The Ecala Group
Regional Council of Mayors, Feb 10th, 2014

A vision and methodology for successful city development
Raising the Bar

Working towards what is possible, not what is usual
The Approach: Beyond Sustainability
Future-proofing development for the 21st century economy
## Six Phases of Socio-Ecological Development

<table>
<thead>
<tr>
<th>Developmental Phase</th>
<th>Tagline</th>
<th>Description of Phase</th>
<th>What is Measured</th>
<th>Definition of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploitive</strong></td>
<td>Illegal (by Western standards)</td>
<td>Exploitation of people &amp; nature for short-term economic benefit / political power. Workers live in poverty to create cheap products. Social &amp; environmental externalities generally ignored.</td>
<td>Economic performance</td>
<td>Not getting caught</td>
</tr>
<tr>
<td><strong>Conventional</strong></td>
<td>Business as usual</td>
<td>Little to no consideration of social or environmental impacts outside of basic compliance. Preservation of status quo. Government / society pays for social &amp; environmental externalities.</td>
<td>Economic performance</td>
<td>Market impact (number of products sold), accumulation of economic wealth, compliance with regulations</td>
</tr>
<tr>
<td><strong>Green</strong></td>
<td>Relative improvement: ‘Less bad’</td>
<td>Partial acceptance of social &amp; environmental impacts. Incremental improvements based upon ‘low-hanging fruit’ &amp; established ROIs.</td>
<td>Social &amp; environmental impacts in relation to economic performance</td>
<td>Smaller ecological footprint coupled with higher profits, stronger brand reputation &amp; greater stakeholder engagement</td>
</tr>
<tr>
<td><strong>Sustainable</strong></td>
<td>Neutral: ‘100% less bad’</td>
<td>Full accountability of social &amp; environmental impacts. Sustainability &amp; transparency central to corporate identity &amp; innovation efforts. Net-zero &amp; ‘climate neutral’ targets drive development.</td>
<td>Systemic supply chain impacts in relation to social, environmental &amp; economic performance</td>
<td>Net-zero supply chain impacts &amp; social justice efforts rewarded by loyal customer base, strong market presence &amp; less regulation</td>
</tr>
<tr>
<td><strong>Restorative</strong></td>
<td>Positive impact: Restoring the integrity of sub-systems</td>
<td>Gives more back to ecological sub-systems than that which is consumed. Positive footprint helps private sector strengthen integrity of commons, minimizes role of government.</td>
<td>Positive economic, environmental &amp; social performance. Effect on greater supply chain / industry.</td>
<td>Net-positive supply chain impacts. Pioneering efforts drive industry-wide innovation, captures loyal market &amp; reduces need for governance</td>
</tr>
<tr>
<td><strong>Thrivable</strong></td>
<td>Unleashing virtuous cycles: Systems work in absolute effectiveness</td>
<td>Human development regenerates socio-ecological systems. Cultural &amp; biological diversity is actively enhanced. Work is deeply purposeful, joyful &amp; enriching.</td>
<td>Socio-ecological system wellbeing</td>
<td>Social &amp; ecological systems are visibly flourishing. Human processes &amp; forms are in harmony with natural systems.</td>
</tr>
</tbody>
</table>
The Approach: Beyond Sustainability
Sustainable development as a ‘break-even’ point

PROFIT / VALUE
COSTS / EXTERNALITIES

Thrivable Development
Restorative Development
Sustainable Development
Green Development
Conventional Development
Exploitive Development
The Approach: Beyond Sustainability

Net positive development as a baseline for future development

The Earth’s Carrying Capacity

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The Approach: Systems-Based & Synergistic

Ecala Value Assessment (EVA) aligns KPIs to create systemic value.
The Approach: Brand Value Loop
Resource management and stakeholder wellbeing defines identity
The Approach: Measuring Success
Aligning ROIs to identify risks and opportunities

<table>
<thead>
<tr>
<th>Scenario I: CONVENTIONAL to GREEN</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>FINANCIAL</th>
<th>ECOLOGICAL</th>
<th>SOCIAL</th>
<th>VALIDATION / IDENTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROI</td>
<td>TREND</td>
<td>ROI</td>
<td>TREND</td>
</tr>
</tbody>
</table>

**AIR**
- Regulatory requirements: N/A
- Market demand: N/A
- Vision/goal: Minimum (Less cost)
- As a part of the infrastructure: Profit

<table>
<thead>
<tr>
<th>AIR</th>
<th>Compliance</th>
<th>Positive</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>Neutral</th>
<th>No=missed opportunity/risk</th>
</tr>
</thead>
</table>

AIR IS A LIABILITY - A NEGATIVE ASSET

**WATER**
- Regulatory requirements: N/A
- Market demand: N/A
- Vision/goal: Minimum (Less cost)
- As a part of the infrastructure: Profit

<table>
<thead>
<tr>
<th>WATER</th>
<th>Compliance</th>
<th>Positive</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>No=missed opportunity/risk</th>
</tr>
</thead>
</table>

WATER IS A LIABILITY - A NEGATIVE ASSET

**WASTE**
- Regulatory requirements: N/A
- Market demand: N/A
- Vision/goal: Minimum (Less cost)
- As a part of the infrastructure: Profit

<table>
<thead>
<tr>
<th>WASTE</th>
<th>Compliance</th>
<th>Positive</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>Positive</th>
<th>Neutral</th>
<th>No=missed opportunity/risk</th>
</tr>
</thead>
</table>

WASTE IS A LIABILITY - A NEGATIVE ASSET
### Scenario II: CONVENTIONAL to RESTORATIVE

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>FINANCIAL</th>
<th>ECOLOGICAL</th>
<th>SOCIAL</th>
<th>VALIDATION / IDENTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROI</td>
<td>TREND</td>
<td>ROI</td>
<td>TREND</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### AIR

- **Market demand**
  - N/A
  - N/A
- **Vision / goal**
  - Max
  - Max
- As a part of the infrastructure
  - Profit
  - Profit

- **Leader**
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive

- **Validation / Identity**
  - Yes

#### WATER

- **Regulatory requirements**
  - N/A
  - N/A
- **Market demand**
  - N/A
  - N/A
- **Vision / goal**
  - Max
  - Max
- As a part of the infrastructure
  - Profit
  - Profit

- **Leader**
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive

- **Validation / Identity**
  - Yes

#### WASTE

- **Regulatory requirements**
  - N/A
  - N/A
- **Market demand**
  - N/A
  - N/A
- **Vision / goal**
  - Max
  - Max
- As a part of the infrastructure
  - Profit
  - Profit

- **Leader**
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive
  - Positive

- **Validation / Identity**
  - Yes
The Broader Context

Infrastructure-as-usual is broken and costly

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>America’s Infrastructure GPA</td>
<td>D</td>
<td>D+</td>
<td>D</td>
<td>D</td>
<td>D+</td>
</tr>
<tr>
<td>Investment need (US$ Trillion)</td>
<td>1.3</td>
<td>1.3</td>
<td>1.6</td>
<td>2.2</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Each category was evaluated on the basis of capacity, condition, funding, future need, operation and maintenance, public safety and resilience.

AVIATION: D
BRIDGES: C+
DAMS: D
DRINKING WATER: D
ENERGY: D+
HAZARDOUS WASTE: D
INLAND WATERWAYS: D−
LEVEES: D−
PORTS: C
PUBLIC PARKS AND RECREATION: C−
RAIL: C+
ROADS: D
SCHOOLS: D
SOLID WASTE: B−
TRANSIT: D
WASTEWATER: D

ESTIMATED INVESTMENT NEEDED BY 2020:
$3.6 TRILLION

A = Exceptional
B = Good
C = Mediocre
D = Poor
F = Failing

LEARN MORE
The Restorative Model of Urban Development
A replicable model for 21st century city development

Restorative development adds greater value to society, the economy and the environment than it takes away. It generates, stores and distributes a surplus of renewable energy within a shared communication technology, water, and waste grid. On the surface, active mobility options, parks, plazas, urban agriculture, and mixed-use development express the unique identity of each community.
The Restorative Model of Urban Development

Integrated infrastructure generates a surplus of value
The Restorative Model of Urban Development

Integrated infrastructure generates a surplus of value
The Approach: Comparison to Other Programs

Socio-ecological performance levels of various development programs
The Approach: Financial Opportunities

The economic benefits that result from restorative development

- Thrivable Development
- Restorative Development
- Sustainable Development
- Green Development
- Conventional Development
- Exploitive Development

PROFIT / VALUE

COSTS / EXTERNALITIES
The Approach: PR Opportunities

PR, branding & identity opportunities that result from net positive development

INTERNATIONAL ICON

LOCAL INTEREST

Thrivable Development
Restorative Development
Sustainable Development
Green Development
Conventional Development
Exploitive Development
What is your vision of successful development?
Provocative Query

What resources or opportunities are present within your community that can be utilized to deliver breakthrough outcomes?
How can the community of leaders in this room work together to create a restorative or thrivable region?