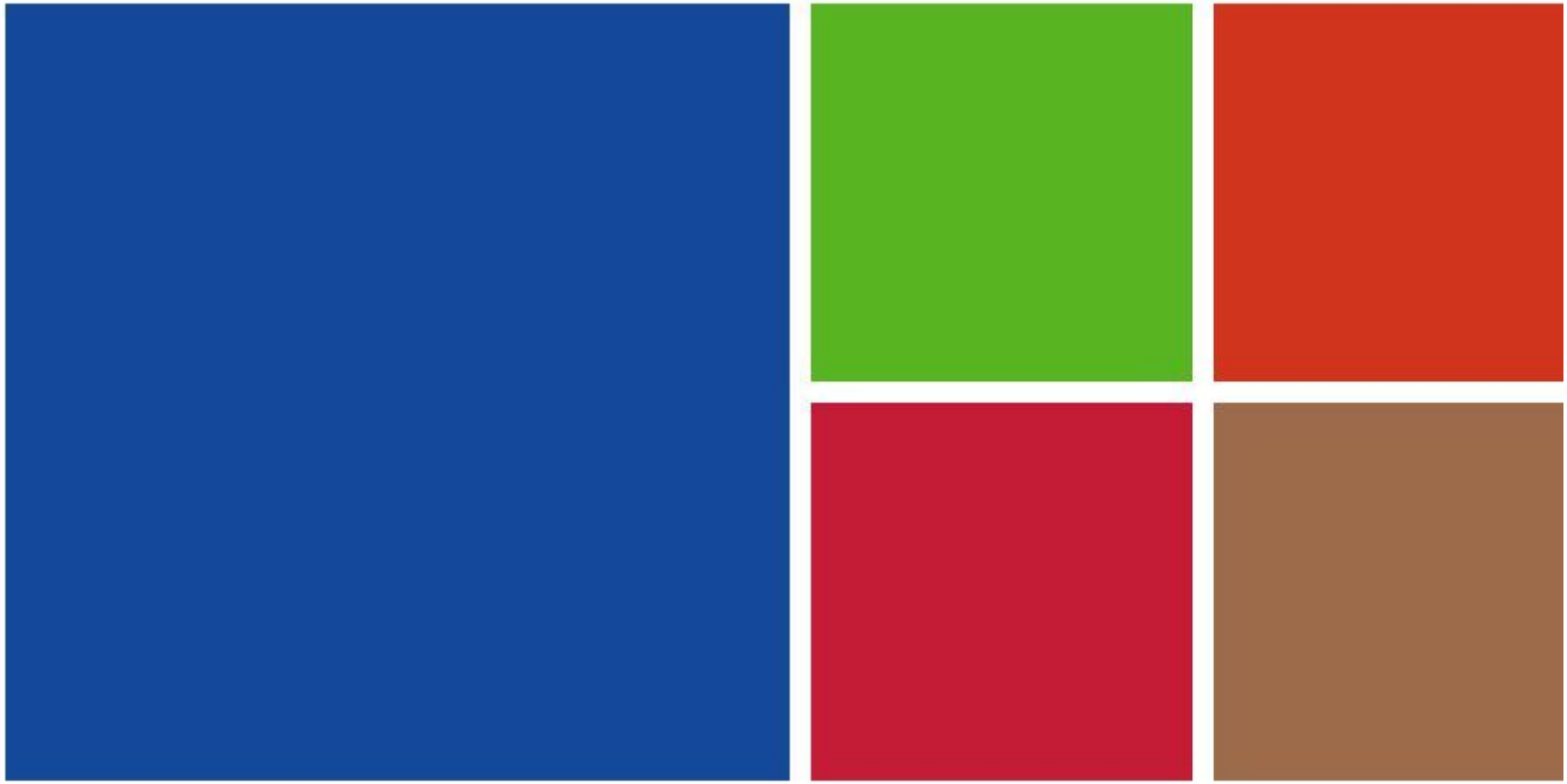


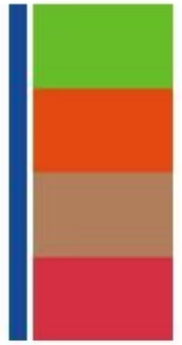
Civil Engineering Creating a Sustainable World

Presented in behalf of ASCE

By: P. A. Leoncio, Jr., P.E.ph., M.ASCE
International & Region 10 Director

Japan Society of Civil Engineers
International Roundtable
Sapporo, Hokkaido, 01 September 2010

ASCE Role in the U.S.



- **Environmental solutions**
- **Infrastructure policy**
- **Regulatory, monitoring and financing process**
- **Infrastructure development and environmental management**
- **Academia and private sector partnership**
- **Disaster response**

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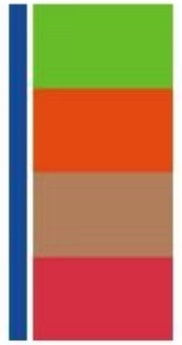
Asian Region and the U.S. – Opportunities for Cooperation



- **Infrastructure challenges**
- **Sustainability**
- **Global future**

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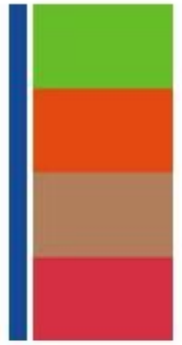
Common National Issues



- **Large, growing populations**
- **Technologically advanced**
- **Global supplier/consumer of goods/services**
- **Sustainability driven**
- **Future-oriented**

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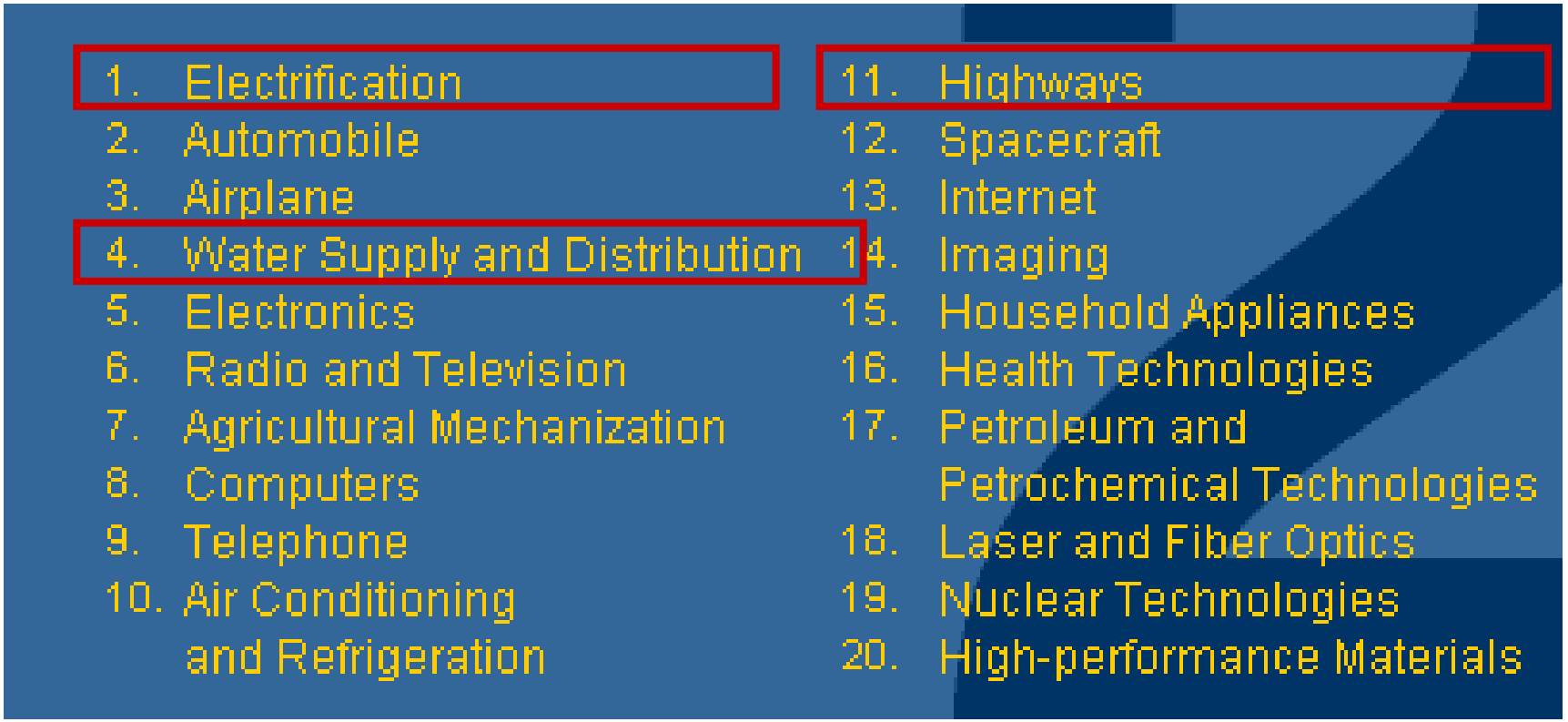
Greatest Engineering Achievements of the 20th Century



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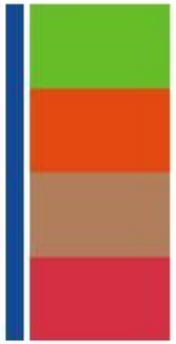
Social Impact

". . . The greatest advances in improving human health were the development of clean drinking water and sewage systems. So, we owe our health as much to civil engineering as we do to biology."

- Lewis Thomas, Former Dean of Yale Medical School and Director of Memorial Sloan-Kettering Cancer Center

Social Impact of Engineering Achievement



Wide-spread, functioning infrastructure is the key to our economic well-being and success.

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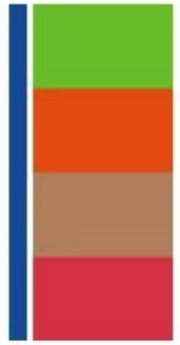
Common Infrastructure Challenges



- **Clean air and water required for health and prosperity**
- **High energy usage**
- **Population widespread**
- **Transportation growth**
- **Infrastructure maintenance**

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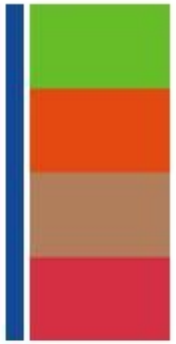
Lessons Learned



Regulation and enforcement created dramatic results

- **Environmental Protection Agency**
- **Clean Water Act**
- **Clean Air Act**
- **Federal Environmental Pesticide Act**

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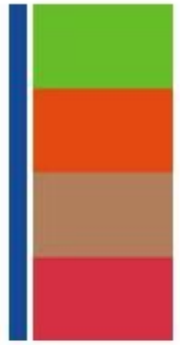
Lessons Learned



The infrastructure must be sustainable and sensitive to environmental constraints.

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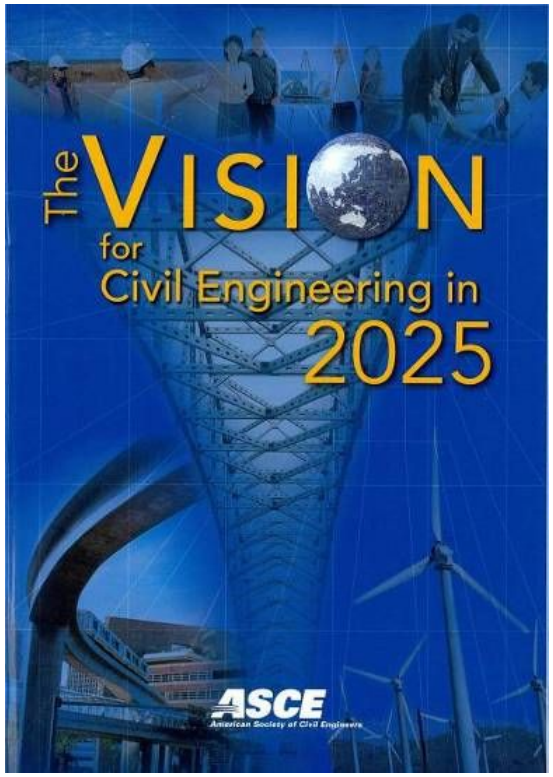
The Vision for Civil Engineering in 2025

Sets an inspirational target for a new global state of affairs

Entrusted by society to create a sustainable world and enhance the global quality of life, civil engineers serve competently, collaboratively, and ethically as……..



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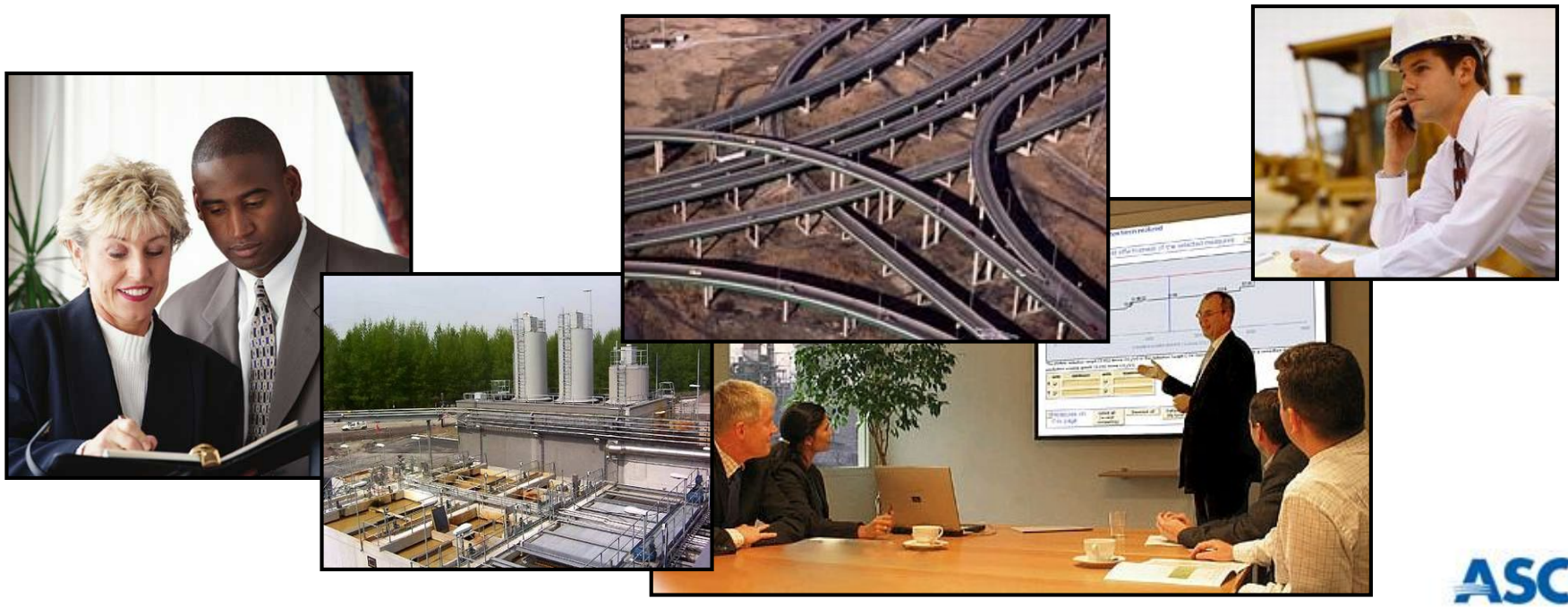
Master Builders

1. **Master planners, designers, constructors, and operators of society's economic and social engine—the built environment**



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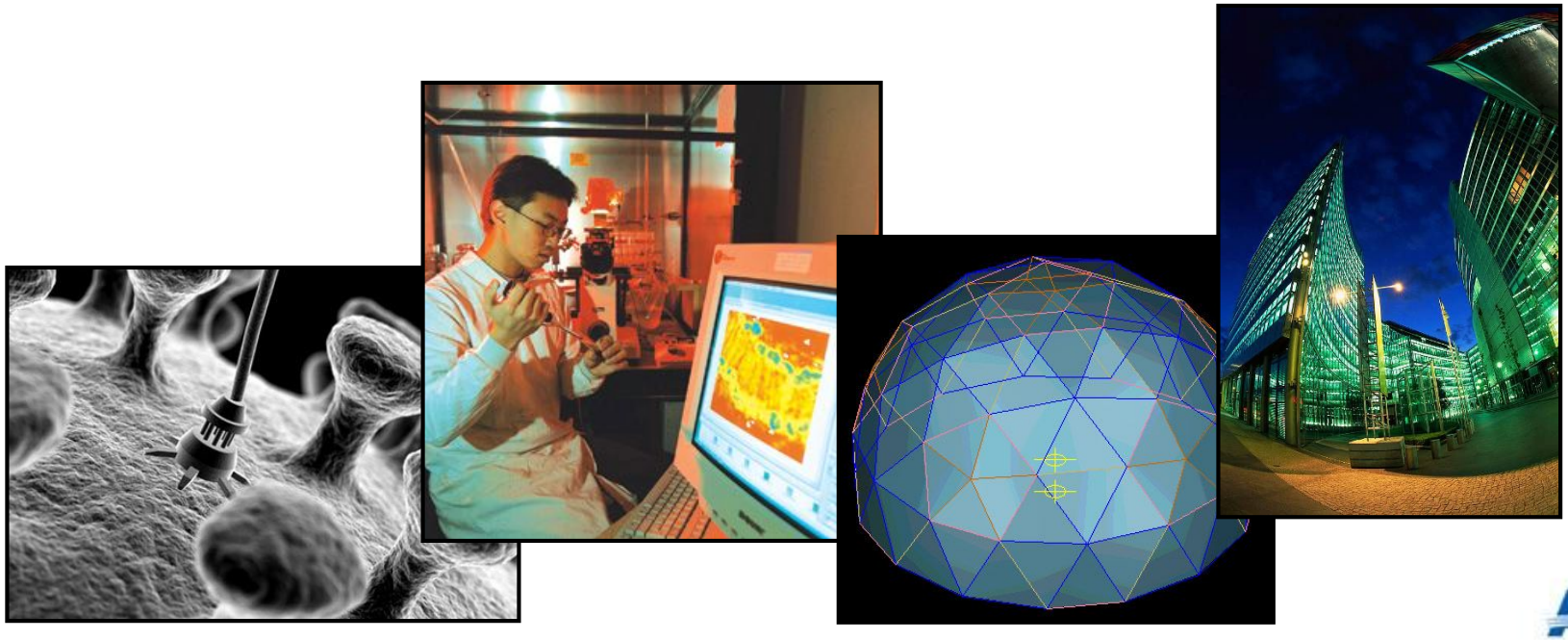
Stewards of the Environment

2. Stewards of the natural environment and its resources

Innovators

3. **Innovators and integrators of ideas and technology across the public, private, and academic sectors**



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Managers of Risk

4. **Managers of risk and uncertainty caused by natural events, accidents, and other threats**

Leaders in Public Policy

5. **Leaders in discussions and decisions shaping public environmental and infrastructure policy**

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"Leaders . . . around the globe should move the civil engineering community toward the Vision"

–The Vision for Civil Engineering in 2025

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"If you don't know where you are going, every road will get you nowhere."

- Henry A. Kissinger, former Secretary of State and Nobel Peace Prize winner

The Task Committee to Achieve Vision 2025 was charged to develop a roadmap to bring the Vision to reality.

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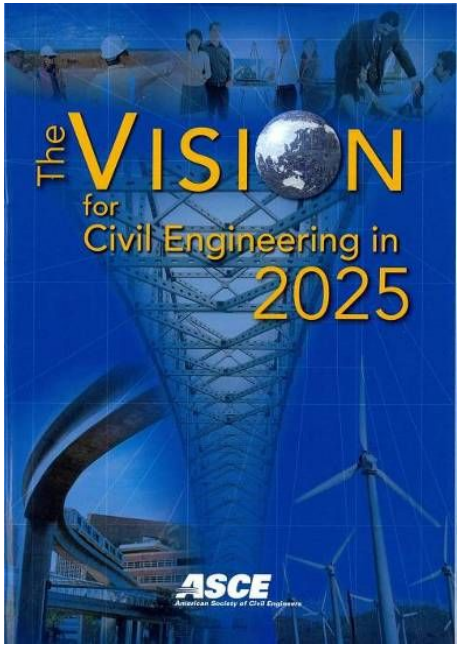
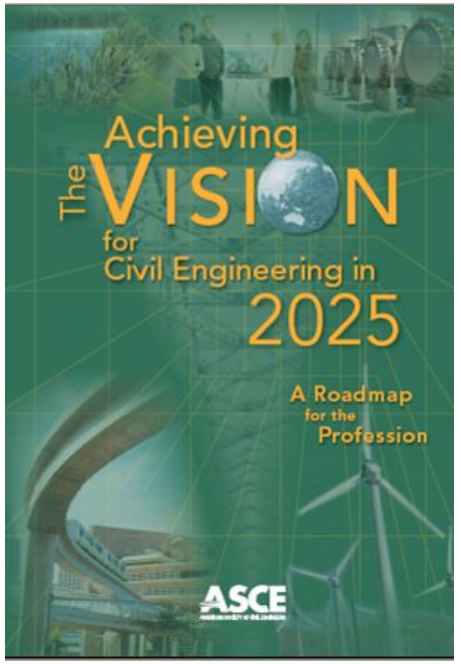
The Vision and the Roadmap





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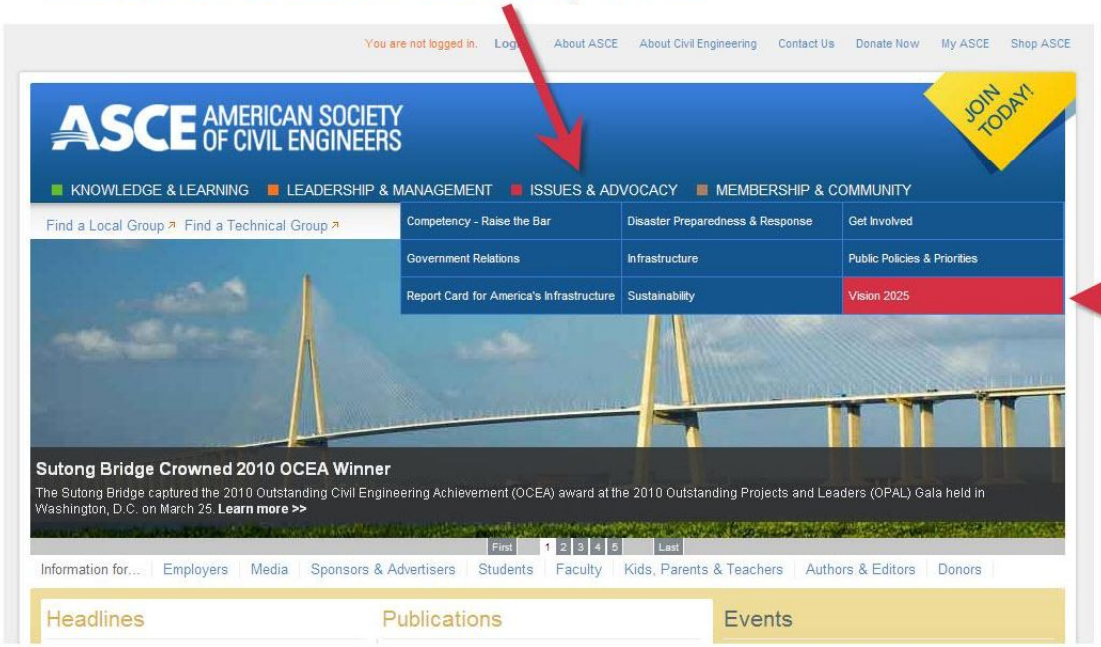
Vision 2025 and Roadmap Distribution

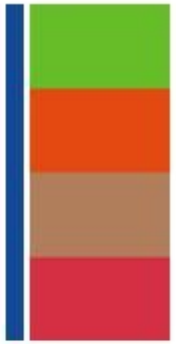
- Vision 2025 and Vision 2025 Roadmap reports are available at www.asce.org.
- Under the Issues & Advocacy menu



click on Vision 2025

- Order a free hard copy
- Download a PDF

Vision 2025 Overview



Outcomes

- Master Builders
- Stewards of the Environment
- Innovators
- Managers of Risk
- Leaders in Public Policy

Themes

- Education
- Leadership
- Collaboration
- Sustainability
- Resilience
- Competence
- Diversity
- Globalization
- Advocacy
- Creativity

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Sustainable CE Infrastructure

In short: **Sustainable civil infrastructure provides environmental, economic and social (triple bottom line) well-being, now and for the future**

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Measuring Sustainability

- **Sustainability Rating Tool**
- **Sustainable Development Course**
- **Professional Certification Program**

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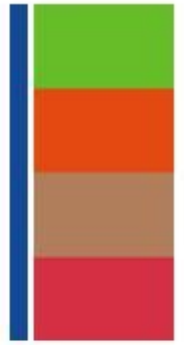
Goal for The Future



U.S. – Asian Region collaboration to create a sustainable world and enhance the global quality of life.

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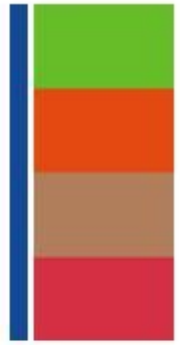
Preparing for the Future

U.S. – Asian Region Collaboration: Moving Forward



- workshops, joint studies, publications
- study tours, academic activities
- partnerships between government and non-government entities
- joint commission to analyze common challenges: water, transportation, urban development, disaster response

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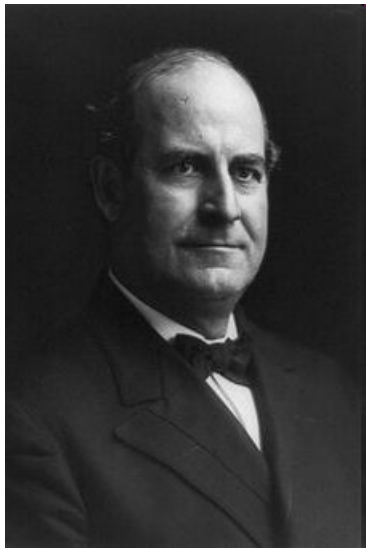
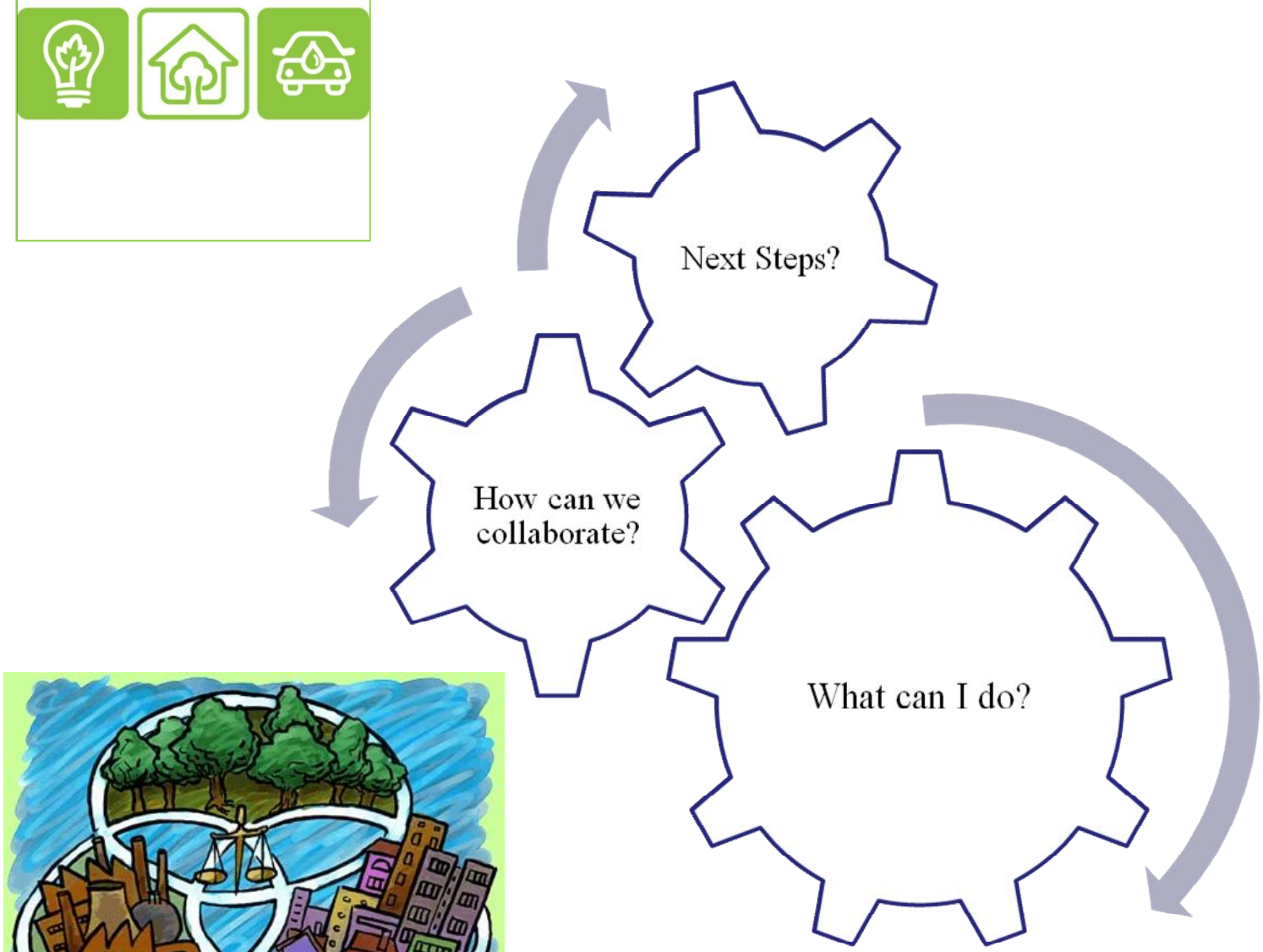
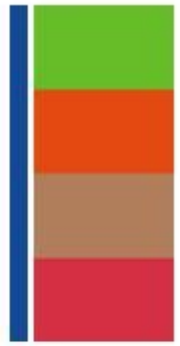


Destiny is not a matter of chance; it is a matter of choice.”

-Statesman William Jennings Bryan


Next Steps?
How can we collaborate?
What can I do?



The best way to predict the Future…

…is to create it.”

-Janus Linus-