WFEO Model Code of Practice for Sustainable Development and Environmental Stewardship

“Think Global and Act Local”

June 2014

WFEO Committee on Engineering and the Environment
World Federation of Engineering Organizations

• International organization for the world engineering profession

• National engineering organizations from over 90 countries and international organizations

• More than 15 million engineers working worldwide

• Focus on supporting the United Nations Millennium Development Goals and new Sustainable Development Goals

• Nine standing committees including Engineering and the Environment, Energy, Disaster Risk Management, Capacity-Building, Anti-corruption, Education, Youth, Women

• Active participant in UNFCCC and UN-CSD
Figure 1.1. Evolution of the environmental movement from pollution detection and treatment to sustainability

- Before 1980s
  - Regulation-Driven Pollution Control
    - Reactive with reliance on abatement
    - Little consideration of resource consumption
    - End-of-pipe pollution control

- 1980s
  - Pollution Prevention
    - Reduce amounts of pollutants produced
    - Reduce amounts of materials used by recycle and reuse

- 1990s
  - Design for Environment
    - Proactive and beyond compliance
    - Extended product responsibility
    - Life cycle analysis
    - Eco-efficiency

- Current
  - Sustainable Development
    - Individual and corporate responsibility
    - Economic
    - Environmental
    - Social
    - Resource
Introduction/Background

- One of five themes in the 2011-2015 CEE strategic plan
- Task group led by Engineers Canada
- Review of existing documents of national and international organizations related to the topics (e.g. New Zealand, South Africa, FEANI, Engineers Canada, ASCE, FIDIC and others)
- Definitions of sustainable development and environmental stewardship and how these relate to each other
- One-page listing of principles similar to the WFEO Code of Ethics
- Revisions based on excellent feedback and suggestions
What is a “Model” Code?

First, Adopt as WFEO policy, not legally or morally binding on members

Second, Adoption by WFEO members may be done in one of three ways:

1. Adopt as written – put your logo on the top and use in your own jurisdiction/membership
2. Adopt with modifications to suit individual circumstances and jurisdictions
3. Use as a source document to develop your own country-specific guidance
Purpose and Objective

• To provide objective guidance to individual engineers on responsible engineering practice
• To provide a policy and implementing document to WFEO and its membership to use within their own organizations and countries
• To inform United Nations organizations and International Financial Institutions of the role, responsibility and practices of engineers
• To increase the profile and authority of WFEO in these subject areas
Scope

- Principles and framework to guide engineering practice that serves the public interest
- What to consider/do and less on the “how”
- Active language
- Technical details and methods on how to implement are largely left to the engineer and reflect the individual circumstances of the project or tasks he/she is undertaking
Document Structure

1. One-page listing of ten principles “mount on the wall” beside Code of Ethics

2. Interpretive Guide
   – Accompanying guide to the code of practice
   – Provides further amplification and explanation on the ten principles
   – Target audiences – individual engineers and national engineering organizations
The Ten Principles – Elements of Professional Practice (1)

- Maintaining competency
- Seeking expertise and advice outside of your competency
- Defining and addressing economic, social and environmental issues, concerns and impacts
- Considering the complete life cycle of projects
- Awareness of and compliance with legal and regulatory requirements
The Ten Principles – Elements of Professional Practice (2)

- Seeking and implementing innovative methods and technologies
- Consultation and appropriate communication with internal and external stakeholders e.g. the public
- Disclosure of information necessary to ensure safety of the public
- Mitigating impacts in advance of complete scientific knowledge if risks are determined to be unacceptable
Implementation (1)

- Publish on the WFEO website with President’s message
- Prepare a letter of transmittal for signature by the President
- Formal distribution to WFEO national and international members through Headquarters
- Formal submission to the United Nations, UNESCO, OECD, FIDIC by Headquarters
- Develop on-line webinars, presentations, workshops and seminars for events in 2014 and 2015 to key target audiences and key sectors
Implementation (2)

- Target audiences include engineers, policy-makers and decision-makers
- Support adoption/implementation by WFEO national and international members
- Key targets will be UN agencies and International Financial Institutions
- Complete initial implementation and dissemination by December 2015
- Deliver progress report at 2015 General Assembly
So . . .

“We can't solve problems by using the same kind of thinking we used when we created them.”

Albert Einstein
“Sustainable development” offers engineers a better decision-making framework that enables responsible environmental stewardship.

So . . .
Thank you!