290 (propane)**
- **Training on safe installations and handling of R290 equipment**
- Awareness raising through media coverage of signing ceremony and leaflet





India's HCFC phase-out management plan stage II (July 2016)

- Policy and enforcement
- Sectorial policy development
 - ❑ **Public procurement policies promoting non-HCFC climate-friendly alternatives**
 - **Awareness and capacity building of procurement agencies**
 - **Tools and criteria for bid evaluation**
 - **Best practice guide for HCFC based systems in government facilities**
 - **Stakeholder and consultation workshops**
 - **Knowledge products for procurement agencies**
 - ❑ Building sector
 - ❑ Cold chain sector
 - ❑ Energy efficiency in the RAC service sector
- Standards for flammable alternatives
- Strengthening of the RASSS (RAC Service Sector Society)
- Awareness, outreach and communication
- Stakeholder cooperation





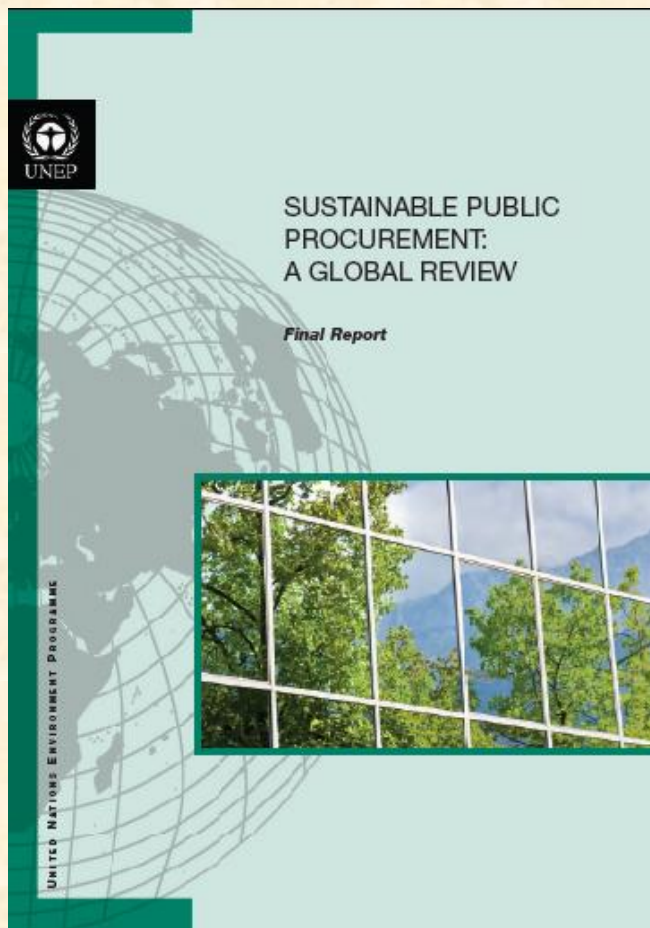
Sustainable public procurement (SPP) presentations during thematic meetings in Minsk & Bucharest (2015)

Possible collaboration with UNEP's 10 Year Framework of Programmes (10YFP) to promote HCFC / HFC alternatives through sustainable public procurement policies

- **Steering committees / task forces:** Participation of ozone officers
- **Action plans:** Prioritization of alternatives
- **Procurement guidelines:** HCFC / HFC alternatives
- **Capacity building:** Procurement officers
- **Pilot tenders**
- **Indicators:** Development & inclusion in monitoring schemes



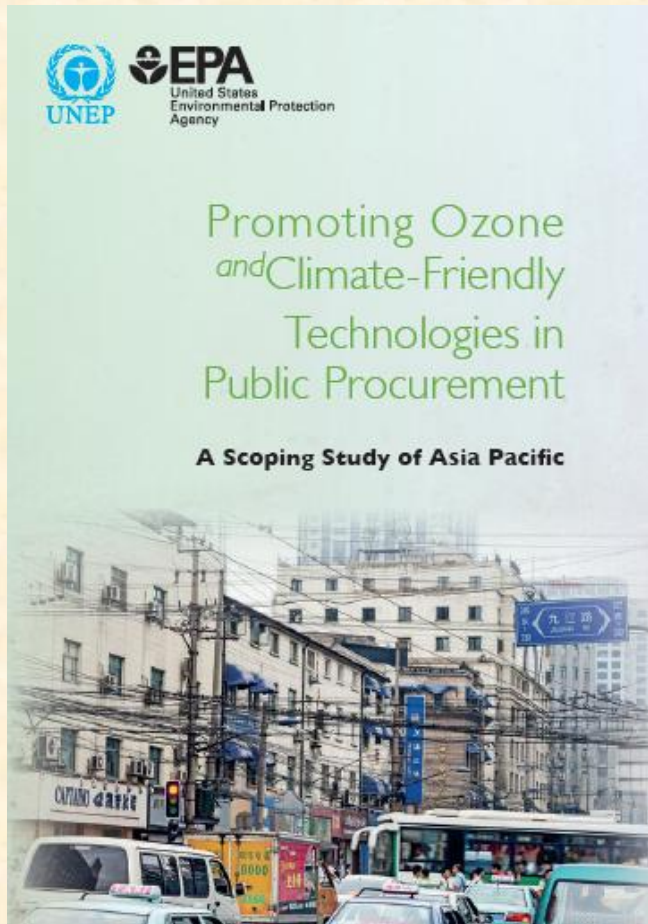
UNEP Sustainable Public Procurement (SPP) - A Global Review (2013)



- **Growing interest and momentum** in sustainable public procurement
- **Networks** sharing experiences and lessons learned
- **Perception** that sustainable products are more expensive
- **Confusion** on what the greenest products / services are
- **Challenge** to measure environmental and social benefits
- **Need for a clear mandate / criteria to select sustainable rather than cheapest products / services**
- Country case studies



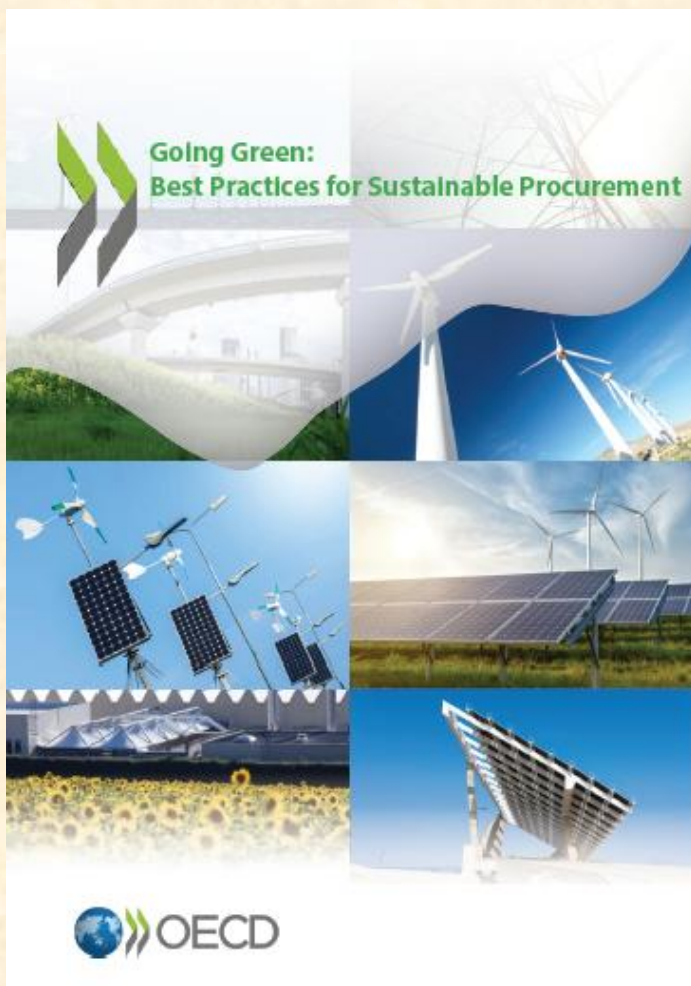
UNEP USEPA Promoting Ozone and Climate-Friendly Technologies in Public Procurement (2015)



- Scoping study in Asia Pacific
- **Purchasing power** of the public sector can ozone and climate-friendly alternatives
- **Barriers** including lack of standards, skilled service technicians, potentially higher investment costs
- **Inclusion of purchasing criteria** in public procurement policies
- **Life-cycle costing as well as environmental / social benefits** to be considered

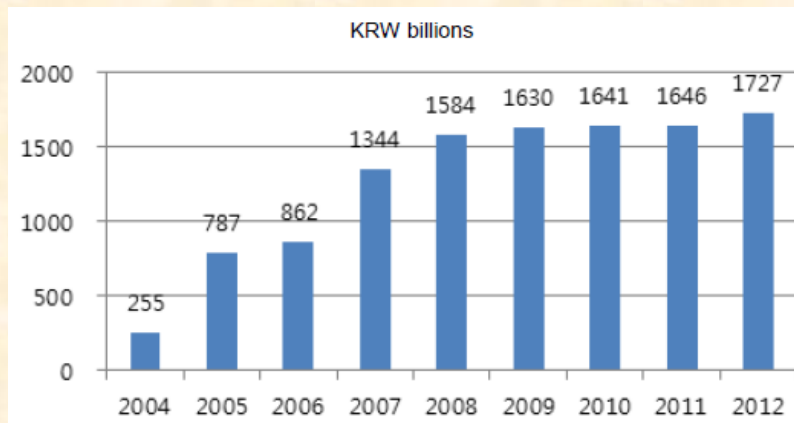


OECD Going Green: Best Practices for Sustainable Procurement (2015)



Best practice case studies
from 21 countries

Korea spends **5-6 % of GDP** for
green public procurement



Source: Korea Environmental Industry
& Technology Institute (Keiti)



OECD Recommendations of the Council on Public Procurement (2015)



Set of 12 recommendations

- **Public procurement as a strategic tool for good governance**

Policy goals

- **Environmental protection**
- **Innovation**
- Job creation
- Development of SMEs



OECD forum on public procurement for innovation in Paris (October 2016)

- **Public procurement is significant part of a country's economy**
 - ❑ 29% of total government expenditures in OECD countries
 - ❑ 12% of gross domestic product in OECD countries
 - ❑ 14% of gross domestic product in EU countries
- **Important role of sub-national level**
 - ❑ 134,000 sub-national governments in OECD countries
 - ❑ 59% of public investment
 - ❑ 40% of total government expenditures
- **Strategic instrument for achieving secondary policy objectives**
 - ❑ **Sustainable growth (sustainable development goals)**
 - ❑ **Innovation**
 - ❑ Support to SMEs and start-up companies





OECD forum on public procurement for innovation (October 2016)

➤ Challenges

- Lacking culture of innovation
- Management of risk from innovative products / services
- Monitoring of the results
- Scaling up
- Lack of indicators to measure impact of public procurement for innovation





OECD forum on public procurement for innovation (October 2016)

➤ Selected quotations

- Innovation should be a state of mind
- There is a way to make it better – find it !
- Address climate change through innovation
- Make public procurement smarter and don't only rely on the price**
- Public demand drives innovation
- Allow taking risk and provide a budget for failure – it is the price to find out what works and what does not work**
- Risk management is crucial
- Focus on low market and low technology maturity**





Public procurement for innovation

Thank you for your attention !

Inspired ?

