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## **The Eco-municipality Model for Sustainable Community Change**

### *A systems approach to creating sustainable communities*

By Torbjorn Lahti and Sarah James

#### **What is an “Eco-municipality”?**

An *eco-municipality* aspires to develop an ecologically, economically, and socially healthy community for the long term, using the Natural Step framework for sustainability<sup>1</sup> as a guide, and a democratic, highly participative development process as the method. An eco-municipality becomes the driving force for involving citizens and sectors of the larger community in the change process toward becoming a sustainable community. An eco-municipality collaborates with other communities regionally, nationally, and internationally both to learn from others and assist others in their change processes. An *eco-region* consists of several eco-municipalities in the same region working together toward these objectives.

The concept originated in Sweden in 1983 with the founding of the first such community, Övertorneå. That pilot project in a northern rural town of 5,000 was such a success that it sparked what today has become a network of more than 60 eco-municipalities across Sweden, ranging from villages of 300-400 residents, to the capital city of Stockholm, with a population of several hundred thousand.

Now Sweden is in the process of sharing the eco-municipality concept with other parts of the world, such as the United States, Japan, Uganda, New Zealand, Estonia and Argentina. An internationally-funded demonstration project – Sustainable Robertsfors, led by Torbjörn Lahti – is in the third year of operation, to show how to implement the eco-municipality model in a five-year period. This model has been designed to be applicable to municipalities of any size in any location or country.

#### **What is different about this model?**

Many communities in the United States and around the world have initiated and are carrying out sustainable development projects. Green building programs, affordable housing, open space preservation, recycling, climate change initiatives, smart growth initiatives, are just a few of these. While these initiatives have made progress toward sustainable goals, they largely are occurring on a project-by-project or issue-oriented basis. Frequently these efforts, as laudable as they are, are unconnected and unintegrated throughout municipal governments and the larger communities.

In contrast to this “silo approach” to sustainable development, the eco-municipality model uses a *systems approach*. Key ingredients of this systems approach are widespread community awareness-raising and integrated municipal involvement, using a common

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For more about the Natural Step, see <[www.naturalstep.org](http://www.naturalstep.org)>

“sustainability language” based upon the Natural Step framework. Using this common language brings about a shared understanding of what sustainability means and how to achieve this throughout all sectors of municipal government and the wider community. The likelihood of conflict and competition among resulting actions is therefore minimized, since all sectors are using same “sustainability playing rules.”

### **Track record of success**

Communities ranging from small villages of 300 people to urban centers of over 700,000 have officially become eco-municipalities, adopting a common set of sustainability objectives as official municipal guiding policy and implementing these widely throughout their governments and larger communities. Over sixty municipalities in Sweden are official eco-municipalities and have formed a national association of eco-municipalities that assist each other and work to influence national policy. They have educated thousands of employees and citizens about what sustainability means and why it is important, so that every employee has the opportunity to contribute to the process.

Community recycling rates have shot up, in some cases as high as 90 per cent of all solid waste. Some of these municipalities have reduced fossil fuel use by 40 percent or more in five years; one town of 5,000 has been almost 100 percent free of fossil fuels since 2001. Depressed communities have used this process to bring about economic and social revitalization in an ecological way. New democratic processes include involving more citizens in municipal and civic affairs in a real way. The eco-municipalities demonstrate that the model can work in almost any community regardless of size, geography, or circumstances.

### **Who Is Involved**

Sarah James, APA member and co-author of APA’s *Planning for Sustainability Policy Guide*, and Torbjörn Lahti, founder of the Swedish eco-municipality movement and Director of the international Sustainable Robertsfors demonstration project, are Project Managers. Both are authors of *The Natural Step for Communities: How Cities and Towns can Change to Sustainable Practices*. Michael Jalmy, recent past President of Esam A.B., Sweden is Project Advisor. We are presently seeking organizations and foundations interested in working with us as project partners.

### **The Natural Step approach to sustainability**

The Natural Step approach to sustainability was developed by a group of scientists in Sweden, led by cancer researcher Dr. Karl-Henrik Robèrt, during the early 1990s. The Natural Step approach to sustainable change involves the use of a clear framework of sustainability principles based upon science and natural law, coupled with a four-step strategic change process. Businesses and communities around the world are using this approach to

*The Natural Step  
system conditions for a  
sustainable society*

*In the sustainable society,  
nature is not subject to  
systematically increasing*

*1. ... concentrations of  
substances extracted from the  
Earth’s crust (such as heavy  
metals, fossil fuels, etc.)*

*2. ... concentrations of  
substances produced by society  
(such as plastics, toxic  
chemicals, etc.)*

*3. ... degradation by physical  
means (such as via erosion, or  
rapid depletion of unique eco-  
systems, etc.)*

*And in that society...*

*4. ... human needs are met  
worldwide.*

reorient their practices to sustainable directions.<sup>1</sup> The guiding objectives of APA's *Planning for Sustainability Policy Guide* are based upon the Natural Step framework.

Comprised of a set of four guiding principles, the Natural Step framework describes how we can develop our individual lives, our society and our economic enterprises in a way that restores and replenishes the earth's life-supporting resources, rather than depleting or destroying them. In other words, these four principles provide a set of "rules" for how we can create both short and the long term -- or "sustainable"-- prosperity and health in our society. These principles, based in natural science, can be interpreted more practically as "guiding objectives" for how we design, develop and manage our communities. (see side bar)

And the third and final key tool that is used in developing an eco-municipality is the "Compass," comprised of four steps:

**1. Learn and understand the Earth's game rules** – eg, the Natural Step Framework and what it means for meeting human needs within nature's limits.

**2. See where we are** --- Ask ourselves, "To what extent are we living within the boundaries defined by the Natural Step guiding principles or guiding objectives?"

**3. Take a bearing** – We envision the future we want – a future in which we can enjoy well-being without contributing to injustice or environmental problems.

**4. Find a smart route** -- We make plans on the basis of the vision we have created, and take well-measured strides on the right road, which may be crooked, but which leads to the right goal.

**GUIDING OBJECTIVES FOR A SUSTAINABLE SOCIETY, BASED ON THE NATURAL STEP FRAMEWORK**

**DEVELOP POLICIES AND PRACTICES THAT ULTIMATELY**

*1. Eliminate our community's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals.*

*2. Eliminate our community's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances.*

*3. Eliminate our community's contribution to encroachment upon nature (e.g., land, water, wildlife, forests, soil, ecosystems)*

*4. Meet human needs fairly and efficiently.*

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*On-the-ground initiatives as of Summer, 2005*

What may be the first eco-municipality initiatives in the United States are emerging. During February, 2005, over 200 citizens, businesspeople, local officials, and members of two tribal nations in the Chequamegon Bay region of northern Wisconsin gathered to kick off an eco-municipality initiative – or eco-region initiative. In Lawrence Township, New Jersey and Portsmouth, New Hampshire, citizens, local officials, educators, and businesspeople came together in May/June, 2005 to explore adopting and implementing the Natural Step framework in initiatives to become sustainable communities.