Institute for Sustainable Infrastructure and Development
10 Emerging Trends for 2015

**Trend 1**  Governments take action to unclog the pipeline

**Trend 2**  Political and regulatory risks rise up the agenda

**Trend 3**  Market reforms: status quo is not fit for purpose

**Trend 4**  The shifting role of multilaterals and development banks

**Trend 5**  Big complexities start to impede big projects

**Trend 6**  Striking the right balance between necessity and opportunity

**Trend 7**  Striving for better asset performance

**Trend 8**  Resource scarcity drives investment

**Trend 9**  Infrastructure players go global

**Trend 10**  Cities sharpen their focus on urban mobility

Source: KPMG
Sustainability Maturity Model

The Sustainability strategy is based on the company’s strategic plan, which in turn stems from a view of the current situation and the long-range outlook. This Model helps to define a future vision and the way to attain strategic goals and initiatives for 2015, 2017 and 2020.

Source: ICA's Sustainability Maturity Model
# Integrated Reporting | The 6 Capitals

<table>
<thead>
<tr>
<th>Capital</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial capital</strong></td>
<td>Funds - Structuring and financing - Available for use in the production of goods - Obtained through financing, such as debt, equity or grants</td>
</tr>
<tr>
<td><strong>Manufactured capital</strong></td>
<td>Manufactured physical objects: - Buildings, equipment y infrastructure</td>
</tr>
<tr>
<td><strong>Intellectual capital</strong></td>
<td>Organizational, knowledge-based intangibles: - Intellectual property - Capital Organizational</td>
</tr>
<tr>
<td><strong>Human capital</strong></td>
<td>People’s competencies, capabilities and experience, and their motivations to innovate.</td>
</tr>
<tr>
<td><strong>Social &amp; Relationship capital</strong></td>
<td>The institutions and the relationships within and between communities, groups of stakeholders and other networks: - Ability to share information to enhance individual and collective well-being</td>
</tr>
<tr>
<td><strong>Natural capital</strong></td>
<td>All renewable and nonrenewable environmental resources and processes that provide goods or services that support the past, current or future prosperity</td>
</tr>
</tbody>
</table>

**Source:** International Integrated Reporting Council
Creating Shared Value Strategy

- Business as usual
  - Philanthropy
    - Compliance (laws, business principles, codes of conduct)
  - Creating Shared Value
    - Business model
    - Creating competitive advantage
      - Positive Impact/Creating value
      - No harm/Hold value

Increase Company Value

Source: Michael E. Porter
Sustainability Strategic Planning

**SUSTAINABILITY OBJECTIVE:**
Be a reference in the industry in terms of sustainability

**STRATEGIC CAPACITY:**
Integrate government policies and processes, risk and accomplishment (GRC)

**OBJECTIVE:**
Integrate the best environmental, social and governance practices, measuring performance indicators, aligned to our key strategy.

**STRATEGIC CAPACITY:**
Provide the ICA experience

**OBJECTIVE:**
Being allies of our strategic stakeholders and ensuring the optimal reputation of our business.

**STRATEGIC CAPACITY:**
Foster a vision of shared social value.

**OBJECTIVE:**
Strengthen our relationship with society to impact positively on their development.

**STRATEGIC CAPACITY:**
Develop the supply chain.

**OBJECTIVE:**
Ensure efficiency and accomplishment in the supply chain with the assessment, development and subcontractor management tool to verify the accomplishment of the supply chain.

**STRATEGIC CAPACITY:**
Strengthen the organizational culture.

**OBJECTIVE:**
Strengthen the organizational culture based on values that promote the achievement of the organization objectives.

**STRATEGIC CAPACITY:**
Optimize the environmental management.

**OBJECTIVE:**
Manage environmental EMICA operation focused on contractual accomplishment, mitigation, risk prevention and project profitability.

**STRATEGIC CAPACITY:**
Strengthen the sustainability culture

**OBJECTIVE:**
Permeate the sustainability culture throughout the organization.

**STRATEGIC CAPACITY:**
Encourage, promote and develop innovative ideas.

**OBJECTIVE:**
Encourage a culture of innovation in EMICA as a critical element to increase competitiveness and tangible value.
ISO9001:2015: Quality Management System

4.1 Understand the organization and its context.
4.2 Understand the stakeholders needs and expectations
4.3 Determine the scope of the QMS

10 Improvement of Performance

5 Leadership

6 Planning

9 Performance Evaluation

4.4 QMS - Processes focus

8 Operations

Stakeholders

Requirements

Input

Output

7 Support processes

Customer and other relevant stakeholders satisfaction

Products & services

Source: ISO 9001
Welfare and Social Shared Value

Post-2015 Development Agenda
UN Global Compact to enhance private sector sustainable practices
ICA’s Circle of Value

Source: Circle of value ICA- IIRC
International Standards for Sustainable Infrastructure Evaluation

1. Quality of Life

2. Leadership

3. Resource Allocation

4. Natural World

5. Climate and Risk
1. Monitoring
2. Reporting
3. Evaluating
4. Performing
5. Long Term Planning

Institute for Sustainable Infrastructure and Development
ISID
Key Definitions

• Sustainable Competitiveness
The set of institutions, policies, and factors that make a nation productive over the longer term while ensuring social and environmental sustainability.

• Sustainable Infrastructure
It has an integrating vision of leadership, economic boost, social development, environment protection and efficient use of resources; that ensures resilience and long term growth and focuses on driving competitiveness of countries.

Source: World Economic Forum
Competitiveness in Mexico

- 55th ranking (out of 148) in competitiveness
- 66th ranking in quality of overall Infrastructure

To increase its level of productivity and to support the transition toward the next development stage, Mexico has to reinforce:

- Supply of infrastructure
- Labor market efficiency
- Higher education and training
- Technological preparation and innovation

Source: World Economic Forum
### Qualifications Mexico vs Top 5 Infrastructure WEF

<table>
<thead>
<tr>
<th>Pillar: Infrastructure</th>
<th>Ranking México/144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Overall Infrastructure</td>
<td>66</td>
</tr>
<tr>
<td>Quality of Roads</td>
<td>51</td>
</tr>
<tr>
<td>Quality of Railroads infrastructure</td>
<td>60</td>
</tr>
<tr>
<td>Quality of port infrastructure</td>
<td>62</td>
</tr>
<tr>
<td>Quality of air transport infrastructure</td>
<td>64</td>
</tr>
<tr>
<td>Quality of electricity supply</td>
<td>81</td>
</tr>
</tbody>
</table>

Source: World Economic Forum
Infrastructure: a key driver for Growth in Mexico

• 5.6 million direct jobs and 2.8 million indirect jobs
• 6.3 % of national GDP. (2012)
• Impact in 63 branches of the 70 productive branches of the economy
• Multiplier effect: 43 pesos out of every 100 intended for construction, are used to purchase services and materials of its supply chain.

Source: (CMIC) Mexican Chamber of construction Industry
Planning, Financing & Leadership

In the case of Mexico, even though there is coordination between private groups and companies related to construction and infrastructure, there is no advocacy in terms of research, training and evaluation, or the possibility to generate and/or impact public policies.

Therefore there is a need for introducing and establishing a consensus on sustainability standards through a collective action approach leading to a positive impact on public policy, better competitiveness conditions, economic efficiency for the sector, public awareness building and creating a long term perspective for all involved stakeholders.

Source: (CMIC) Mexican Chamber of construction Industry
Planning, Financing & Leadership

The challenges of infrastructure in Mexico can be classified into 3 general categories: planning, financing and leadership:

**Planning**
- Lack of long term vision and portfolio of executive projects
- Right of way, land use permits, environment permits
- Wrong public tender conditions and excess of requisites, incomplete executive projects

**Financing**
- Lack of opportunity on the permits of budget authorization
- Excess time for the authorization of budget changes
- Early closure of budgetary exercises
- Lack of competitive financing

**Leadership**
- Wrong distribution of risks between contractor and client
- Inconsistency between laws, regulations and norms of the involved government agencies
- Discretion of interpretation by government officials
**ISID**

- Strategic planning is the basis of sustainable development. With the collaboration of the private initiative and development agencies, the federal government can find an important support in the design of long-term plans for the country.

- This project aims to set up an Institute for Sustainable Infrastructure for Development as innovative model for national development through a planning system, monitoring and evaluating of sustainable infrastructure which considers all these components: financing, legal framework, evaluation metrics, incentives for different actors, social and environmental impacts, development and research capacities, among others.
General Objectives

To influence *public policy* and infrastructure *planning* to boost sustainable competitiveness in Mexico, through an independent and nonpartisan *institute*, with the aim of improving the quality of life of the population.
Specific objectives

• To be an *Open dialogue institute* for major infrastructure development actors in Mexico
• To be a *Planning Institute* for sustainable infrastructure
• To be a *Research and analysis institute* that evaluates infrastructure projects under sustainable international standards
• To be a *Transparency and accountability institute* in the development of infrastructure projects.
Key Success Factors

• Economic & management autonomy
• Openness and dialogue with all stakeholders involved / interested in developing infrastructure in Mexico:
  • Public
  • Private
  • Social
  • Academic
• Intellectual Independence
• Transparency and Accountability
• Short and long-term projects / studies
Next Steps

• Operative structure & action plan
  • Information analysis (concerning the planning and governance guidelines of each sector)
  • Proposal process (content development of the current situation (daily practices), infrastructure in Mexico with the sustainable environment and project portfolio. Definition of a Matrix of opportunities)
  • Define participation strategies and government, trade union group and society alliances
  • Establish financing schemes
  • Legal, social, academic, and technical recognition
Short & Long term Deliveries

- Monitoring the national infrastructure plan of Mexico
- Identification and evaluation of key projects of infrastructure per fields:
  - Transport & Communication sector
  - Energy sector
  - Hydraulic industry
  - Health sector
  - Urban development and housings sector
  - Tourism sector
- Organization of discussion groups with the objective to define sustainability standards that fit to the Mexican context including all stakeholders
Thank You