Whole-Systems for Community and Organizational Sustainability Performance

October 2007

Author: Christopher Juniper
Founding Member, Sustainability Leadership Institute
www.sustainabilityleaders.org
cjuniper@sustainabilityleaders.org

Abstract

This paper is written specifically to support the 2nd Seoul Initiative Leadership Programme on Green Growth, 8-20 October 2007. It has two parts: Part I: Sustainability performance tools created by Natural Capitalism Solutions, and Part II: a brief survey of ideas offered by the author to enhance Green Growth sustainable economic development success.

Finding the synergies of whole-systems is a core competency of sustainability performance. Whole-systems for organizations extend beyond traditional boundaries to include the life-cycle of products/services and the business climate provided by the host community. Seen from the community economic development perspective, whole-systems for sustainability performance need to include education and incentives for hosted businesses to adopt sustainability strategies as well as whole-system planning to build the community’s capital stocks that are the lasting foundation for prosperity (including natural capital).

This paper summarizes three whole-system tools/processes developed and implemented by the author and various colleagues to maximize sustainability performance and economic prosperity by organizations and communities.

The Local Action for Sustainable Economic Renewal (LASER) system developed in 2006 for America’s Development Foundation empowers community leaders to develop ten kinds of capital needed for ongoing prosperity and align economic development policies with the needs of sustainable businesses.

The Management Helix system guides organizations (for-profit businesses, non-profit enterprises and government operations) through a phased and systematic approach for integrating sustainability into every aspect.

The Sustainability Performance Life-cycle Management System tool supports the Management Helix with a process for identifying and addressing sustainability
performance “HotSpots” throughout the life-cycle of the organization’s products/services.

Part I: Whole-system Tools for Sustainability Performance

At the heart of achieving prosperity through sustainability strategies is whole-system thinking – one of the toughest practices for humans to achieve in their own lives, organizations or communities. Whole-systems are required to correctly identify sustainability problems/challenges/opportunities, and whole-systems are very helpful in the development and execution of solutions.

Whole-systems thinking for sustainability could be traced to the pioneering Limits to Growth work of the early 1970s – which used whole system predictions to illustrate how unsustainable was the economy and projections of its infinite growth.

Environmental management systems have long been based on whole-system approaches – the ISO14001 EMS standards attempt to stimulate environmental (and often, health and safety) performance through the process of identifying all environmental aspects and impacts, choosing which are significant enough to address, and addressing through a systematic approach to management involvement, training, documenting and continual improvement of both environmental performance and EMS process.

Aside from ISO14001, few whole-system approaches have been developed for organizations¹ or for sustainable community/regional economic development.² Because of the paucity of whole systems developed to date, the team of Christopher Juniper of the Sustainability Leadership Institute and L. Hunter Lovins at Natural Capitalism Solutions (NCS) has partnered with multiple collaborators to develop them.

---

¹ Other whole-system sustainability approaches for organizations include: (1) The Sigma Project’s “Sustainability Integrated Guidelines for Management;” (2) The systematic approach to integrating biodiversity concerns with an EMS proposed by Earthwatch’s Business and Biodiversity Resource Centre’s “Business and Biodiversity” publication; (3) The SD Planner tool developed by the Global Environmental Management Initiative (GEMI); (4) The use of Global Compact Principles outlined by Business for Social Responsibility’s “Building the UN Global Compact Principles Into Business: A Practical Integration Guide;” (5) and (6) The Center for Sustainability Management’s “The Sustainability Balanced Scorecard – Theory and Application of a Tool for Value-Based Sustainability Management” (Frank Figge, et.al., 2002).

² Other whole-system sustainability approaches for communities/regions include: (1) Local Agenda 21; (2) Building a Green Future: Towards Zero Carbon Development, from the UK Communities and Local Government division, December 2006. Systems used or proposed for sustainable community development are provided at the website of the Smart Communities Network at http://www.smartcommunities.ncat.org/overview/ovcodtoc.shtml.
Whole systems have the following fundamental advantages over piecemeal systems:

- Discover and exploit synergies between aspects, impacts and solutions
- Avoid “missing-piece” dysfunction
  - Example: a complete food protein cannot exist without all seven amino acids available in the right proportions….a missing one renders the others ineffective
- Reduces unintended consequences

The “Management Helix”\(^3\) for organizations serves two purposes simultaneously: the development of strategies for all aspects of competitiveness, and the integration of sustainability into all strategies through a phased approach. The Helix system includes a full-life cycle approach to an organization’s sustainability impacts through the Sustainability Performance Lifecycle Management System.\(^4\)

### The LASER System for Economic Development Planning: Local Action for Sustainable Economic Renewal

For community/regional economic development, the Local Action for Sustainable Economic Renewal (LASER) system\(^5\) calls on a community’s leaders to engage citizens in developing plans for building community capital for all 10 of the types of community capital required for a sustainable society and economy:

- Assets for Human Development: Human Capital
- Environmental Assets: Natural Capital
- Social and Cultural Assets: Social Capital; Historic and Cultural Capital
- Institutional Assets: Institutional Capital; Entrepreneurial Capital
- Financial Assets: Financial Capital; Potential Exchange Capital
- Manufactured Assets: Built Capital; Technological Capital

A complementary process has been developed by Natural Capitalism Solutions for communities that are choosing to address climate change that includes whole-system climate protection strategies promoting local and global economic prosperity.\(^6\)

---

\(^3\) Developed in collaboration with The Natural Edge Project of Australia and with students of the Sustainable Management program at Presidio World College, San Francisco, USA.

\(^4\) Initially developed by Christopher Juniper in 2003 with generous support from Criterium Bicycles, USA and implemented in 2006 in partnership with Clif Bar & Co., Berkeley, CA, USA.

\(^5\) Developed in collaboration with Gwendolyn Hallsmith, now of City of Montpelier, VT, USA (founder of Global Communities Inc.), Bernard Lietaer of the University of California’s Center for Sustainable Resources, Wayne Fawbush of Regional Technology Strategies, and Michael Miller of America’s Development Foundation (ADF) with generous support from ADF.

Sustainable business integrates with sustainable community/regional economic development in a very synergistic manner: all of the qualities of a sustainable business align with the qualities that citizens worldwide consistently wish for from enterprises their community hosts: efficient use of local resources, minimized toxicity, maximized human health protection for workers and customers, socially-responsible compensation packages, etc. These synergies resulted in the LASER system’s call for community/regional economic development strategies to include education and incentives for business adoption of whole-system sustainability practices.

**Sustainability Success in Organizations Through the Management Helix**

Organizations (for-profit businesses, non-profit enterprises and government operations) all face similar challenges implementing sustainability strategies – summarized as:

- Integrating sustainability (long-term social and environmental responsibility) with revenue/profit goals and immediate financial challenges;
- Making sustainability performance everybody’s job;
- Combining short-term successes with long-term investments and finding the capital for sustainability performance investments;
- Creating a culture that embraces and reinforces sustainability values – usually within an external social/economic culture that has not done so;
- Convincing shareholders and other important stakeholders, including employees, that sustainability strategies are critical for the organization’s future and are based on sound scientific/economic assessments of the future rather than a passing fad;
- Expanding sustainability strategies beyond operations under its direct control to the entire value chain; and
- Creating sustainability management systems that add more value than their costs of development and implementation (often including third-party auditors).

The sustainability performance journey can appear to organizational leaders as very challenging: a very complex process on the frontiers of information about business and ecology; requiring huge training investments of both employees and customers; and full of risky project “potholes” that can quickly derail enthusiasm – especially those projects that are long-term investments into yet-to-be-established technologies (particularly if “frontier” technologies have been tried without success in the organization’s past).

To address these challenges, the Management Helix is designed to:

- Guide an organization through a phased implementation process towards becoming fully sustainable – i.e. a “Restorative” organization that
restores/builds human and natural capital throughout the entire value chain.

- Organize operations into distinct strategies (totaling 49 in the basic template prior to customization by the organization) foster understanding of the relationships between them, and ensure that lagging strategies that could hold back overall progress are addressed in a timely fashion.
- Provide the sustainability implementation effort with a natural-world graphic metaphor – a DNA helix – that provides a dynamic nature-based foundation for understanding and executing the process of sustainability performance.
- Promote the inherent synergies of a whole-system approach through both the use of a DNA helix structural approach and the implementation processes that continually ask participants to keep the connections with other strategies visible.

The core structure of the Management Helix is the organization of the six activities that every organization must conduct (ideally, through a conscious strategy communicated to all stakeholders) into the following categories:

- Governance
- Operations
- Design
- Human Resources
- Marketing/Communications
- Partnerships / Value Chain

As per the graphic below, think of these activity categories as the connectors of a DNA Helix – the connectors that with resilient strength hold together the strands that form the sides of the helix molecule. The molecule’s strands are the fundamental aspects of the molecule – i.e. the “backbones” of the structure. In the Management Helix, the strands are:

- Mission – the purpose and values of the organization
- Metrics – the systems for internal and external measurement and reporting of performance

One of the critical tools for using the Management Helix (or for maximizing sustainability performance throughout an organization’s value chain using any system) is a cost-effective method of assessing sustainability aspects, impacts and areas worthy of the organization’s focus. The Natural Capitalism Life-cycle Management system was developed by Christopher Juniper for this purpose, and is addressed following the PortionPac case study.

Implementation Experience: PortionPac Chemical Corporation, Chicago, IL, USA
In partnership with the Chicago (IL) Manufacturing Center, the author (through Natural Capitalism Solutions) has been implementing the Management Helix at the PortionPac Chemical Corporation, an inner-city Chicago business of less than 100 employees that manufactures cleaning chemicals and janitorial systems for commercial facilities.

PortionPac has been dedicated since its founding in 1964 to minimizing cleaning chemical usage, minimizing cleaning chemical impacts on human health, minimizing packaging waste, minimizing energy used to ship cleaning chemicals, and operating as a socially-responsible family-oriented company that contributes to the revitalization of an old industrial neighborhood in Chicago. Its products and systems are sold throughout the US by distributors; their services include a unique business development program for state prisons whereby prison laborers make and package cleaning chemicals for use in the prison and elsewhere in state government operations.

Major customers include Fortune 100 corporations, state governments, and school district food service operations. PortionPac’s business model includes the innovative system for school districts of providing cleaning at a set cost – giving PortionPac the economic incentive to minimize chemical use – a best practice for sustainability performance.7

PortionPac’s management team decided in 2005 that it needed a systematic approach to becoming a sustainability leader for its industry, and adopted the Management Helix system to guide its efforts. With assistance from Natural Capitalism and CMC consultants, the company examined its present status regarding the 49 strategies for an organizations articulated in the Helix, and chose 13 that addressed its most immediate needs, including climate change strategies, project development strategies, and marketing strategies.

PortionPac dedicated itself to becoming the first in its industry to have 100% of its products certified as environmentally-preferable by GreenSeal – a goal likely to be achieved in 2007. It is active in helping GreenSeal and other standards-based organizations like the US Green Building Council set increasingly higher standards for sustainability performance. It employs a national education director for customers who is certified by the US Green Building Council as a LEED-certified professional.

It has developed sustainability educational materials for employees and customers, and is supporting development of a whole-system approach to sustainable cleaning that will raise standards for the entire industry. The company is expected to become a member of the Chicago Climate Exchange in 2007, committing it to continually reduce its carbon emissions. It’s leadership is

---

7 The practice of providing services at fixed cost rather than selling products has been described as The Solutions Economy and is being explored by numerous corporations worldwide – see Hawken, Lovins and Lovins, *Natural Capitalism – Creating the Next Industrial Revolution*, 1999.
increasingly being recognized in the marketplace by both private-sector and public-sector customers that are increasing their standards for cleaning services.

**Sustainability Performance Life-cycle Management System**

Implementing Life-cycle Management for an entire organization serves two primary purposes: (1) Orienting management to a strategy of taking responsibility for the entire value-chain – from raw materials through to customer use and disposal – of its products/services; and (2) Identification of the aspects and impacts of its value chain that deserve the attention of the organization given its limited resources.

Life-cycle management, and in particular a key component of LCM – Life-cycle Analysis (LCA), long recognized as a critical practice of sustainability performance, has been difficult to accomplish in a cost-effective and timely manner (e.g. “at business speed”). This is largely because LCAs often focus on tracking physical materials and energy flows exclusively, which is a very tedious process and in the final analysis, gives only limited guidance about how the organization can best use its resources to improve sustainability performance. A secondary reason is that the information needed for accurate LCM activities is rarely available in the detail and timeliness necessary, even from direct suppliers who, as customers of the LCM business, have incentives to satisfy customers’ information requests.\(^8\)

The Sustainability Performance Life-cycle Management System (SPLMS) combines qualitative and quantitative information to assess the sustainability performance of the ingredients and processes in the value-chain. Quantitative information includes the total “ecological rucksack” of the ingredient – i.e. the total amount of water, energy, biotic and abiotic materials required to produce the ingredient – which adds up to hundreds or thousands of times the weight of the ingredient.\(^9\)

These quantitative estimates are combined with qualitative assessments of the companies in the value-chain – both their existing sustainability performance and their likely future sustainability performance as predicted by government regulations, company commitments, and industry association support. Combining this information together into a score, called the HotSpot Analysis

---

8 Another life-cycle system with similar goals was proposed by Caroline Gauthier in “Measuring Corporate Social and Environmental Performance: The Extended Life-cycle Assessment,” *Journal of Business Ethics*, June 2005.
9 The “ecological rucksack” is best estimated using a system like MIPS, developed by the Wuppertal Institute, which uses research to estimate the amount of materials, energy and water required for various substances.
Score, gives an understandable and easily repeatable number that identifies the areas that deserve sustainability performance attention.\textsuperscript{10}

**Implementation Experience: Clif Bar & Co., Berkeley, CA, USA**

The Clif Bar & Co. is a growing privately-held company of approximately 175 employees based in Berkeley, California, USA. It is co-owned by its founder Gary Erickson and his spouse Kit Crawford, and is led by CEO Sheryl O’Laughlin.\textsuperscript{11} Clif Bar is a leading maker of all-natural and organic energy and nutrition foods and drinks, including the CLIF\textsuperscript{®} BAR energy bar and LUNA\textsuperscript{®}, The Whole Nutrition Bar for Women\textsuperscript{TM}.

Focused on great food and sustainability, Clif Bar & Co. works continuously to reduce its footprint on the planet from the field to the final product. The internal sustainability team is presently led by Sustainability Manager Diana Simmons and company Ecologist Elysa Hammond; it includes COO Kevin Cleary, Sustainability Associate Cassandra Cyphers and Sustainable Food Systems Manager Shauna Sadowski.

Sustainability performance has been an organizational focus since 2001. Initiatives have included the use of organic ingredients; adoption of “green business practices”; joining the fight against global warming (through Clif Bar’s unique “Start Global Cooling” campaign); ongoing financial and volunteer support for selected non-profit Partners in Sustainability; and for 2007 implementation of a “code of conduct” for suppliers.

As one of its 2005 projects, the sustainability team decided to scrutinize the environmental impacts of its entire value-chain, from the growth/manufacturing of its ingredients to the process of making its products and shipment to customers. This project began with development and implementation of (1) sustainability principles and (2) a methodology for assessing the life-cycle impacts through the perspective of the adopted sustainability principles. Clif Bar is among the first companies in the world to attempt sustainability performance of its entire lifecycle.

The author proposed use of the SPLMS model for a combined assessment of the qualitative and quantitative sustainability performance of a product; Clif Bar initiated the project in January 2006. The project team (Natural Capitalism Solutions) adapted the MIPS system (Materials Intensity Per Service Unit)

\textsuperscript{10} A similar scoring system, the Green Plus system, has been developed by SC Johnson Co. for its own use and is available for all companies through preferred provider Five Winds International Inc., an international sustainable business consultancy (www.fivewinds.com).

developed by the Wuppertal Institute to produce the quantitative estimates of environmental impacts desired by Clif Bar:

- Estimates of the total materials, water and energy inputs and greenhouse gas (GHGPrint) and solid waste (WastePrint) outputs required to deliver a given weight unit (kg. was used) of ingredients to Clif Bar’s processes;
- Estimates of the same for Clif Bar’s processes: packaging, manufacturing, logistics, shipping and headquarters operations;

The life-cycle estimates were multiplied by the amount of those ingredients or processes used by Clif Bar in 2005 to obtain its “Foodprint” – the total physical impact of Clif Bar’s 2005 operations...from the farmer’s fields to the final product.

To illustrate the calculation: assume that the total energy, materials and water inputs and greenhouse gas outputs for the delivery of a kg. of the ingredient to Clif Bar is 3000. The 3000 factor is multiplied by the amount of that ingredient delivered in 2005, then all ingredients added together with the life-cycle estimates for the processes to obtain the total Foodprint.\(^\text{12}\)

By calculating the Foodprint per ingredient or process, Clif Bar’s product designers and managers can quickly assess the sustainability performance of different product formulas and/or suppliers of both ingredients and processes. Potential new ingredients can also be quickly assessed against existing ingredients as soon as credible lifecycle data (i.e. the energy, materials and water inputs) can be obtained. Further, the lifecycle savings obtained by purchase of organic materials can be estimated, and Clif Bar’s reduction of life-cycle energy, materials and water due to organic purchases estimated.

The SPLMS process uses quantitative information to put qualitative information about the sustainability practices and commitments of the value-chain in perspective. In the Clif Bar project, the top 20 ingredients that comprise approximately 95% of the weight of Clif Bar’s shipped products were qualitatively analyzed for sustainability performance, using the adopted Clif Bar sustainability principles to define sustainability performance. Each ingredient was given a score of 1-5 by a team of employees knowledgeable about Clif Bar’s supplier and industry practices. This information was enhanced by research on industry processes and best sustainability practices by NCS.

The SPLMS system accounts for the social aspects of sustainability performance through the qualitative scoring – most whole systems of sustainability principles include a principle for social sustainability. The adopted Clif Bar sustainability principles are:

- Use renewable energy and recycled metals;

---

\(^{12}\) In other words, if a company purchased 1,000,000 kg. of an ingredient with a Foodprint of 3000, the total Foodprint contribution for that ingredient is 1,000,000 multiplied by 3000 = 3 billion. In the case of agricultural products that comprise all of the ingredients of a food product except for packaging, the use of water was estimated to be 98% of the typical ingredient’s Foodprint, which was estimated to be a factor of approximately 3400.
Use materials that nature can recycle;
Protect and restore the earth;
Treat all people with fairness and equity;
Have fun and share the journey.

The qualitative Sustainability Performance scores of the ingredients and processes were combined with (1) the total weight of the ingredient used in 2005 and (2) the materials intensity factors of the ingredient (compared to the average for Clif Bar ingredients) to obtain a “HotSpot Analysis Score” that guided selection of potential “HotSpots” that Clif Bar will focus on during 2007. In addition to the HotSpot Analysis Score, the HotSpots selected were because of the:

- Environmental intensity in Clif Bar’s Foodprint;
- Important unknowns about the sustainability performance;
- The apparent opportunity for the use of best sustainability practices to significantly affect sustainability performance;
- The public’s focus on sustainability issues in the industry or the specific supplier; and
- The importance of the ingredient or process to Clif Bar’s stakeholders (including its employees).

For example, Clif Bar headquarters operations, though less than 1% of its Foodprint, was selected as a HotSpot because of the significance of Clif Bar sending a clear message to its employees that sustainability performance is a central aspect of its operations.

**Whole System use of sustainability tools: The synergies of using LASER to promote business competitiveness via the Management Helix and Sustainability Performance Life-cycle Management Systems.**

Businesses have the best chance to make sustainability performance profitable if all of the systems involving business operations are pulling in the same direction: a sustainable economy. Achieving this whole-system includes all three of the tools/processes described in this paper:

- A LASER-based community/regional economic development plan that ensures the community’s economic development strategy includes both continual building of the community capital required for competitive business operations, and explicit governmental strategies for improving the sustainable business practices of organizations (government, non-profit enterprises and for-profit businesses) in the area.
- Use of the Management Helix by organizations to guide strategic implementation of sustainability performance into all aspects of the organization over time;
• Use of the SPLMS to give organizations a cost-effective way for its own personnel to continually improve the sustainability performance of its entire value chain – by addressing the HotSpots with the greatest opportunities for improvement and/or the greatest risks to the company from lack of sustainable practices.

Sustainability, at its core, is the inclusion of intergenerational concerns into decision-making – which is best accomplished through whole-system strategies that capture the synergies (i.e. multiple benefits) of investments for greater productivity, less waste, less risk, and the building up (rather than consuming) of the natural capital the organization needs. Individual actions such as energy efficiency or reduction of toxics in the formulation of a product will improve sustainability performance, but may miss greater opportunities for enhanced profitability and/or produce unanticipated consequences.

---

Part II: Green Growth Public Policy Ideas for Sustainable Development Success – Brief Descriptions

Green Tax and Budget Reform

Business Tax Incentives

• No business tax cost write-off for research and development expenses not improving sustainability of the product
  o Business tax rule send important signals to decision-makers about social/economic preferences, and sometimes are influential beyond their fiscal effect because of the strong desire of all businesses to avoid taxes to the maximum extent. This idea, best implemented at the national level, would require establishing an enforceable evaluation system through which a business would need to apply for tax write-off of research and development expenses justified by the project demonstrably improving the sustainability performance of the product being researched or developed. An alternative that may be further effective would be to have the tax revenues gained from non-sustainable R&D no longer being written off as a legitimate business expense serve as a source of funds to provide tax credits for R&D that is on the frontier of sustainability performance (the “bleeding” edge). Prior to either of these ideas being implemented, it is recommended that governments form voluntary partnerships with key industries to steer R&D towards greater sustainability performance, using the threat of reducing or eliminating write-offs as a motivator for voluntary actions.

• No business tax cost write-off for advertising
Sustainable consumption patterns require people to make more rational choices about meeting their needs, and reduce whimsical consumption. It also requires more informed consumers who will distinguish between sustainable products or services, and unsustainable ones. Business advertising rarely serves these goals – instead advertising is well known to be precisely targeted to creating emotional connections between products and personal well-being to the exclusion of social and environmental needs. With the advent of the internet, business product information, including its sustainability performance, can be made widely available at little cost to consumers – further reducing the need for mass advertising to distinguish products through imagery, and further allowing consumers to become well-informed about product attributes without advertising media linking businesses with consumers. This idea contemplates other forms of education for consumers than traditional advertising, perhaps including non-profit consumer testing and education agencies supplementing information provided by businesses via their websites. This is a fairly radical measure that is best initiated through voluntary public/private partnerships launched the threat of businesses losing the ability to tax expense advertising dollars a potential motivator for the goal of more sustainability performance being conveyed to consumers through advertising mediums. This idea is part of a package of ideas offered by the Strategic Corporate Initiative, endorsed by author David Korten, designed to create a more sustainable economy.\footref{footnote13}

- **No business tax cost write-off for compensation packages too low or too high.**
  
  Various efforts around the world throughout history attempt to ensure that workers receive living wages (adequate to handle costs of living) or that executives with decision-making power are not excessively compensated. Such rules have existing on a national and local level; Portland, OR (USA), for example, levies a business income tax that does not allow income to be reduced by excessive salaries of owners. Minimum wages are usually addressed through blunt legislation that sets minimums that do not sufficiently move upward with the costs of living – leaving the “minimum” far removed from what is considered a “living” wage. Free market economists, frequently joined by the business community, argue against any such regulations on the basis that labor markets can be trusted to set wages. The idea that businesses should have financial inducements through tax policy is a middle-ground between strict regulation and no regulation. The concept of setting

minimums and maximums outside of which businesses would not receive tax expensing of compensation implies the same level of government analysis and interference as strict regulatory approaches, but allowing business decision-making freedom to exceed the rules if it wishes. Regardless of the approach taken, local and national governments need to address compensation of workers that are increasingly disadvantaged in global labor markets such that wages do not keep up with inflation of the four key processes that people need to achieve better economic/social conditions for their families: housing, mobility, higher education and health care.

Total Cost Accounting / Full Cost Pricing

- Low or negative discount rates substituted for “cost of money” discount rates.
  o Capital investments are analyzed using a “discount” rate to estimate the present value of future costs and benefits. In large investments such as powerplants, semiconductor plants, etc. Discounts rates are commonly set as the cost of money at the time of borrowing the funds needed by the investment on the theory that instead of the funds being used for the investment, the funds could be invested in another project or account that would achieve similar returns to the project. This system essentially leaves out any value of people in the future in the equation – undervaluing considerations of the problems that future generations may encounter with today’s investments. In other words, present discounting devalues the future, potentially causing more unsustainable investments to be made today. Lowered or even negative discount rates can help remedy this situation.¹⁴

- Design costing including externalities
  o When products are designed, assumptions are made about two critical future factors that determine product profitability: the costs of making the product and the costs to consumers of using it. As the costs of energy and other natural resources are continually rising due to demand exceeding supply – a situation likely to get worse before it gets better – and as people around the world continue to force the internalization of pollution and human health costs into business costs structures through regulations and consumer pressure – costs of production and use of products are likely to rise compared to today. If product design systems include

an estimated cost of production and use that includes all sustainability externalities for both operations, products will be designed much more sustainability than under normal assumptions that today’s relative costs will continue. Such as system can be designed by an industry association and used (or not...or tweaked) by industry members – making it cost-effective for individual companies to develop. The effect of such an approach would be more sustainable products – with the manufacturer “betting” that even if the higher cost scenarios do not play out precisely as expected, that its “leading-edge” sustainable product will be profitable because of its market viability. Governments can use policy measures, grants or other means to support such design approaches by businesses, including providing information to companies about expected future utility costs in the region (information that is presently difficult if not impossible to obtain).

Development of Sustainable Infrastructure

Ecological Carrying Capacity Information

- As communities compete for business investments, utility costs become increasingly important as energy, water and pollution disposal costs rise worldwide. The challenge for governments is to manage local economic interactions with local ecological carrying capacity so as to minimize utility rates. Likewise, businesses can contribute to utility resources remaining cost-effective as they design products or facilities (facility management strategies or new facilities) if they are well-informed of carrying capacity strategies enough to minimize their own impacts. Presently, the information provided to businesses regarding facility or product manufacturing design is usually from a regulatory perspective rather than a pro-active sustainability performance strategy.

Net efficiency and sustainability performance assessment of transportation infrastructure, including fuels

- As energy prices rise, transportation cost-efficiency will be especially challenged. The future regarding transportation costs has become highly uncertain. Transportation fuels, like all products, are subject to energy-cost driven inflation because energy is used in every step of product manufacture. As governments plan for new transportation infrastructure, it needs to enhance the sustainability performance of those investments (which a community is often stuck with for decades) with sophisticated analysis of the sustainability performance (today, and potential performance in the future) of transportation energy sources. The analysis needs to include net energy usage of various fuels, since net energy has declined over time and is expected to continue this trend (net energy being the amount of usable energy gained from the energy invested in obtaining the energy). This process is being piloted by the US Army's Fort
Carson Mountain Post in its Sustainable Transportation Plan, to be completed in early 2008.  

**Promotion of Sustainable Consumption and Production**

Green Growth promoting business equity/lending programs  
Every business financial transaction contains performance measures and other incentives that influence business behavior. Recognizing that traditional banking relationships can influence businesses away from sustainable strategies, public and private sources of business finance have been established that specifically promote business sustainability. Every government needs to conduct its own analysis of whether innovative, sustainable businesses can obtain the financing they need from the private sector’s sources, and devise financing resources to fill gaps present, especially those gaps that explicitly occur regarding sustainable business product, services or strategies. Such gaps often occur in the area of existing facility energy conservation financing, where companies are frequently under-investing in energy conservation processes because of a perception (and occasionally reality) that other investments of their limited capital resources will bring higher returns.  

Examples include:

- SJF Ventures (formerly Sustainable Jobs Fund), USA: [www.sjfund.com](http://www.sjfund.com)
- Shorebank Pacific, USA: [www.eco-bank.com](http://www.eco-bank.com)

**Sustainability Education for Enterprises and Consumers**

- **Sustainable Enterprise education required to obtain licenses**
  - Too many businesses remain ignorant of the strong case that greater sustainability behavior results in greater profits. To kick-start this awareness until it becomes mainstream in a nation, region or community, an educational process for businesspeople needs to be established by governments. Though voluntary approaches will have some effect (see below), a stronger approach that ties renewals of business licenses to executives taking a course (as little as a half-day course would likely be sufficient) on the potential for greater profitability due to sustainability strategies. Governments could tweak the idea to include business fee or tax discounts for those with multiple executives having taken business

---

15 The Sustainable Transportation Plan is being authored by Christopher Juniper of Natural Capitalism Solutions – contact him at cjuniper@natcapsolutions.org for more details.

16 The author calls this the “Perceived Internal Return on Investment” dilemma – people in many companies have reported great frustration at the under-investment in high return-on-investment projects because of the perception (never officially stated in documents or arrived at by careful analysis) that other investments will be more important.
sustainability course, or multiple local partners of a business value-chain.

- **Government support of Sustainable Enterprise Education Networks**
  Businesses often learn best from each other as peers, partners and customers. Numerous examples exist of a business network that promotes business sustainability practices becoming a force for sustainability in a business community with little investment required by local governments aside from initial start-up support and/or relatively low annual membership dues (low compared to the government managing the business network itself without private sector contributions). Examples include sustainable business networks, local manufacturing assistance centers with sustainability expertise, and university-based programs for business assistance with sustainability strategies. A best practice for governments is to invest in a business-run non-profit that is perceived as operated by the business community for their own benefit with government support rather than control.

- **Training of future workers in Sustainable Enterprise Practices**
  - Businesses experience high costs, particularly in technical areas, of training and retraining workers. Public education systems are the first general steps of worker training during primary school; in later primary school years and in post-primary education the training is often specific to a business-related skill. Few of such training programs are yet oriented to the competitive advantages (and accompanying workplace techniques) of sustainability strategies. Sustainability-competent workers will be better trained in whole-system thinking, materials science, life sciences, and other skills. Aligning the needs of sustainable businesses with local education systems will help the competitive advantage of sustainable businesses, especially since so few economic areas are doing so. An important component of this effort would be use of sustainability strategies in school operations – training youth to make better decisions in a hands-on way; one example is the “Think Leadership” guide for school leaders produced by private firms in the UK.  

---


18 See www.thinkleadership.org.uk.
Sustainable Management of Local Governments

- **Sustainable Procurement**
  - Businesses get no clearer signals about the future than from the customers; successful business managers will include customers among their most influential voices. Government operations are frequently the largest purchasers of products and services in a given region – therefore the depth of sustainability performance of government purchasing is a key market signal to local companies to make more sustainable products for the region, and the world. The number of government organizations committed to sustainable or “green” procurement continually increases, most notably in January 2007 where the US Government became committed to “sustainable management” of its operations (including procurement) through Executive Order of the President 13423.\(^\text{19}\)

- **Demonstrate Sustainability Management Tools**
  - Businesses are often skeptical about new management systems such as Environmental Management Systems (EMSs) since the systems, by virtue of their training, documentation and certification requirements, can easily cost more than they save – making them cost ineffective. This is especially true when high-prices consultants are involved in creating the system and certifying it works to standard. Other sustainability tools in this document, especially life-cycle management tools that are data and analysis intensive, also appear to businesses to be potentially burdensome beyond their benefits. Local or regional governments face many of the same challenges as businesses to become more effective through sustainability performance. Therefore, it is incumbent upon local/regional governments to demonstrate the efficacy of sustainability performance management systems and techniques for its private sector by doing it first themselves. A related practice is for local / regional / state governments to facilitate collaborative learning among businesses through convening business roundtables or “brown-bag” (i.e. lunch discussion) groups, and to support trade associations to better educate and explore sustainability practices with their members and in some cases to support the development of multi-industry trade associations dedicated to promoting sustainable business practices in multiple

\(^{19}\) Executive orders from the President are issued by the President pertaining to federal government operations only (the President in their role as “CEO” of the government’s operations). EO13423, titled “Strengthening Federal Environmental, Energy and Transportation Management” and issued 24 January 2007, calls for the US government to improve energy efficiency, reduce water consumption intensity, reduce the quantity of toxic and hazardous chemicals acquired and requires of agency acquisitions “the use of sustainable environmental practices, including acquisition of bio-based, environmentally preferable, energy-efficient, water-efficient and recycled-content products.”
(or all) industries. An example of this is CORE Colorado, a non-profit trade association of sustainable businesses of all industries that receives financial support from the state government.²⁰

**Promote the “Solutions” Economy**

The “Solutions” economy refers to value chain practices by businesses that reinforce sustainability performance. Value chains are essentially a series of contracts that link together businesses that play a role in the delivery of products and services. The contracts governing these relationships generally do not incentives or other provisions for sustainability performance by the parties involved. This represents a string of lost opportunities for value-chain performance from whole-system sustainability strategies. The two main types of “Solutions economy” sustainability performance contracts are designer incentives, and leasing services instead of buying the physical objects that provide those services.

- **Design Incentives**
  - It has been demonstrated through experiments that facility designers often under-design resource productivity capabilities of facilities – dooming the facility to decades of not operating as efficiently / cost-effectively as possible. This is partly because of the financial incentives related to facility design – i.e. the time pressures to complete designs using known techniques (both of design and constructions) and the disconnect between designers’ fees and actual building performance. A potential solution is explicit contractual bonuses for facility designers that exceed efficiencies of building codes in demonstrable manner – through actual building performance. For example, if a designer gets a bonus for 20 yrs beyond the design work based on a small percentage of the savings from energy and water efficiency, more sustainable designs are likely to result.²¹

- **Leasing Services**
  - People and enterprises frequently lease rather than own an object; the Solutions economy concept is a specific form of lease that makes the manufacturer do two tasks that create incentives for the manufacturer to design a more sustainable product: (1) the manufacturer pays for all operating costs of the object; (2) the manufacturer takes the product back after use by the lessee; and (3) the manufacturer collects a flat rate on the services provided by

²⁰ Core Colorado’s website is [www.corecolorado.org](http://www.corecolorado.org); the “CORE” stands for Committed Organizations for a Responsible Economy. Author Juniper serves on the Board of Directors at the time of this document’s preparation.

²¹ This concept was promoted by Rocky Mountain Institute in the 1990s, and was piloted by Oakland, California. XXX
the object – meaning that if the manufacturer designs in greater efficiency, it earns more profit. This combination of lease terms will stimulate manufacturers to eliminate toxics in products (since they won’t want the toxic waste on their own balance sheet upon product return); to make products highly resource productive since the manufacturer is paying those operational expenses, and to make low maintenance products since the manufacturer is responsible for maintenance costs. General Electric began leasing “thrust services” of its jet engines in the early part of the 21st century; Pittsburgh Paint and Glass had begun leasing its services to US automakers in the 1990s in the form of selling “painted cars” that it painted rather than paint. Xerox Corp. has leased copies to businesses on Solutions economy conditions of charging for copies, not for machines and materials.

Greening the Market and Businesses

Stakeholder / Employee Ownership

A key aspect of livable compensation and capitalism-based social safety nets (i.e. provided by the private sector to the extent possible) is actual ownership of assets – including business assets as well as real estate. Some employee-owned companies are sustainability leaders as directed by employee owners who want their company to reflect their own values of being socially/environmentally responsible (e.g. New Belgium Brewing and Herman Miller in the US). The following practices can be adopted by governments to support employee-ownership of companies (partial or full).

- **ESOP Plans:** At the time a company owned by a sole proprietor is being transferred to a new owner is a good time for employees to finance a purchase of the business. This generally means the employees must create an organization that will obtain financing for the purchase based on future revenues and other assets. Such financing is often crucial for employee ownership desires to be realized. Governments can support ESOPs with tax incentives or other mechanisms that make them more likely to succeed; ESOPs presently enjoy tax incentives in the US.\(^2\)

- **Government Financial Inducements**

---

\(^2\) See the US National Center for Employee Ownership at [www.nceo.org](http://www.nceo.org), the European Federation of Employee Shareownership at [www.efesonline.org](http://www.efesonline.org), and the story of the famed Mondragon employee-owned cooperative as told by the International Institute for Sustainable Development at [http://www.iisd.org/50comm/commdb/desc/d13.htm](http://www.iisd.org/50comm/commdb/desc/d13.htm). The W.L. Gore company, employing 7,500, was recently cited as a leading example of an employee-owned company in the US – see Gar Alperovitz, Steve Dubb and Ted Howard, “7 Cool Companies” in *YES! Magazine*, Fall 2007.
For this author, employee ownership is so critical to equitable and sustainable development that common taxes such as corporate income taxes should be dramatically reduced if certain employee-ownership thresholds (such as 20% by non-executives) are met. Likewise, employee owned businesses should receive favorable government financing for expansions, etc.

- **Community Development Enterprises**
  - Community development enterprises that make owners of businesses (often non-profits) out of neighborhoods, customers, local governments and other groups (such as citizens of a community holding unsalable shares in a local enterprise considered to be an asset like a sports team) have been shown to be effective ways of communities achieving wealth creation and retention goals. Leading examples in the US include Pioneer Human Services, Weaver Street Market, ONE DC, Champlain Housing Trust, and Market Street Plaza. The latter is a real estate development company based in San Diego that used a public stock offering to build a community-centered shopping area in partnerships with a neighborhood foundation.

Transparency

Based on the success of previous transparency laws regarding sustainability performance, in particular the US Toxics Reduction Inventory act that required disclosure of toxic chemicals at business sites, additional ideas to promote sustainable enterprise behavior deserve investigation.

- **Wage/compensation Rates**
  - Polls indicate that people are interested in supporting socially-responsible businesses and often disdain businesses that are perceived to exploit workers. But generally consumers do not know the basics of pay rates for businesses they patronize, particularly retail stores. Governments could require businesses to prominently post certain wage rates that would not reveal the wages of the vast majority of workers, but would nevertheless provide more information than the next-to-none that is presently available. This author offers this suggestion: all businesses must post and update on a monthly basis the compensation packages for their lowest paid workers (including those at direct value-chain contractors), the

23 The Green Bay Packers football (American) club is owned by citizens of the Green Bay area via shares that cannot be sold (can only be transferred within the family). See generally, and specifically, the New Rules Project’s website on the Packers’ example and other community ownership concepts at http://www.newrules.org/sports/packers.html.

highest paid worker(s) and the average for the corporate operations. If these figures are calculated in the same way, consumers would have simple-to-understand means of assessing where to vote with their dollars on business practices.

- **Sustainability Reporting**
  - Similar to the compensation rates discussion above, sustainability performance reporting by businesses is inconsistent and therefore not very useful to consumers since ugly stories can be buried by enterprises that choose to report only good news. Standardized sustainability performance reporting mandated by governments is a relatively simple solution – ideally using international standards but nations or even regions/states/provinces could lead the way with experimentation.

- **Private Firm Reporting**
  - Substantial data can be withheld from the public if a firm is privately owned. For what purpose? This author feels the public’s right to know about the financial and other results of privately-held firms outweighs any public interest in protecting private firms from public disclosure of the same information that publicly-held firms must divulge. The more transparency, the better.

### Eco-efficiency Indicators

Regional Sustainable Development Indicators

Few communities use management indicators to track their progress on community goals, and fewer still make the investment to track indicators that are typical to sustainable management – since the data generally does not exist for what sustainability management needs. What gets measured gets managed, and at a community or state governance level, what gets measured can provide more of a sustainability-oriented long-term approach to governance. An example of a major employer stimulating such discussions in its region of influence is the Fort Carson Mountain Post of the US Army, which created a local-government steering committee in 2003 that continues to assess how best to integrate sustainability concerns into local decision-making via regional indicators.25

### Youth and Ecosystem Representative Engagement

Sustainability is about making better decisions today through consideration of future generations and whole ecological systems. But these two primary “stakeholders” of sustainability – future generations and ecologic systems (that

---

25 This project was led by author Christopher Juniper – contact him for more information.
arguably have a right to health for their own sake – not just for human values) are not specifically represented in decision-making meetings. One way to solve this is to designate a human to represent future generations or ecological systems in decision-making meetings. Another is to designate a “youth” or young person’s group as representing future generations. The UN’s Commission for Sustainable Development has done this with a Youth and Children Stakeholder group that provides advice to the commission. The paper written by Emma Juniper, who has participated in that UN CSD Youth Caucus for four years, for the 7th Asia Pacific Roundtable on Sustainable Consumption and Production is attached as Appendix A to this report regarding Youth Stakeholder groups.

APPENDIX A
YOUTH STAKEHOLDER GROUPS

Youth In Sustainable Development: Tools and models for furthering the implementation of Agenda 21 Chapter 25

Emma Juniper
ejuniper@gmail.com
+1 713 828 7613

Abstract

Sustainable Development decisions must be made with all stakeholders’ input in order to be truly sustainable, yet youth are often not taken into consideration despite their availability, eagerness, knowledge, and creativity. Chapter 25 of Agenda 21 lays out a plan for involving youth and children at all levels of decision-making processes in regards to sustainable development. There are various models being used by business, academia, and governments throughout the world to engage youth in decision-making process with increasingly new models being utilized that involve collaborative software technology and innovative multi-stakeholder dialogues. As every institution and organization operates within different demographically diverse communities, they must individually choose the appropriate model. I will draw upon my experience as a youth employee, community engagement coordinator, and my experience with the United Nations Youth Caucus over the past three years along with my research to give a picture of what youth participation means from different angles.

The presentation will examine case studies of youth involvement, including involvement in various governments around the world, select organizations, and the United Nations. The presentation will provide tools and models for businesses and governments to implement Chapter 25 of Agenda 21.
Sustainable Development

At its core, sustainability has been described as having two “parents”: inter/intra generational responsibility and whole-system thinking (C. Juniper, personal communication, January 18, 2007). Sustainable development decisions, planning with the future generations in mind, must be done with the full participation of all stakeholders who will be affected by the decisions. The two more prominent groups that are often left out of this equation are nature and youth. Contrary to nature, youth are here, educated, with voices, eager, and knowledgeable. However, youth stakeholder groups or other forms of formal engagement of the next generation are not a common practice by organizations or governments that are attempting to deliver sustainable development to their constituents.

This lack of engagement of youth is present despite the importance and signing of Agenda 21 Chapter 25. The principal idea in Agenda 21 Chapter 25 is that: “It is imperative that youth from all parts of the world participate actively in all relevant levels of decision-making processes because it affects their lives today and has implications for their futures. (See Appendix A)

Why youth?

Truly sustainable development entails planning for the long-term, which youth have a natural affinity towards because of their presence in the future. Young people can bring new perspectives, influencing outcomes in new and unexpected ways (Alison Gray 2002). They have been trained by the latest professionals, are innovative and creative, have the latest information and are very well equipped to be part of the decisions that shape their future.

Best of all, they have imagination. There is a complimentary ying and yang with involving the wisdom of the old and of the new. We are the people who will live with the consequences of the decisions today; it is important that we are given the opportunity to shape our own future. Youth bring fresh perspective to the table and often adults have reported being surprised and impressed by the capabilities of youth (Kirby and Bryson). Many reported a change in attitude which “included beginning to see young people as part of the solution and not part of the problem, a gradual recognition of the need for adults to change and of the need for dialogue with children and young people which is based on the principle of equality.” (Kirby and Bryson)

My experience with the United Nations Youth Caucus

I have been involved in the NGO and Youth Caucuses of the United Nations Commission on Sustainable Development (UNCSD) for 2004-2006 and will participate again this upcoming May 2007. (See Appendix D) This model for youth participation is specific to the United Nations structure; however, it can be used to help develop appropriate models for other organizations.
The model is informal, and includes two youth coordinators with 2-year terms; one from the Global North and one from the Global South. The youth caucus is voluntary, and has no funding for its members to participate in the Commission. Once youth arrive at the Commission, one’s participation level is up to the individual. The Youth Caucus is allotted a certain amount of time to speak to the assembly on behalf of the youth of the world regarding the themes.

Informally, youth write for the daily publications, and individually lobby ministers of government delegations. For example, two years ago I spent quite a bit of time lobbying ministers from the Northern Africa region, explaining what the statement “water is a human right” would mean in policy language. Civil Society is not on an equal playing field with governments in terms of decision-making within this structure, but they get a chance to express themselves through comments and publications. In the end, the commission comes up with a text which all of the governments agree to in terms of where the nations are at in terms of reaching the Millennium Development Goals and what policies must now be implemented.

My experience with Swift Kick

I am the Community Engagement Coordinator for Swift Kick, an education company that does leadership trainings on college campuses. We involve students in our decisions through Basecamp, a software available online for collaboration (See Appendix B for image). The youth we are involved with, unless part of the internship program, do not have decision-making power, but their feedback is used and highly respected.

In our internship program, Basecamp is used to collaborate with all employees and the interns through discussion boards, task lists, milestones, writeboards, fileshares and more. The facilitators of the campaigns choose who can access the different parts of the campaign. This is the harbinger of online collaborative software enabling multiple users to participate at different levels. This is an important tool for organizations to explore in terms of engaging youth as many today utilize Web 2.0 software for discussions, blogs, and chatting. We also utilize surveys, which filter directly into profiles in our database to track participants and their feedback regarding different projects.

Guidelines for engaging youth

Every government, business, and academic institution is structured differently and every community’s members have different resources and cultures, thus each organization must research and choose the appropriate model to increase effectiveness for everyone involved. Once the appropriate model has been selected, it must be adjusted to the local social, geographical,
There are various levels of participation involved in each of the models and it is important to acknowledge that the highest level of participation is not always appropriate for the setting. Hart created a ladder to describe the different levels of participation (See Appendix C). For example, *Consultation* entails asking children directly about their views. *Participation* refers to the extent of children’s involvement in decision-making.” (Alison Gray 2002)

### Conditions for success

Despite the wide array of models available, there are key conditions would should be utilized and taken into consideration for increasing the potential benefits for all stakeholders.

**Key conditions for success:**

- **Multiple participation options:** offering a variety of structures for youth participation allows flexibility and openness and creates a space for different participation levels, encouraging wider involvement. (Busch)
- **Youth-invented:** The earlier youth are involved in the developing the process, the more likely the model will work for everyone involved. (Busch)
- **Communication:** One should take into consideration the fact that youth don’t always communicate through the same formats as adults or with the same language. It is important to ensure all materials are available in all appropriate languages and reduce “policy speak” or other potentially confusing vocabulary. It is also important that all correspondence address the youth directly. (Alison Gray)
- **Facilitation:** Proper facilitation is key and when appropriate, a trained youth facilitator can be very effective.
- **Personalization:** Youth prefer face-to-face contact or small group discussions over phone interviews or surveys. A sense of trust and comfort is key to enabling youth to open-up and engage. (Alison Gray)
- **Feedback:** Prompt feedback with constant communication throughout the process is very important for continued interest. (Alison Gray)
- **Needs:** For improved participation, youth need access those in power and to relevant information, genuine choices between distinct options, trusted support figure, and a means of redress for a complaint. (Alison Gray)

Alison Gray lays out some key steps for legitimate participation:

1. Acknowledgment that youth are competent, that they are able to draw on information, experience and support to make relevant and useful contributions.
2. Giving youth appropriate information and clarifying the expectations adults have of them.
3. Considering how adults will carry out instructions or incorporate the information young people provide.

4. The opportunity to participate should be available to children and young people across all abilities, ages, ethnic and religious backgrounds, social classes and personal circumstances and behaviour.

Models for youth participation

Here is a sampling of the various models available to incorporate youth into decision-making processes. Each organization must pick and choose and customize the models to fit the organizational structure already in place. I have chosen two case studies to elaborate on. However, as there are multiple case studies available for each model, thus I am listing websites for additional information if you are interested in a specific model.

Youth stakeholder groups

Youth councils/forums are commonly used and appropriate at the local government level and for businesses. There are six different widely-used types:

- **Feeder organisations**: are characterised by a commitment to engage young people in decision-making and are planned and resourced to fall within local authority. They feed or contribute to ongoing strategies.
- **Shadow organisations**: are parallel bodies that mimic existing adult-based organisations.
- **Consultative organisations**: have a strong local focus
- **Issue-specific organisations**: are typically initiated by community bodies such as the police or health authority with the intent of engaging young people in agendas which are organisationally led
- **Group-specific organisations**: represent groups of young people who share a common identity, either through a common interest or through their marginalised position within society
- **Community-specific organisations**: encompass a wider range of aspects of young people’s environment and their relationship with the local community.” (Alison Gray 2002)

Note:

It can be beneficial to have adults serving on as assistant or mediators for all-youth councils. This paid position can provide structural support, language support, and can relieve the youth, who are often voluntary, of coordination responsibilities. (Busch)

Websites

Websites are important tools for engaging youth and it is recommended that all government websites should include minimum one page aimed specifically at youth. For maximum participation, the government can hold an annual national
competition inviting young people to design the webpage. It would be beneficial to setup a way to have the content be managed by youth. (Stephen Coleman)

**Youth on board of directors/city council**

A very effective model for participation is the addition of a youth seat on the board of directors or government council. This model would be best used for local organizations with smaller communities. This is a high level of youth involvement as the youth member can be on equal playing field as everyone else. Youths can also serve in positions of responsibility as voting members on city boards and committees, where they contribute to creating policy. (Cindy Carlson)

**Case Studies:**
- [American Legacy Foundation](#): Thania Ileana Balcorta, a college student in California, is the American Legacy Foundation’s youth board member. The Board of Directors in this case has two in-person meetings, one retreat and several teleconferences each year. Thania explains her experience: “Being young, I don’t have the experienced perspective of my more senior board members. However, they lack my youthful perspective. I think that together we reach a happy medium.” (Thania Balcorta, personal communication, January 16, 2007)
- [Massachusetts, USA examples](#)
- [Other examples from around the world](#)

**Internet collaboration**

As mentioned earlier, online collaboration software is key to involving youth in the ever-changing world of technology. Youth are increasingly using Web 2.0 software to connect and create virtual communities. It is appropriate to tap into this as a way to engage youth in decision-making processes if utilizing the Internet is widespread enough to avoid creating inequalities through requiring Internet for participation.

**Roundtable panel**

A roundtable panel consists of selected youth meeting over a short-term period (often around a year), reviewing relevant policies, and making recommendations to government departments.

**Case Studies:**
- [Australia Youth Roundtable](#): The Roundtable consists of youth from all regions in Australia who participate for a year in discussions, writing publications, and recommendations.
- [Canada roundtable](#): “This is a group of about 15 young people from across Canada selected by EC
staff each year. They meet a couple of times each year, and are asked to comment on EC programs and work plan, as well as develop their own action items. EC has a full-time salaried staff person dedicated to youth outreach programs thus allowing for continuity, and dedicated human resource time to this important issue.” (Youth Summit Team 2001)

Task Force

A task force at an Academic Institution is a group of representatives from different departments or organizations coming together on a monthly or bi-monthly basis to evaluate potential programs or projects and make recommendations to a higher-level decision-making body. The members are often appointed and serve a specific term-length. Task forces vary in number of members and often breakup into subcommittees. Often youth and teachers are voluntarily involved through an application or selection process, whereas administration and staff are often required as part of their job descriptions.

Case Studies:
Clark University, Worcester, MA:
The task force is comprised of appointed student representatives along with key administration staff and faculty, notably the Campus Sustainability Coordinator. The students don’t meet with nor poll the student body, so the representation is very personal. The students do not have decision-making power, but the group meets monthly and brainstorms campaigns and projects to be implemented campus-wide.

New York University, New York, NY:
The NYU task force is similar to that of Clark, but quite a bit larger and broken down into subcommittees and without a Sustainability Coordinator to which President Marc remarks “We are in the process of getting an official director of sustainability, that will make a big difference.” It is around 40% students. The entire task force meets 2-3 times per semester, and again the students are appointed in an unscientific way (Marc Brodeur, personal communication, January 12, 2007). Adam Brock comments that “For students interested in making NYU a more sustainable place, the taskforce is a mixed bag, but a great example of real-world decision-making processes. There are tons of administrators and faculty interested in campus greening, but as a community of 70,000 people, there’s a lot of bureaucracy and institutional inertia to overcome.” (Adam Brock, personal communication, January 20, 2007).

Complete participation: everyone on a council

The Social Justice Academy created 14 committees to oversee all aspects of student life. All students choose a committee on which to serve, creating 100% student participation in school governance. This is a great example of involving youth in decision-making processes in an Academic setting.
Resources for incorporating youth into your organization

Youth On Board Publications
14 Points to Successfully Involving Youth in Decision Making

References:

Busch, Thomas. (n.d.) Creating A Local Youth Council. Berlin, Germany: International Youth Foundation


Youth Summit Team. (2001) Youth Engagement in Decision-making; a Review of Canada’s Implementation of Agenda 21, Chapter 25. Canada

Appendices:

Appendix A:
Agenda 21 was adopted by more than 178 governments at the United Nations Conference on Environment and Development in 1992. It is a comprehensive plan of action designed to guide policies and programs created in every area in which humans have an impact on the environment. The full implementation of Agenda 21 was reconfirmed at the World Summit on Sustainable Development in 2002. The Commission on Sustainable Development (CSD) was also created to ensure follow-up and monitor and report on the implementation of Agenda 21.

Appendix B:
### Hart's ladder of participation

<table>
<thead>
<tr>
<th>Rank</th>
<th>Description</th>
<th>Description Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Child-initiated, shared decisions with adults</td>
<td>Children and young people have the ideas, set up the project, and invite adults to join them in making decisions.</td>
</tr>
<tr>
<td>7.</td>
<td>Child-initiated and directed</td>
<td>Children and young people have the initial idea and decide how the project is to be carried out. Adults are available but do not take charge.</td>
</tr>
<tr>
<td>6.</td>
<td>Adult-initiated, shared decisions with children</td>
<td>Adults have the initial idea but children and young people are involved in every step of the planning and implementation. Their views are not only considered but they are also involved in making the decisions.</td>
</tr>
<tr>
<td>5.</td>
<td>Consulted and informed</td>
<td>The project is designed and run by adults but children and young people are consulted. They have a full understanding of the process and their opinions are taken seriously.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>4. Assigned but informed</td>
<td>Adults decide on the project but children and young people volunteer for it. The children and young people understand the project and know who decided they should be involved and why. Adults respect their views.</td>
<td></td>
</tr>
<tr>
<td>3. Tokenism</td>
<td>Children and young people are asked to say what they think about an issue but have little or no choice about the way they express those views or the scope of the ideas they can express.</td>
<td></td>
</tr>
<tr>
<td>2. Decoration</td>
<td>Children and young people take part in an event, e.g. by singing, dancing or wearing t-shirts with logos on, but they do not really understand the issues.</td>
<td></td>
</tr>
<tr>
<td>1. Manipulation</td>
<td>Children and young people do or say what adults suggest they do, but have no real understanding of the issues, OR children and young people are asked what they think and adults use some of their ideas but do not tell them what influence they have on the final decision.</td>
<td></td>
</tr>
</tbody>
</table>

**Appendix D:**

The CSD is an annual two-week conference, which runs in a 2-year cycle, with a review year and consequently a policy year focused on 3-4 of the Millennium Development Goal themes and monitoring progress on Agenda 21. Civil Society is allowed to participate through 9 major groups: Women, Children and Youth, Indigenous People, NGOs, Local Authorities, Workers and Trade Unions, Business and Industry, Scientific and Technological Communities, and Farmers. The participation of youth at the United Nations through the UNCSD youth caucus is an example of sustained and formalized youth integration into decision-making processes for sustainable development. 

---

http://www.youthonboard.org/site/c.ihLUJ7PLKsG/b.2046677/k.E09D/Examples.htm  