



## The Sustainable Cities: PLUS Planning Cycle

The Sustainable Cities: PLUS Planning Cycle is a generic summary of the principles and stages of planning developed by various cities that are members of the Sustainable Cities: PLUS Network – a peer learning network of 38 cities and regions engaged in long-term integrated planning and community demonstration projects. The cities are from 14 different countries in the North and South and represent a broad range of sizes, geography and cultures<sup>1</sup>

### The Planning Cycle: SIX PRINCIPLES

The analysis and synthesis of many different planning systems and principles in use by cities in the PLUS Network, is culminating in the articulation of six main principles which underlie the successful execution of the Sustainable Cities: PLUS Network's planning cycle.

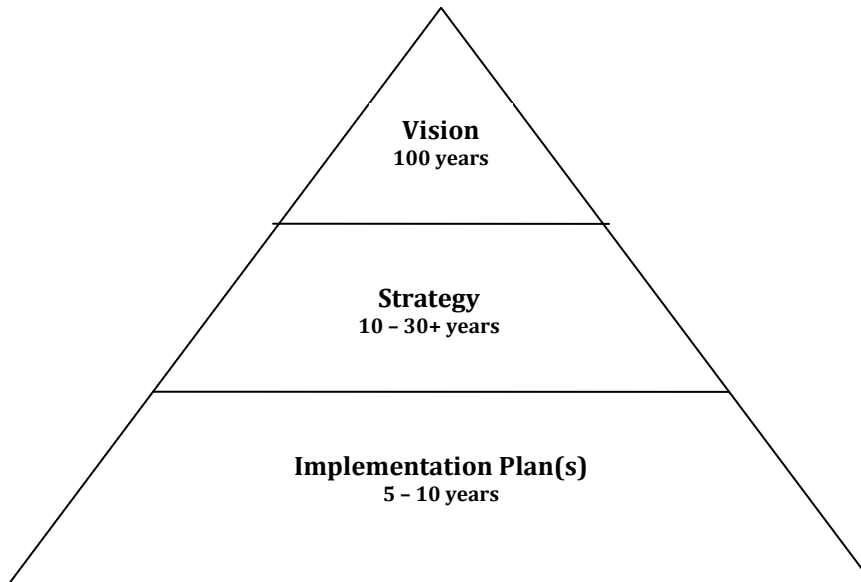
#### Principle 1: Adopting a long-term lens

The difference between traditional planning and the PLUS Network's planning is the difference between planning from current trends (forecasting) to planning from a vision of a desired future and reflecting back to determine what actions would lead to that future (back-casting). Recognizing that it is unrealistic to try to predict the future 100 years from now, the PLUS Network's planning cycle breaks this down into manageable pieces. The 100-year vision does not require highly specific actions. It simply sets out a desired future over three generations or beyond—what kind of city do we want for our grandchildren and great-grandchildren, and how can we set the right actions in motion to make that desired future a reality?

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<sup>1</sup> 38 cities participate in Network activities of which 34 have signed Memoranda of Agreement. The cities are: Australia, Adelaide; Brazil, Curitiba, Porto Alegre, Salvador ; Canada, Calgary, Canmore, Edmonton, Halifax Region; Iqaluit, Metro Vancouver, Montreal\*, Niagara Region, Ottawa, Okanagan Indian Band , Port Alberni\*, Regina, Saint John, Vernon, Whistler; Costa Rica, San Jose; Korea, Suncheon; Mexico, Chihuahua, Colima, Matamoros; Mongolia, Ulaanbaatar; Philippines, San Fernando; Romania, Bucharest; Senegal, Dakar; South Africa, Durban; Sri Lanka, Badulla, Matale, Nuwara Eliya, Matara\*, Moratuwa\*; Tanzania, Dar es Salaam; U.S.A. Olympia, Portland, Montpelier \*participating, MoA pending

Then we work out a medium-term strategy for the next 30 years, and a comprehensive shorter-term implementation/action plan with 5-10 year timelines. This implementation plan includes a budget and workplan.



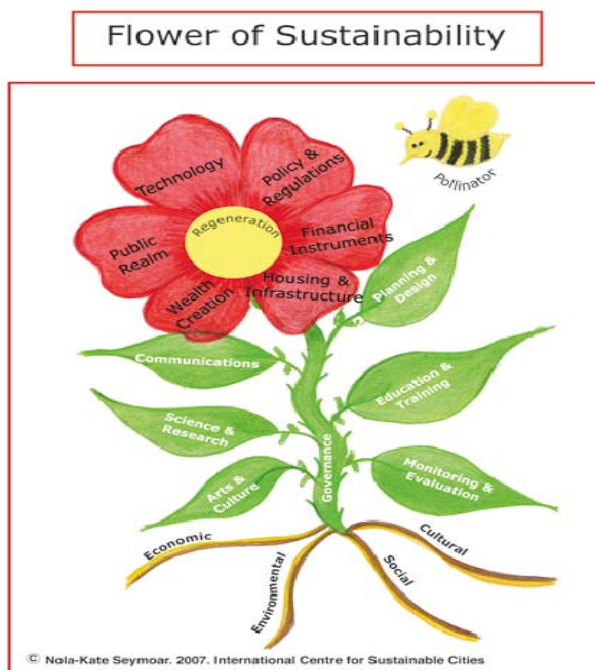
A three-generation vision requires “backcasting” and releases creativity as teams identify their vision for the future and reflect back from that desired future to consider what needs to be done to head in the right direction. This “future generation” lens:

- **Considers** long-term trends such as climate change, resource scarcity, technological innovation, demographic changes, social conflict and globalization;
- **Anticipates** unexpected events such as natural disasters, epidemics and economic shocks;
- **Exceeds** territory, narrow interests or terms of office;
- **Aligns** with the lifespan of city infrastructure; and
- **Inspires** creativity and innovative thinking.

## **Principle 2: Viewing the City as One Complex System**

Only a holistic view enables planning for long-term sustainability. This means recognizing the inter-relations and interactions of the four elements of sustainability—economic, environmental, social and cultural, with each other and with governance—and treating the whole as one system. We have moved from traditional ways of representing this graphically to a holistic organic analogy which better reflects the nature of sustainability: a flower which reacts to its environment.

The four elements of sustainability are the roots. They must be planted in fertile soil. The stem is governance—the stabilizing institutions and structures that support or inhibit the plant’s strength and growth. The leaves are processes that can transform energy and provide nourishment: education and training; science and research; media and communications; planning and design; monitoring and evaluation; arts and culture. The showy petals provide the flower’s character and distinctiveness, making it attractive to insects, birds, animals and humans. They represent the places in which direct interventions make the most difference and are most immediately obvious: policy and regulations; housing and infrastructure; public places and spaces; wealth creation; financial instruments and technologies. The centre of the flower holds the seeds of its regeneration. Birds and bees pollinate, scatter and transfer these seeds. In this analogy, Sustainable Cities and the PLUS Network are pollinators, transferring experiences and seeding new ideas. Gardiners can improve the soil and add resources such as rain, sun and shade (or funding, in the real world) as appropriate. Everyone can appreciate the beauty of sustainability.



### Principle 3: Using an Integrated and Comprehensive Approach

Cities tend to manage various systems such as water, transportation, waste and energy on separate tracks. Long-term sustainability requires aligning all these

plans and managing them in an integrated fashion. Different cities find their own ways of doing this. In Canada, Metro Vancouver's cities<sup>PLUS</sup> established 17 Foundation teams under four categories: people, place, infrastructure and governance. The City of Calgary set 28 goals under five areas: the built environment and infrastructure, the economy, governance, the natural environment and the social system. Chihuahua, Mexico selected nine strategic elements. Each city defines its own priorities, and may work on many themes in parallel.

#### **Principle 4: Adaptive Management and Collective Learning**

In order to work with a very long-term lens and a systems approach, management systems must operate in a mode of constant learning and experimentation. This is known as adaptive management, which monitors and creates feedback loops, recognizing that unexpected outcomes are inevitable and that they represent an opportunity for innovation and learning<sup>2</sup>. This approach enables mid-course corrections, learning from experience and failures and adjusting behaviour to ensure survival. It characterises more resilient cities and communities. Beyond the learning by individual cities, the nature of the Sustainable Cities: PLUS Network is to share these experiences among its members and beyond, thus generating new knowledge and maximizing the transfer of learning.

#### **Principle 5: Focusing on a City's Bioregion, Ecological Footprint and Neighbours**

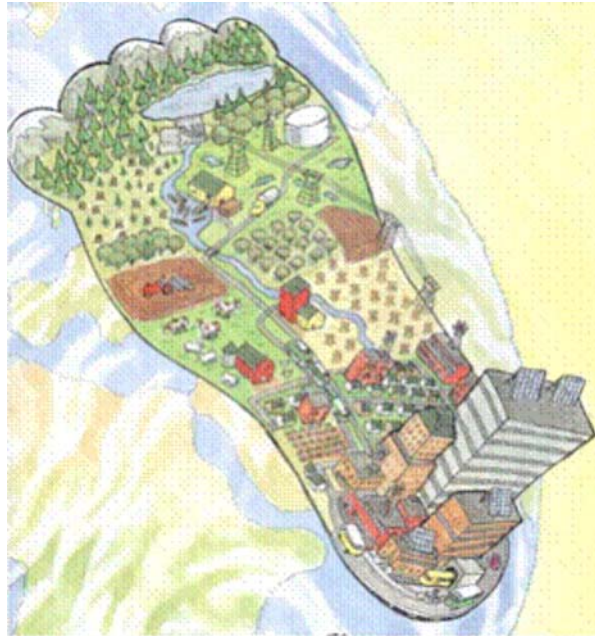
Humans are an integral part of the natural world and cities must be viewed within their larger ecosystem, bioregion, watersheds and air-sheds. This is often easiest to do when considering the long-term vision and strategy. Stakeholders in the Niagara Region for example asked: how can we plan for half a river? They are now in a continuous dialogue with their neighbours in the USA.



**Figure 1: Smarter Niagara - a broad regional, cross-border approach**

<sup>2</sup> see Lance Gunderson and CS Holling. Panarchy: Understanding Transformations in Systems of Humans and Nature; Island Press 2001

The city extends its impact beyond its geographic region through its interactions with others in trade, political and cultural processes. The concept of the ecological footprint<sup>3</sup> refers to the area of land and water the city needs to produce the resources it consumes, and to absorb the waste it generates. If everyone in the world consumed at the level of North Americans, we would need more than four planets. This concept helps people understand the consequences of their own consumption and production decisions. It has been applied as both a research tool and as an educational tool with calculators for individuals, schools and cities.<sup>4</sup>



The long-term view also includes socio-political and economic relationships with neighbouring areas and First Nations communities, as well as places where the community buys and sells its goods and services. The Sustainable Cities: PLUS Network encourages cities to expand the geographic and jurisdictional scope of their planning process beyond their political boundaries.

### **Principle 6: Participatory Engagement**

Integrated long-term planning is ongoing, iterative and participatory. Multi-sectoral and multi-stakeholder groups usually lead the process, with the support of multi-disciplinary staff teams. Multi-sectoral groups (such as a Mayor's Task Force on the Future of the City) include leaders from the public, private, academic and not-for-profit sectors. Multi-stakeholder groups (such as Roundtables or Working Groups) typically involve representatives of community groups that have a particular interest in the outcomes of the planning. Multi-stakeholder approaches

<sup>3</sup> See *Our Ecological Footprint: Reducing Human Impact on Earth*, Mathis Wackernagel and William Rees, New Society Publishers 1996

<sup>4</sup> See [www.wwf.org.uk](http://www.wwf.org.uk) and [www.epa.vic.gov.au](http://www.epa.vic.gov.au) for examples.

improve data gathering, decision-making, priorities and strategies while ensuring that the process survives leadership changes and elections.

General public participation involves different engagement strategies at various stages. Broad public participation is most common in visioning, setting priorities and monitoring progress. Agreement on principles of community engagement, such as acceptance, active listening, collaboration and inclusiveness, is essential to success. There are many participation tools and techniques<sup>5</sup> and it is useful to understand the continuum of participation<sup>6</sup> in order to choose the right type of engagement for the purpose. Charrettes represent an increasingly common participatory approach to engage stakeholders in the design of buildings, neighbourhoods or regions<sup>7</sup>. Engagement tools range from high-tech and computer-based (such as MetroQUEST, described in the next section) to low-tech, such as community asset mapping or creating green plans.<sup>8</sup>

Participatory approaches, (whether general public or more focused participation by community groups, or both), enables communities to take ownership of the process while the city provides leadership, support and resources. In the words of the Mayor of Calgary, this allows the process to be “city-led, and community owned”.

## Collaborative Engagement



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<sup>5</sup> See Integrated Community Sustainability Planning Tool on cit for some examples.

<sup>6</sup> See for example Arnstein's Ladder of Citizen Participation and Davidson's wheel of participation.

<sup>7</sup> Sustainability by Design: A Vision for a Region of 4 Million, Design Centre for Sustainability, UBC 2006

<sup>8</sup> see Asset Based Community Development, (ABCD) the Coady International Institute [www.coadyinstitutue.ca](http://www.coadyinstitutue.ca) or Developing Youth Friendly City Guides, the Environmental Youth Alliance for examples.

## The Sustainable Cities: PLUS Planning Cycle: SIX KEY STAGES



In the real world of cities trying to achieve long-term sustainability, the planning process is organic and messy—in short, human. While this cycle suggests stages one to six with a defined start and finish, each city moves through it and organizes itself in its own distinct way. Some planning frameworks involve different sequences. For example, The Natural Step puts gathering baseline data before the visioning process; others may do it after.

The Sustainable Cities: PLUS Planning Cycle is intended to describe an ongoing, iterative process that sometimes feels chaotic as work proceeds in parallel. But what is important is that it is flexible and adaptable to each city's specific situation and needs, readiness, capacity and existing planning processes. Cities can “join” the process at any stage.

This process is not linear, but rather an upward spiral. Even if external circumstances change (economic movements or climactic events, for example) and initial projections have to be adjusted, the city will still be closer to sustainability than before engaging in the process. The six principles and the six key stages of the Sustainable Cities: PLUS Planning cycle are generic and flexible

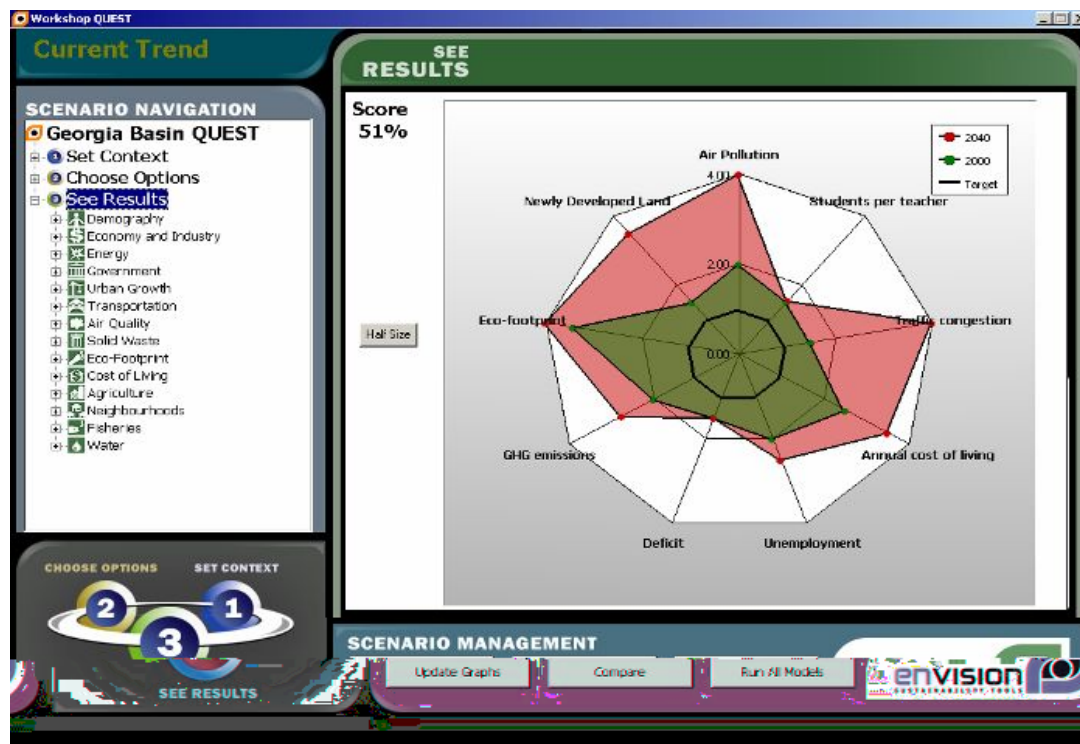
enough to be used with other frameworks such as The Natural Step, Smart Growth, the Earth Charter Action Tools (EarthCAT), Local Agenda 21 and others.

## The Six Stage of the Planning Cycle

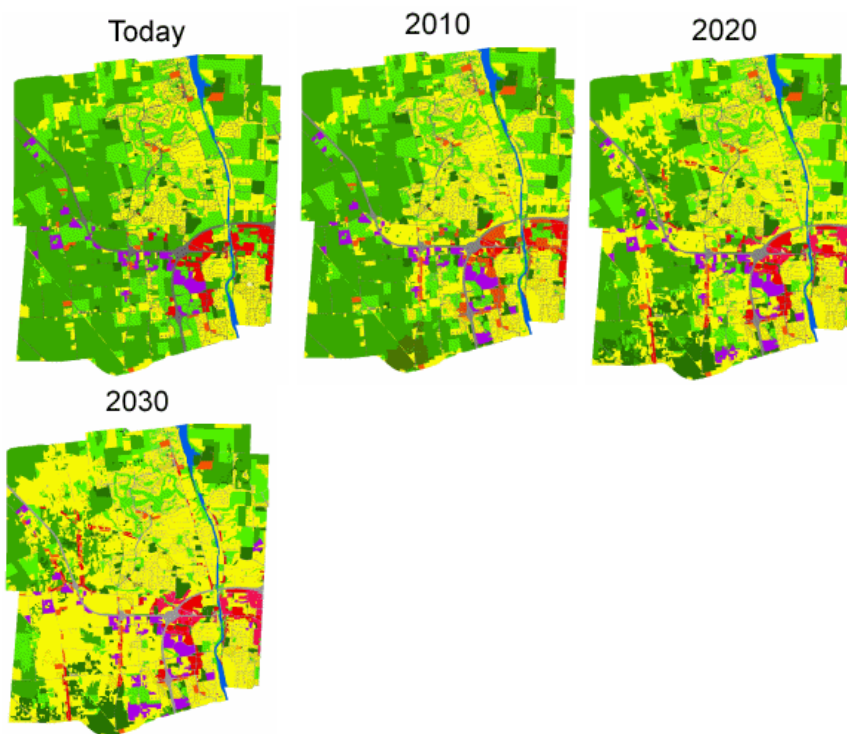
### 1. Awareness and Scoping

Communities must recognize their own need to become more sustainable. This only happens when people see a strong need to change the status quo—perhaps in response to climate change, a mine closure or a disaster. Members of the Sustainable Cities: PLUS Network sign a membership agreement that commits them to a set of sustainability principles. This initial phase of the planning cycle involves committing to become a sustainable city or community, perhaps through a ‘Sustainability Charter’ or a set of principles such as the Melbourne Principles. This is the Awareness phase of The Natural Step.

Awareness of the impacts of climate change is often an important driver of long-term planning. Al Gore’s film, *An Inconvenient Truth*, for example can motivate audiences to act. Others use MetroQuest, a computer-assisted public awareness tool that projects the results of different future scenarios, using a fun and creative game to demonstrate the interconnections between choices about land use, transportation, economics and social impacts. Participants can test different options as they try to make the diagram of an open web as large as possible.



Other software tools that can be very helpful in this stage include *What if.* (see [www.whatifinc.biz](http://www.whatifinc.biz)) This easy-to-use GIS-based system can explore alternate futures for a community and prepare long-term land use, population, housing and employment projections for enumeration districts, political jurisdictions, and user-defined areas such as school districts, and traffic analysis zones.

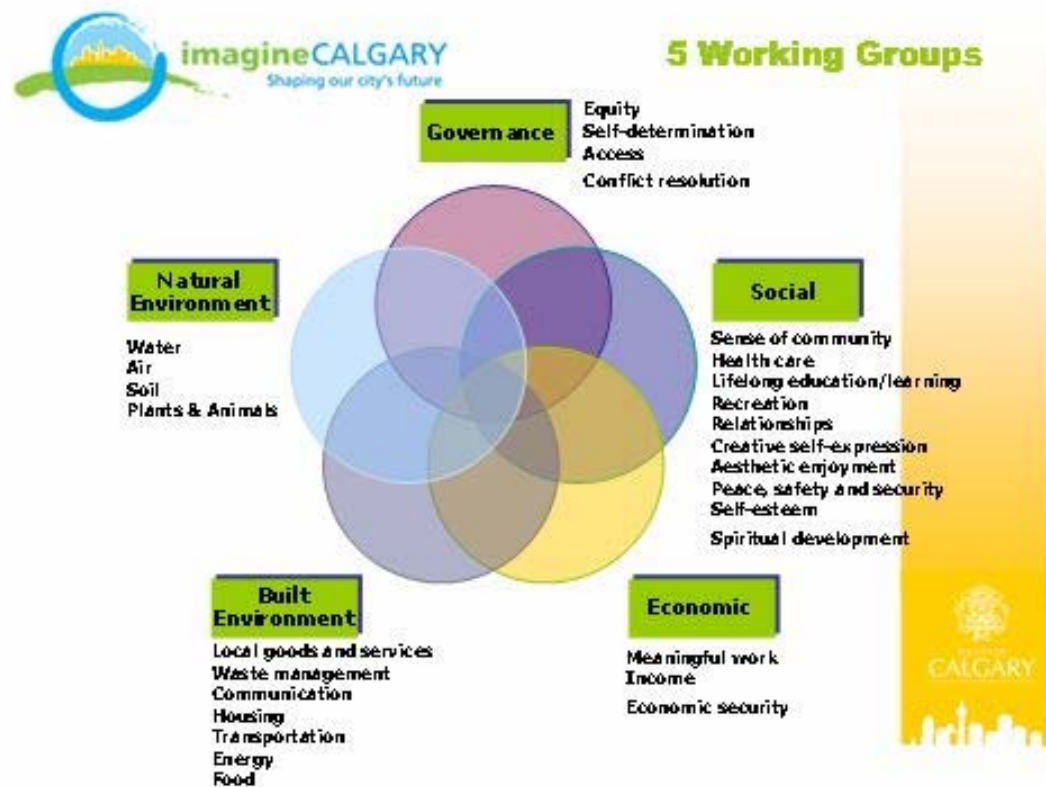


Once the community commits to sustainability, in the scoping phase it assesses its capacity and readiness to engage in a long-term planning process; establishes the geographic and jurisdictional scope and timeframes, budgets and resources; and creates a multi-stakeholder “Planning/Project Team” to undertake the project.

Based on the experience of a number of the PLUS Network cities, it is better to attach the project team to an existing multi-stakeholder structure rather than create a new team. Otherwise, when the ‘planning’ is over the team may be dismantled and there will be no group with continuity to shepherd and monitor the implementation process.

Cities often identify their plan’s core themes (e.g. economic, environmental, social, cultural and governance systems) and strategic areas (e.g. land use, transportation, air, water, health, social equity, accessibility etc) at this stage

and identify the leadership for each. The City of Calgary, for example, established five working groups that tackled the areas identified below.



## 2. Visioning

In this stage, cities consider the key sustainability elements of economic, environmental, social, cultural and governance systems to articulate a successful vision of the city in 100 years.<sup>9</sup> This overall vision is based on shared community values, strengths and assets and sustainability principles. Some cities use small multi-sectoral groups of leaders to develop the vision (such as the design “charrettes” in Metro Vancouver’s cities<sup>PLUS</sup>) while others use broader public participation processes (such as the “imagine” process used in Chicago, Calgary and Durban). The choice may depend upon the existing level of engagement, budget, and time available. During this phase, smaller working groups may envision the end state goals for each of their strategic areas, creating multiple visions which are melded together at a later stage. Based upon the experience of several cities, it may be useful to start from a

<sup>9</sup> It should be noted that some cities do a baseline analysis before they do their visioning process.

shared draft vision, move into smaller working groups and return to refine the vision at a later stage.

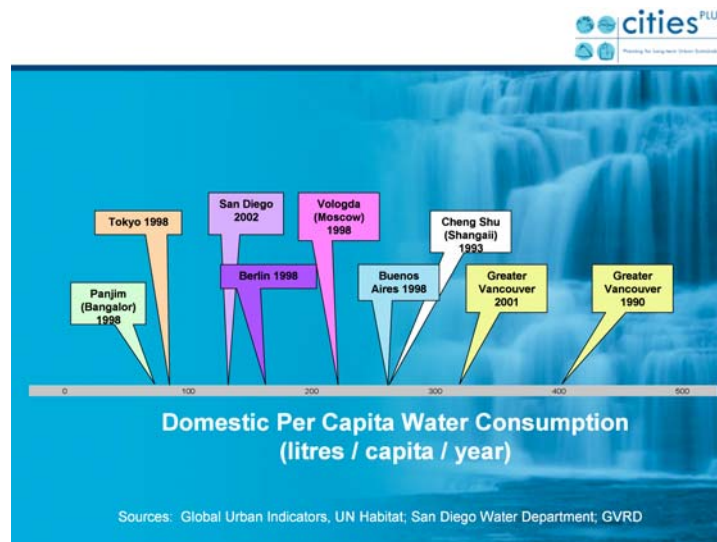
The City of Durban, South Africa decided to undertake a broad public participation process to develop its vision and is using a variety of media to inform and engage citizens. Calgary, Alberta, used a similar process and involved more than 18,000 residents in defining the kind of city they wanted for the future.

## Imagine Durban



### 3. Establishing the Baseline, Exploring the Options

Within each theme, working groups gather baseline data on specific issues such as water or energy and assess their current status, benchmarking themselves with regard to others. Some communities do this in advance of their visioning. The data should include facts, census information and more subjective community values such as those revealed through asset mapping. Working groups may forecast anticipated trends (business as usual) and back-cast to identify alternatives and options. Surveying best practices or state-of-the-art technologies helps when exploring options. Then the working groups set targets and may identify preliminary indicators. In the process of establishing targets and indicators, it is important that the Working Groups anticipate implementation and make sure that those with the relevant mandates (such as the city engineers) participate in setting or reviewing the goals, targets and indicators.



#### 4. Developing Strategies

In this stage the timeframe under consideration moves closer, from a long-term vision to a medium-term strategy. Two particular tools are useful in building strategies. One is the use of participatory design charrettes.<sup>10</sup> The other, developed in Durban, is called a 'Big Momma Workshop'. Both methodologies involve bringing large multi-stakeholder groups together to make decisions about priorities. Small communities have an easier time assigning working groups and bringing their results together, and can often engage a larger percentage of their residents.

Adapting a traditional SWOT analysis may be appropriate<sup>11</sup>. During the strategic stage, cities examine their goals and identify how they might get there by considering questions such as: What will move us in the direction of sustainability? How does this action relate to the four systems tests of the Natural Step? Does the action provide a flexible platform? If we invest in this will we preclude other options later on? Such questions help set strategic priorities and identify how the city will reach its vision and goals.

Each city will deal with the issues somewhat differently, but it is important to bring the working groups together to identify synergies and develop actionable plans based on agreed priorities. Again, the process is iterative and each component part of the system interacts with others. The resulting strategy should be both comprehensive (in the sense that it includes all aspects of the urban system such as water, land, transportation etc.) and integrated (in the sense that it considers all elements of sustainability such as social, economic, environmental, cultural and governance).

<sup>10</sup> See Sustainability by Design website [www.dcs.sala.ubc.ca](http://www.dcs.sala.ubc.ca)







<sup>11</sup> SWOT refers to a four quadrant grid - Strengths, Weaknesses, Opportunities and Threats

## 5. Implementation

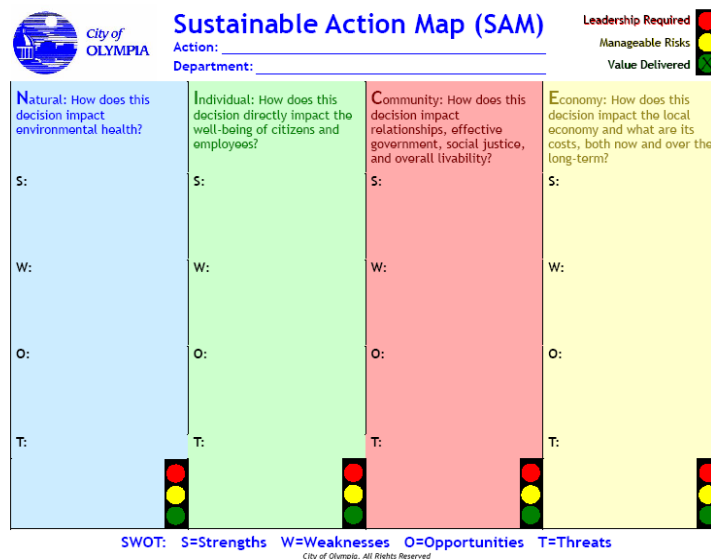
A plan has a budget and workplan. Most cities review their operating plans every 5 years. Official Community Plans, Regional Growth Strategies, Municipal Development Plans or other formal plans mandated by legislation need to be aligned with each other and with the long-term vision and medium-term strategies. Success requires aligning plans so that they do not derail the movement toward sustainability through contradictory actions (for example building more highways for cars defeats the objective of improving air quality).

The implementation stage prioritizes actions and strategies and assigns timeframes, and human and financial resources for their implementation. This stage involves identifying who can and will do what, when; and how they and others will know when they have been successful. cities<sup>PLUS</sup>, for example, used the matrix below that identifies the actors and what they can do in a number of categories (e.g. legislation and enforcement, financial measures, planning and design, research and technology, education and training).

### Short-term Implementation Strategies: cities<sup>PLUS</sup>

Example Short-Term Implementation Measures		Catalyst Strategy 7: Create Shock Resilient Cells					
		Planning Initiatives	Research & Demonstration	Education & Inspiration	Legislation & Enforcement	Financial Instruments	
<b>Concept:</b> <i>Use a cellular structure to reorganize land use and critical infrastructure capacity, enhancing local self-reliance and reducing vulnerability to unexpected shocks.</i>	<b>Municipal Agencies</b> 	<ul style="list-style-type: none"> <li>Identify threat-vulnerable urban systems and develop corresponding threat prevention and risk management plans</li> <li>Direct growth away from areas of high risk from natural disaster</li> </ul>	<ul style="list-style-type: none"> <li>Assess critical resources for achieving short-term self-sufficiency in event of disasters</li> <li>Work towards meeting the National Fire Protection Association's standard on Disaster/Emergency Management</li> </ul>	<ul style="list-style-type: none"> <li>Train staff an emergency response plans and procedures</li> <li>Simulate city-wide disaster scenarios to train and educate professional response teams and citizens</li> </ul>	<ul style="list-style-type: none"> <li>Designate cellular zones of self-reliance for basic necessities based on natural break lines in major infrastructure</li> <li>Designate areas for urban agriculture</li> <li>Restrict development in areas prone to natural hazards</li> </ul>	<ul style="list-style-type: none"> <li>Offer subsidies to landowners that upgrade buildings to seismic standards</li> </ul>	
	<b>Regional Agencies</b> 	<ul style="list-style-type: none"> <li>Coordinate preparing a regional emergency response &amp; recovery plan to address a full range of potential threats</li> <li>Create distributed water storage systems across subregions</li> <li>Develop infrastructure redundancies</li> </ul>	<ul style="list-style-type: none"> <li>Develop integrated incident response protocols</li> <li>Develop alternative means of moving goods, people, and information in event of infrastructure disruption or failure</li> <li>Upgrade infrastructure to current seismic codes</li> </ul>	<ul style="list-style-type: none"> <li>Identify partner regions to ensure availability of mutual disaster aid</li> <li>Coordinate live co-training among first responders and simulate region-wide disaster scenarios to train and educate responders and citizens</li> </ul>	<ul style="list-style-type: none"> <li>Use growth management strategy to direct growth away from areas of high risk from natural disasters</li> <li>Work with other levels of government to maintain and protect multiple sources of natural resources</li> </ul>	<ul style="list-style-type: none"> <li>Provide tradable commuting credits to encourage people to work closer to home</li> <li>Operate a fund to cost-share the relocation of residents living on high risk lands susceptible to natural hazards</li> </ul>	
	<b>Provincial Agencies</b> 	<ul style="list-style-type: none"> <li>Create integrated incident response protocols</li> <li>Create provincial economic plans that ensure a diversified economy</li> <li>Foster relatively self-sufficient regional areas capable of isolation in catastrophic events</li> </ul>	<ul style="list-style-type: none"> <li>Develop an integrated climate stress response protocol</li> <li>Develop and disseminate seismic hazard maps</li> <li>Create an intelligence collection system that analyzes threat-related information and alerts region accordingly</li> </ul>	<ul style="list-style-type: none"> <li>Expand public education curriculum to include the functioning of ecosystems and how they may be irreversibly altered and can collapse</li> <li>Incorporate first aid training in school curricula</li> </ul>	<ul style="list-style-type: none"> <li>Continue developing and updating building and infrastructure codes for earthquakes and other natural disasters</li> </ul>	<ul style="list-style-type: none"> <li>Provide grants for risk management planning and implementation</li> <li>Provide incentives to stimulate reductions in demand for all resources to increase self-reliance</li> </ul>	
	<b>Federal Agencies</b> 	<ul style="list-style-type: none"> <li>Host issue-based high-level political forums on risk scenarios</li> <li>Plan for transition or relocation from areas vulnerable to environmental disaster, climate change and structural economic change</li> </ul>	<ul style="list-style-type: none"> <li>Conduct a comprehensive risk assessment for all threats and the integration of risk management strategies into long-term plans</li> <li>Sponsor research on adaptation to changing climatic conditions</li> </ul>	<ul style="list-style-type: none"> <li>Educate and train emergency responders on best practices in modeling, monitoring, response, mitigation and adaptation to various disruptions in urban systems</li> <li>Develop educational materials on designing with nature</li> </ul>	<ul style="list-style-type: none"> <li>Mandate other levels of government to develop key mitigation and response plans for maximum credible events</li> </ul>	<ul style="list-style-type: none"> <li>Stop fossil fuel purchase subsidies and development incentives to decrease fossil fuel dependency</li> <li>Increase renewable energy investment incentives</li> </ul>	
<b>Governance Reform:</b> <ul style="list-style-type: none"> <li>Improved resilience derives from alternative response mechanisms. Civil society, reinforcing different cultural patterns of knowing and acting, should formally participate in democratic government</li> </ul>	<b>Private Sector</b> 	<ul style="list-style-type: none"> <li>Identify risks to key inputs and plan for alternative supply</li> <li>Develop business continuity plans</li> <li>Continue to increase property insurance premiums based on environmental risk forecasting</li> </ul>	<ul style="list-style-type: none"> <li>Identify opportunities for industrial ecology clusters to reduce supply risks and create multiple resource flow pathways</li> <li>Engage in partnerships with governments to identify and bolster critical infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Reduce demand for non-local inputs to increase self-reliance for basic necessities in case of supply chain disruptions</li> </ul>	<b>ANYBODY (Implementation Measures for Anyone to Implement)</b> <ul style="list-style-type: none"> <li>Promote increased understanding of the tolerance of environmental and human systems to increased stress and shock, especially the circumstances in which systems subject to increasing stress will collapse</li> <li>Offer courses and training on emergency preparedness</li> </ul>	<b>EVERYBODY (Implementation Measures for Everybody to Implement)</b> <ul style="list-style-type: none"> <li>Join and train for voluntary memberships in local incident response teams</li> <li>At appropriate scale, store 1-week supply of basic survival resources</li> <li>Participate in integrated threat response teams</li> <li>Pre-plan for maximum credible events</li> </ul>	
	<b>NGOs</b> 	<ul style="list-style-type: none"> <li>Identify and advocate on behalf of environments, species, people, &amp; communities at risk to increasing stresses and shocks</li> </ul>	<ul style="list-style-type: none"> <li>Work with communities to foster local self-reliance</li> </ul>	<ul style="list-style-type: none"> <li>Conduct community first aid training</li> <li>Provide educational information on vulnerability of natural &amp; urban systems to threats</li> <li>Establish and train voluntary emergency and crisis response teams</li> </ul>			
<b>Role of Citizens:</b> <ul style="list-style-type: none"> <li>Maintain emergency survival kits in homes, vehicles, offices</li> <li>Understand appropriate responses in the event of a major catastrophe</li> </ul>							

The City of Olympia in Washington, USA, developed a Sustainable Action Map (SAM) to serve as a screen for its decision making process.



## 6, Monitoring, Reporting, Celebrating and Adapting

In this stage, cities measure progress against sustainability goals, targets and timeframes by using sustainability indicators and base-line data. A transparent, agreed-upon process ensures that politicians and community partners are all accountable for progress. Cities such as Adelaide and Whistler, report publicly on their progress and issue sustainability reports. Some use public events and celebrations to inform the community of progress. As the groups assess their progress, they also make course corrections and revise or adapt their long-term plans. See *It* is a new tool for tracking and showing progress. (see [www.visiblestrategies.com](http://www.visiblestrategies.com)).

For the Resort Municipality of Whistler, monitoring and reporting are critical to the success of Whistler2020, its comprehensive sustainability plan, underpinned by community engagement and the Natural Step framework. Monitoring results helps to inform ongoing community-wide decision-making and the annual action planning by the sixteen Whistler2020 strategy task forces. The monitoring system tracks progress towards the vision and strategy descriptions of success.

Performance is monitored and reported at three levels:

- Core Indicators – high-level, ‘Whistler-at-a-Glance’ information for tracking progress relative to the Whistler2020 vision, priorities and sustainability objectives.
- Strategy Indicators – more detailed information for tracking progress on

each of the sixteen strategy descriptions of success.

- Context Indicators – additional information about the resort community, not directly linked to Whistler2020 performance.

These indicators were developed over a two-year cycle and created an important community-supported baseline. Monitoring is reported electronically on the award-winning whistler2020.ca website through the 2020explorer tool.



## Summary

The Sustainable Cities: PLUS Planning Cycle is a flexible process that moves through six stages and spirals upward, enhancing performance through constant learning.

These principles and stages are consistent with Smart Planning, Integrated Community Sustainability Planning, and Comprehensive Community Planning. They are also consistent with a large number of frameworks and tools currently used by cities and communities in Canada and around the world, including:

- The Natural Step,
- Sustainable Planning and Design Essentials (the decision making framework first developed for cities<sup>PLUS</sup>),
- Smart Growth,
- Local Agenda/Action 21,
- Earth Charter Action Tools, and
- Tools such as MetroQUEST, design charrettes and others.<sup>12</sup>

As cities and communities embark on the long-term planning process they are invited to share their experience and lessons with others through the International Centre for Sustainable Cities and the Sustainable Cities: PLUS Network<sup>13</sup>.

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<sup>12</sup> See Planning for Long-term Urban Sustainability: A Guide to Frameworks and Tools, Nola-Kate Seymoar et al, International centre for Sustainable Cities, 2004, and Integrated Community Sustainability Planning Tools, Chris Ling et al, Royal Roads University.

<sup>13</sup> Send comments to nkseymoar@icsc.ca