

Mapping our Common Ground

a community
and green mapping
resource guide



UVic Community Mapping Collaboratory
Common Ground Community Mapping Network
Green Map System

Mapping Our Common Ground

Community mapping is a graphic learning, development, and planning tool that connects people to one another and their home places. We are all mapmakers and any community can make maps. Community maps are the collective representations of geography and landscape, and community mapping is the process to create such representations. Community mapping also tells the stories of what is happening right now and what may happen in the future. Every community has stories, recently or long buried in the lives and landscapes of our common ground. Community mapping connects geography to the history of our lives and the world around us.

Why Maps?

Maps are graphic representations of our inner and outer worlds. Early humans developed mental maps as they developed language and spatial consciousness. In both oral and written traditions they named symbols, place names, individuals, and actions. To this day, maps maintain both cultural and practical applications. They are powerful navigational tools and can help guide our way in the world and in our daily lives. However, the map is only a picture in time and can never truly re-present the territory. The question is: Who makes the maps? Community mapping, as "spatial discourse", invites ordinary people to express their inner mental maps, their own visions, and values and to connect these to their everyday lives.

What is a community?

Communities can be places or spaces defined by where and with whom one identifies with and/or feels that one belongs. A community can be geographic (e.g. local, school, neighborhood, regional, national), socio-cultural (e.g. ethnic, women, men, gay, youth and children), sectoral (e.g. education, recreation, government, police, health), ecological (e.g. bioregional, plant, animal, biosphere) or special interest (e.g. church, punk, soccer, birdwatchers).

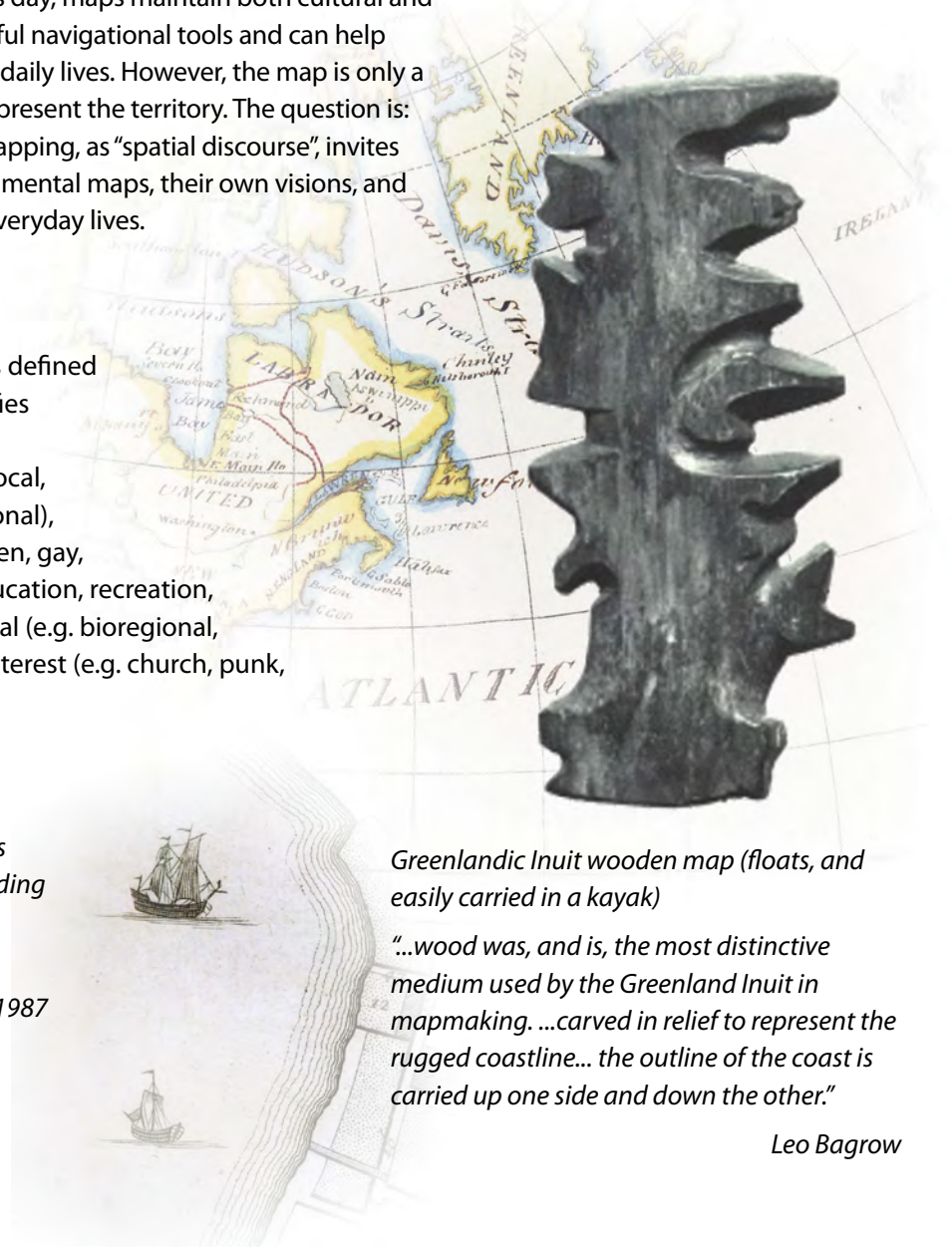
What is a map?

"Maps are graphic representations that facilitate a spatial understanding of things, concepts, processes or events in the human world."

Harley and Woodward, 1987

"Maps, like theories, have power by virtue of introducing methods of manipulation and control that are not possible without them. They become evidence of reality in themselves and can only be changed through the production of other maps and theories."

David Turnbull
Maps are Territories, 1989



Greenlandic Inuit wooden map (floats, and easily carried in a kayak)

"...wood was, and is, the most distinctive medium used by the Greenland Inuit in mapmaking. ...carved in relief to represent the rugged coastline... the outline of the coast is carried up one side and down the other."

Leo Bagrow

Why Community Mapping?

Community and Green Mapping affirm the integrity and diversity of local places and people as the primary foundation for healthy community development and sustainability. In an age of globalization, monoculture and virtual reality, we need such processes to reconnect ourselves to one another and our distinct and unique home places.

Creates a Sense of Place

Maps are tools that shape our perception of place. All humanity, particularly the majority who live in cities, is challenged to protect, enhance, and create healthy social and natural environments. Community mapping provides an inclusive and graphic framework for people to share their experiences, knowledge, and vision about their home place.

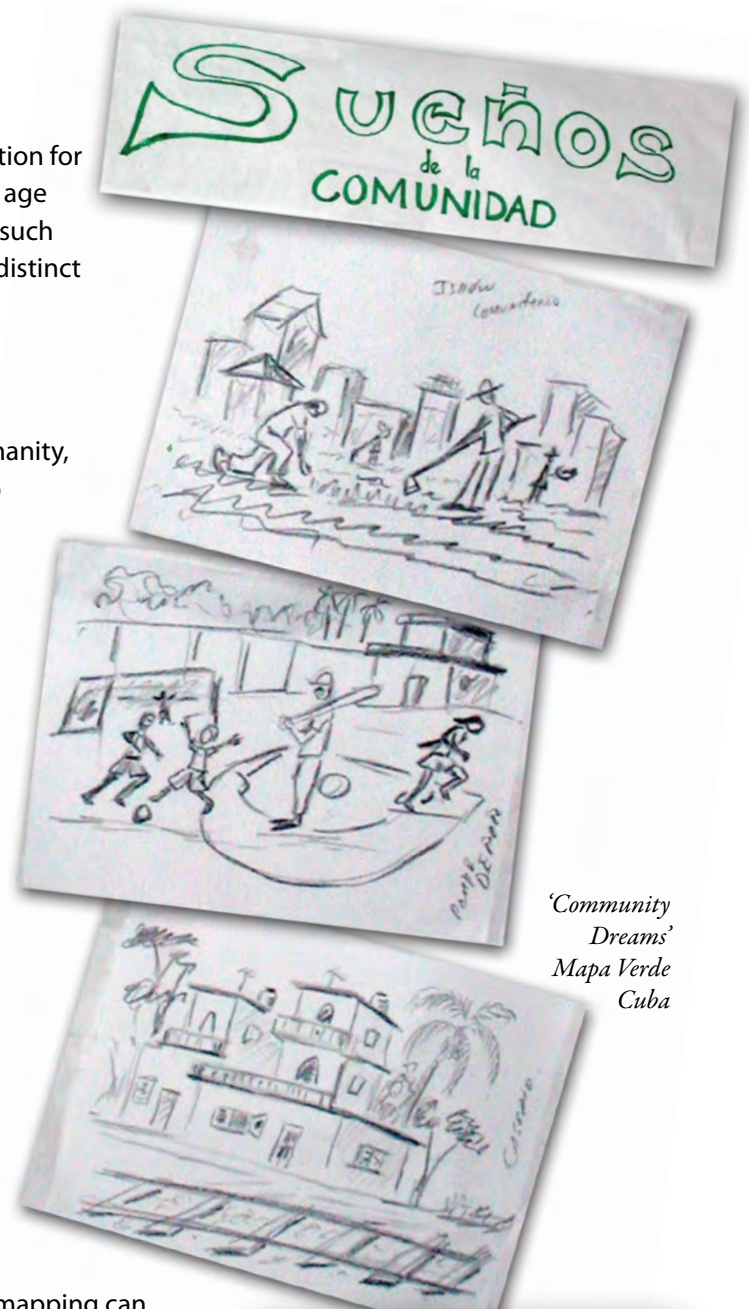
Facilitates Dialogue

Community mapping is as much about process as it is about getting the map done. As a participatory and creative educational tool, mapping relies on the active engagement of participants to think together graphically and not just verbally. The process of map-making can bring together diverse perspectives and people to affirm different experiences and worldviews, to create dialogue and common understanding.

Transforms "Reality"

Community mapping is about transforming power based on the re-presentation of personal and collective realities. For people concerned with development issues, mapping can be a powerful tool for community learning, planning, and development. Citizens locate and affirm the historical, physical, social, cultural, and even spiritual attributes of their home place. Through the process of naming their realities through the creation of maps, communities are better equipped to proactively plan their own lives and communities.

Together the inventory and the dialogue about "the place we call home" can lead to new possibilities for nurturing healthy people, communities, and ecosystems.



*'Community
Dreams'
Mapa Verde
Cuba*

Social work needs the mobilization of power. Each one collaborates with what he/she can do or is able to offer. This way, the fabric that supports the action gets stronger and each one feels that they are a small part of the country's transformation".

*Zilda Arns
Brazilian physicist and
National Coordinator
of the "Pastoral da Criança"*

Community Mapping Values

*cherishing the past,
valuing the present,
visioning the future*

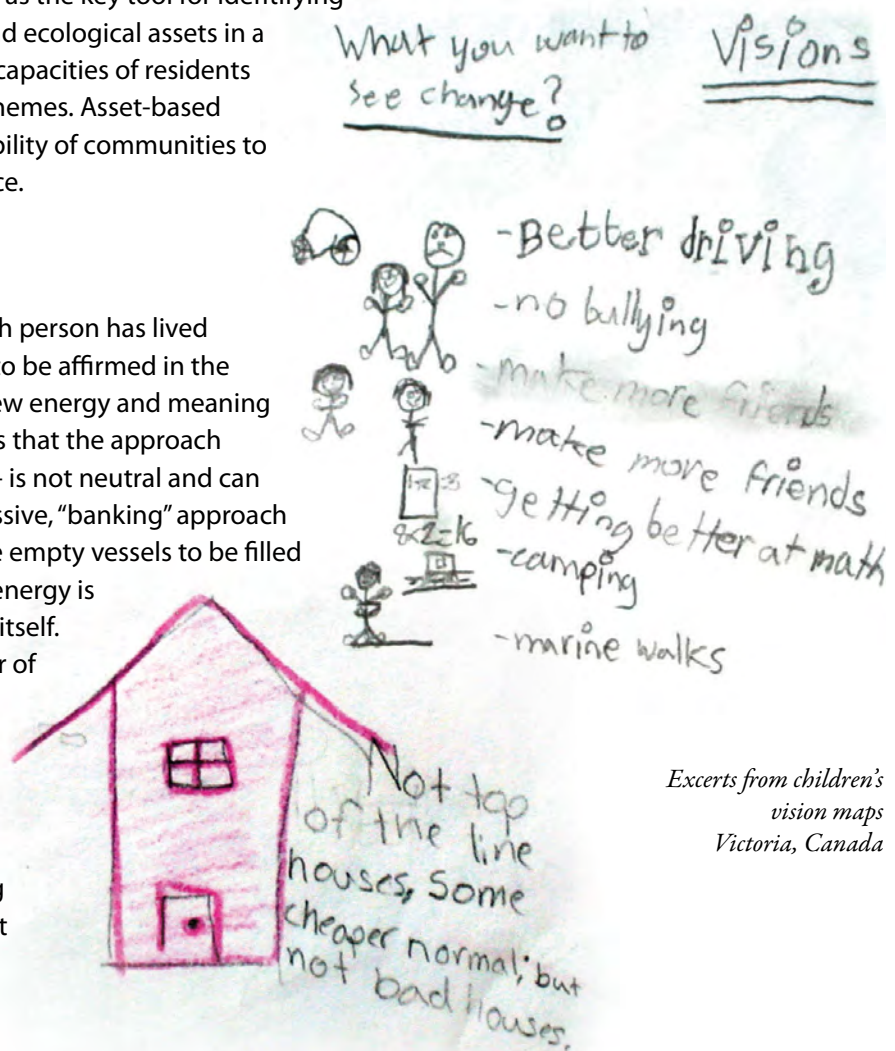
Asset-Based Development

The people-centered, participatory methodology behind community mapping is also popularly known as “asset-based” development. It is distinguished from needs-based, expert-led community development processes. Asset-based development provides a creative process through which communities can rediscover their local assets and mobilize their strengths to build more sustainable communities. Asset-based development is defined by three characteristics: (1) it starts with what is present, not what is absent; (2) it is internally focused to stress the importance of local definitions, visions, means and ownership of development; and (3) it is relationship-driven. In his book, *Building Communities from the Inside Out*, John McKnight identifies mapping as the key tool for identifying and mobilizing key social, economic, and ecological assets in a community, beginning with individual capacities of residents and extending to specific sectors and themes. Asset-based development affirms the intrinsic capability of communities to find solutions to the challenges they face.



Transformative Learning

Community mapping assumes that each person has lived experiences, gifts, and ideas that need to be affirmed in the learning process if we want to create new energy and meaning together. Community mapping believes that the approach to teaching and learning – “pedagogy” - is not neutral and can energize or alienate the learner. The passive, “banking” approach to learning assumes that individuals are empty vessels to be filled with knowledge. However, nature and energy is constantly in change and transforming itself. Paolo Freire, the Latin American pioneer of transformational learning and popular education, believed in the power of people, particularly those suffering exclusion and oppression, to become active subjects rather than passive objects of history. Community mapping believes we all have the ability and right to name our own realities.



*Excerpts from children's
vision maps
Victoria, Canada*

Community Mapping- Key Features

Collaboration and Inclusion Sustainable community initiatives are developed through a collaborative relationship among local stakeholders, recognizing the benefit and strengths of networking, learning from and sharing with other initiatives.

Participatory and experiential learning

Community-based mapping values and engages the lived experience and experiential knowledge of all citizens

Grass-roots driven Communities maintain control of the process and the out-comes. Recognizes that those who live in a place are best able to make sustainable decisions about that place and to monitor social and ecological impacts.

Indigenous and Community Knowledges

Recognizes that intimate knowledge of places and ways of living sustainably and respectfully lie in the cultural traditions, languages and worldviews of many indigenous and traditional societies.

Ecosystem-Based Grounded in ecological not only political jurisdictions. Strives to maintain the integrity of whole ecosystems.

Global Context Recognizes the global, social and environmental context. Acknowledges that community development does not happen in a vacuum but is constantly engaging global problems with local solutions.

Self-reliant Supports proactive initiatives that enhance community organization, economy and identification with place.

Open and inclusive Creates cross-sectoral support to increase community access to information and resources.

Holistic Works towards an integrative approach to living that is developed on the bases of economic, social and biological diversity.

"Somewhere between the rainbow and the internet, a place that is important to you is struggling to maintain its integrity..."

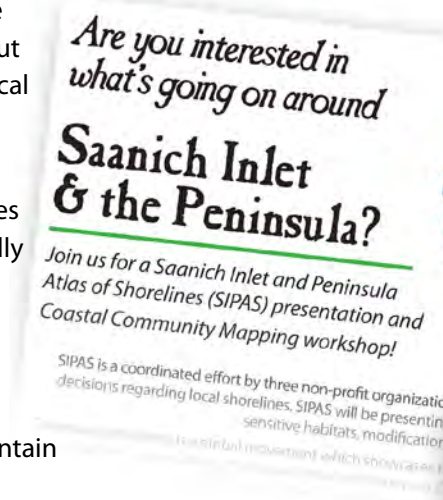
Whatever happens on the worldwide web, shards of histories, ecologies, economies and cultures are heaped and shifted on bits of land. Many of us understand ourselves in the world as much through a relationship with a patch of ground (or more than one) as with people. Indeed it is hard to separate them."

Sue Clifford

Common Ground UK



Choosing categories for the Coastal Community Green Map, Saanich, BC, Canada



"No amount of technology substitutes for the lived experience of a real person in an actual place"

John McKnight



culturally modified tree

WSÁNEĆ cedar harvesting at SNIDĆEL, BC, Canada

Community Mapping Stories

Community mapping activities support overall community building and planning. Almost anything can be mapped! Various frameworks or themes can focus community mapping efforts and help to support discussion about an issue such as land ownership or future planning goals. The mapping can be directly used to develop community action projects.



"The maps become a source of collective knowledge about place –a level of knowledge that no single individual, corporation, or government agency is ever likely to match. This leads to empowerment, and to decisions about growth and development that better helps us to achieve the goals that most of us share: social justice and ecological sustainability."

Doug Aberley, 2002

"So much surveying, measuring, fact gathering, analysis, and policy-making leaves out the very things which make a place significant to those who know it well"

Sue Clifford, Common Ground UK

Theme and Project Ideas for Community Mapping

Culture and Social Heritage

Community history atlases (settler and First Nations / indigenous)
Cultural restoration and justice
Indigenous knowledge(s)
Intercultural understanding
Heritage sites tours, websites and booklets
Seniors' memory books (interviews by local youth)
Tourism

Conservation and Sustainability

Alternative energy
Community and native plant gardens, urban farming
Environmental justice
Food and water systems, security, sovereignty
Greenways and green spaces
Heritage plants, edible landscaping
Insects, amphibians
Local/migratory birds and butterflies
Lost streams and lost species maps
Remediation sites
Resilience
Toxic sites
Underground water sources
Wildlife corridors and migration routes

Community Planning

Climate change adaptation, impacts, trends
Emergency preparedness, plans, hazards
Housing types, density (sprawl reduction)
Land ownership, use, resources, cooperatives
Local associations, organizations, sharing economy
Parks, public space, assessment and use
Participatory engagement, planning and visioning
Placemaking
Poverty, wealth (social justice)
Societal change, scenario planning
Societal impacts, trends
Social justice, gentrification
Traffic patterns, mass transit/bike lane studies

Economic Development

Capital flow
Resource use
Local business, historic trends and opportunities
Vacant lots, opportunity sites, and markets
Income and demographic trends
Green businesses and services
Energy innovation, generation
Fair and equitable trade

Personal and Community Health

Personal assets and life journeys-visions
Health trends and patterns
Social inclusion (ages, culture, gender, class, abilities)

Conservation and Sustainability

The **Victoria Fruit Tree Project**, managed by the non-profit group LifeCycles, developed and uses a regional map and database of local fruit trees as a food security and harvesting project. Since the year 2000 approximately 25,000 lbs. of fruit is gathered annually by volunteers, with one-third of the food going to the owners, one-third to local food banks, and one-third to social enterprises to support Lifecycle's work. Now this work has expanded to food gleaning from farms and food waste from stores. lifecyclesproject.ca

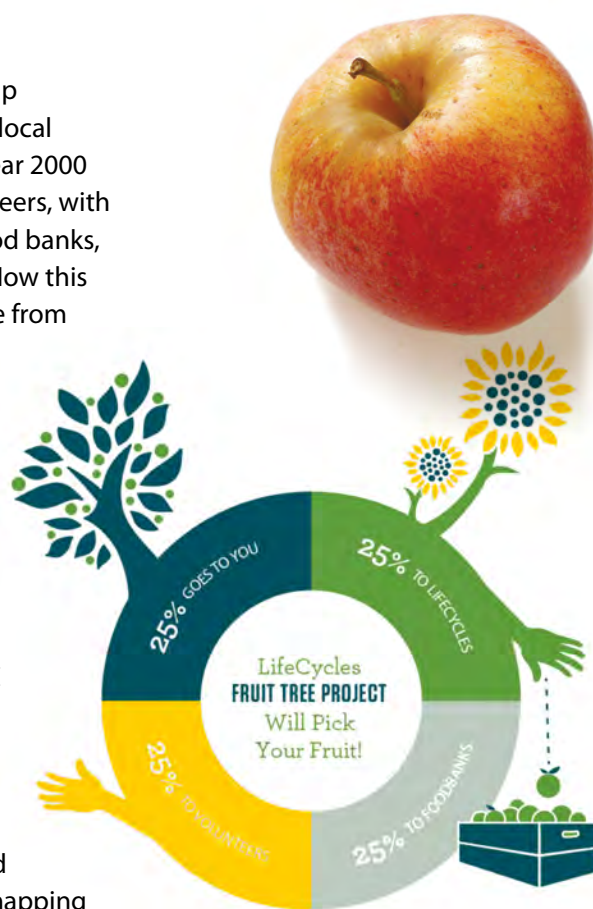
The dynamic South China Mangrove Conservation Network focuses attention on the many gifts of these coastal forests. Healthy mangroves are vital – they protect the land from tsunamis and pollution, while providing habitat for wildlife. The Network has created Green Maps that also include hand drawing to bring an inviting human touch to this important conservation practice. china-mangrove.org

The Community Mapping Network (CMN) maintained by the BC Conservation Foundation helps communities map sensitive habitats and species distributions in British Columbia and Canada. Since 2000, the CMN has created community based atlases with customized data entry and reporting tools. The atlases integrate many different data sources including local and remote data sets, geo-referenced videos and sensitive habitat mapping projects. The Atlas Gallery has over sixty user friendly atlases that use Mapguide Open Source. By providing accurate and up to date information, the CMN and its many partners help plan sustainable communities. cmnbc.ca

Culture and Heritage

The **Oak Bay Community Green Map**, created between 2006-2012 in Victoria, British Columbia, overlays Indigenous and settler heritage. The Indigenous peoples of this Pacific Northwest coastal region, called Victoria by British colonists, have lived here for thousands of years. Explorers followed by settlers arrived, renamed and altered the landscapes profoundly. The map includes, Indigenous artwork and placenames. The mapping process led to the establishment of the **Oak Bay Community Association** who continued to reach out to local indigenous communities.

In Kamakura Japan, community members took five years to create their first Green Map. The process involved school children, senior citizens, university students and others who explored the treasures of this ancient temple town in great depth. Excitingly, the resulting map goes all the way back to the year 1180, with Green Map Icons tracing patterns of development. Even the city's unique mailboxes made it on this lovingly designed map!



Saltwater People, a memoir by **WSÁNEĆ** elder David Elliott Sr., records and maps some of the place-names and oral histories of the **WSÁNEĆ** First Nations traditional territory a portion of which is referred to as Districts of Saanich within the Capital Regional District.

*"In such an era my grandfather, David Elliot Sr., began to think out and record his memoir style representation of Saanich History: The Saltwater People. This was an attempt to lay the foundational record of the settler's impact on traditional Saanich knowledge and on the **SENĆOŦEN**, the Saanich Language. The Saltwater People not only contained his memories, a unique phonic system for **SENĆOŦEN** and place names within traditional **WSÁNEĆ** Territory, it also offered his interpretation of our collective identity: We are the Saltwater People, a people who relied on our centuries-old knowledge for food, travel and the continuing development of our physical, mental and spiritual selves. In fact we once spent as much time on the water as we did on the land".*

Kevin Paul, **WSÁNEĆ** Nations

Tourism

Interactive and printed Green Maps have been created to support responsible eco-tourism in cities worldwide, helping to connect visitors with authentic models they can bring home. Here are two very different approaches:

- As **The City of Cape Town** prepared to host thousands of FIFA World Cup 2010 fans, the Environmental Resource Management office collected green sites with the help of radio and social media outreach, and the company, Map My Way. As the online Open Green Map expanded, beautifully designed citywide print editions were published annually, introducing both visitors and residents to biodiversity, design and other themes. Cape Town shared the design and branding of their popular website with the South African cities of Johannesburg and Durban, so each can more effectively promote sustainable living, social inclusion and eco-tourism. CapeTownGreenMap.co.za
- Find **Iceland's Green Map** online at nature.is Amazingly, it features the entire country! Iceland's unique landscape made creating local icons an imperative, so volcanos, puffins and more can be readily sighted. With their own interactive map platform and a multilingual App, the family business (also called Nature.Is) behind the Iceland Green Map project has provided colorful and inviting printed editions, exhibits, graphics, cards and other materials that impact visitors while also fulfilling residents' needs.



Climate Change and Resilient Communities

In 2003, North America's "Great Northeast Blackout" inspired Green Map System to research and chart energy, climate change, conservation and renewables in New York City. Focus groups helped fine tune the contents of this printed map so it tells a complex story through three themes, Energy Dark Sides, Everyday and Easy, and Energy Investments. In 2006, 100,000 copies were distributed, sparking action and diverse responses. Teachers requested tools, so a series of modules were designed to build students' understanding of the role of our daily choices on climate health.

GreenMapNYC.org/get-involved/students-teachers/

In 2009, an easy to use interactive Open Green Map platform was launched by Green Map System. Open to public images, viewpoints and site suggestions, it helped many Green Map projects reach new audiences and more easily collect sites. With a multilingual interface, mobile Site Collector and other features, The Open Green Map, social mapping platform' won eight international awards. Video: bit.ly/naturegreen

The NYC energy edition was one of the first Open Green Maps – today there are more than 400, made in 40 countries! Interactive, widgets' can be embedded in other websites so it's an easy way to continually add new energy-related sites, including some collected on bicycling and walking tours that explore new directions. After Superstorm Sandy in fall 2012, the high water mark was added so people could see the extent of the flood and impacted infrastructure long after the surge retreated. OpenGreenMap.org/nycenergy

Then, as the city's Bike Share program was launched in spring, a new printed Green Map was published with

support of Partnerships for Parks. Designed primarily for the residents of the Lower East Side, “Lower East Ride” was printed in English, Spanish and Chinese (in postcard and poster formats). This map highlights both the storm damage and the everyday benefits of bicycling to directly respond to climate change. These Green Maps have inspired other communities, from South Korea to Spain, to map out climate issues and countermeasures.

bit.ly/climGM14



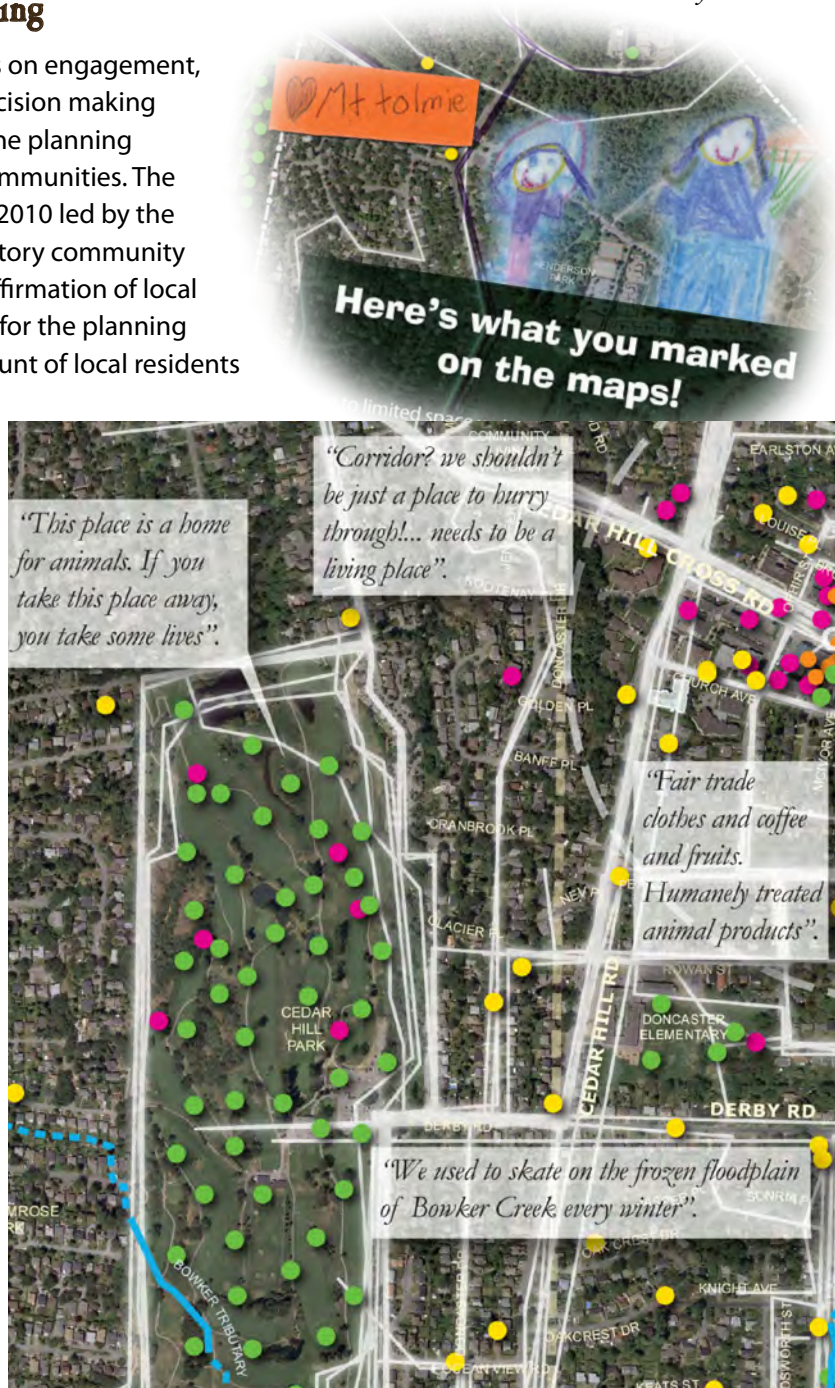
These bike tours resulted in a ‘how to’ video bit.ly/howtourGM

Community Planning and Visioning

Community-based mapping projects focus on engagement, outreach and participatory, democratic decision making to include as many citizens as possible in the planning and improvement or protection of their communities. The Shelbourne Corridor Action Plan began in 2010 led by the Municipality of Saanich and used participatory community mapping, asset-based engagement and affirmation of local heritage and volunteers as the foundation for the planning process, attracting an unprecedented amount of local residents in the process. In 2015 the re-named and completed Shelbourne Valley Action Plan had directly engaged over 1000 citizens from diverse backgrounds in the most comprehensive participatory local plan in Saanich’s history. bit.ly/ShelbournePlan

Visioning

On Vancouver Island, in British Columbia, Canada the District of Saanich, village of Port Renfrew and the ‘Vic West’ neighbourhood of Victoria, used community mapping of personal, community, and environmental assets as the basis for their Community Vision Mapping Projects. “Cherishing the Past, Valuing the Present and Visioning the Future” was the umbrella slogan for the projects. Activities included fun all-ages hands-on mapping events, walkabouts, focus groups, interviews with elders, community art and photography, and a consensus process to identify community action and renewal projects. See mapping.uvic.ca for examples.



Excerpt from the Shelbourne Valley Action Plan report and map

Placemaking

Placemaking is a core outcome and focus for many processes involving community mapping.

In the UK, **The Brighton Place-Maker-Space** (Place-making + maker-spaces = the Place-Maker-Space) is a collaboration between the **University of Brighton**, **Community21** initiative and graduate social enterprises Blockbuilders and Exploring Senses and is co-funded by the university, private sector and through community consultation work. They use accessible technology and making methods to engage often disenfranchised, marginalized or disengaged members of the community in making a difference, through participation in generating meaningful visions for the future of the neighborhood in which people live. This is propelled by the new UK government statutory Neighborhood Plans which require local communities to form 'visions' for the future of their community through participatory planning.



Co-designing the future of the neighbourhood using 'dig-tools'

Personal and Community Health

The **Asset-Based Community Development Institute (ABCD)**, located at the **Center for Civic Engagement**, Northwestern University in Evanston, Illinois, is at the center of a large and growing global movement that considers personal and local assets as the primary building blocks of personal health and sustainable community development. Building on the skills of local residents, the power of local associations, and the supportive functions of local institutions, asset-based community development draws upon and maps existing personal and community strengths to build stronger, more sustainable and economically viable communities for the future. abcdinstitute.org



Participatory Asset-Health Mapping

Healthy City is a US initiative which supports communities, particularly those facing health inequities, in identifying, organizing, and sharing its collective voice with decision makers at the local and state levels. Their approach is community and place-based and supported by their on-line Community Research Lab Toolbox. Community-Based Organizations can use the concepts, methods, and tools provided, such as the Community-Engaged Mapping Facilitation Guide and Guide to Planning a Community-Engaged Mapping Event, to host an event or activity that collects knowledge and experiences from community members about local assets. bit.ly/ParticipatoryAssetMapping

Green Mapmaking

Over the last 20 years, a major international movement for community mapping has been developed by an evolving network of local project leaders and a New York-based nonprofit organization, Green Map System. Using maps as its medium of engagement, GreenMap.org's mission is to promote sustainability and community participation while building local capacity, networks and knowledge. Designed with the network, the Green Map toolkit offers a global iconography, collaboratively developed resources, and an interactive "social mapping" platform that empowers local project leaders to create a fresh perspective on familiar places.

Green Maps function as practical guides to sustainable living while helping spread successful model initiatives to new locations.

This is a locally adaptable, globally shared framework for environmental mapmaking. It invites people of all ages and diverse backgrounds to map their own local urban or rural community, campus or club. Using Green Map's shared visual language – a collaboratively designed set of icons representing the different kinds of green sites, ecological, social and cultural resources – Mapmakers are independently producing unique, regionally flavored images that fulfill local needs, yet are globally connected.

Whether created in a single community workshop or the outcome of years of collaboration, the resulting Green Maps identify, promote, and link ecological and cultural resources. Printed, published on the internet or made into a mural or poster, each locally-made Green Map spotlights important issues and deepens involvement in positive social change. GreenMap.org



Green Mapmaking Stories

A thousand printed and web-based Green Maps have been published! In addition to the hundreds of maps you can view online, 550 unique print edition Green Maps are archived in the Map Collection at the main New York Public Library. This archive includes 300 locally produced outreach and education resources. Green Mapmakers from Europe, Asia, and the Americas have shared their stories through blogs and social media, as well as through books and research papers (50 of which are now archived at the University of Victoria Library in British Columbia). Over the years, the network has formed regional partnerships to enrich their outcomes on participatory planning, placemaking, equitable and resilient community building, special events, local tourism and to involve civil society in the process.

New York- Green Map Hub

Universally understandable. Resource efficient. Worldview-changing. Even back in 1992, maps have all these characteristics, and so, this ancient medium turned out to be ideal for connecting people with sustainable living sites around New York City. A green-minded design activist group led by Wendy Brawer produced the first citywide Green Map in six weeks in 1992. This citywide map sparked inquiries that led to the concept of a locally-led global network connected by a shared set of map icons. As the network grew, the early adopters inspired one another and co-created community mapmaking methods and resources. The website, online since 1995 at GreenMap.org, shares an adaptable mapmaking toolkit and promotes all the maps and other outcomes. Green Map became a non-profit organization in Year 2000.

New local NYC Green Maps were also created to test new concepts and involve more New Yorkers of all ages as well as visitors. Waste, energy, bicycling and youth views are among the themes of the organization's print and interactive maps, found at GreenMapNYC.org



At the Archive Launch, historic maps of New York made participants wonder how the Green Maps will be received 400 years in the future

From Mapping to Making

In 2015, Green Map System compiled a list of projects it had contributed to that resulted in the making of new green sites. "We made maps and provided other support to [Gardens Rising](http://GardensRising.org) – a state-funded program to develop rainwater-collecting green infrastructure in community gardens (2015-2019); the Foresight Center – a "resiliency lab" concept for a community center; Local Spokes



– a bicycling equity program (2011-2013); R-951, NYC's first Net Zero Passive House residence (2012-2015); and realized we had expanded from mapping to making sustainable living resources", said founding director Wendy Brawer. "We also share our knowledge and help groups connect with experts, build capacity and communicate between communities." Amplifying related green site development projects by Green Mapmakers around the world, "Green Making" has potential as an adaptable model, expanding notions of what can be accomplished by a local Green Map project.



Cuban Elder, Mapa Verde

Engaging Students

The global office for Green Map System has been located on Manhattan's Lower East Side since program inception. Nearby universities (and occasionally, high schools) have provided interns that made remarkable contributions since the early days of the nonprofit. Summer and spring break programs have supported national and international interns, several of whom later created Green Maps. One example is Beth Ferguson, who won a stipend from Hampshire College to intern when she was a third year student. Her campus and community Green Maps became part of her senior thesis. Later, she joined the Green Map staff and led the LoMap project (see below), worked with the wonderful community leading the Mapa Verde Cuba project and even created illustrations for this book! More than 100 interns have worked at Green Map System!



"We liked the Green Map System's possibilities of establishing a relationship of exchange between North America and Cuba and the global ecological movement. It seemed to be a good way to exchange environmental education methodologies and experiences as well as share our sustainable development work with the world."

Liana Bidart Cisneros, Mapa Verde Cuba coordinator

Cuba

Cuba is a country with rural and urban Green Map projects in all of its 14 provinces. Their network is called Mapa Verde Cuba. The Island of Cuba and its small surrounding islands can be found in the Caribbean with a population of 11 million. Cuba is known for its beautiful nature, special flora and fauna, its appreciation for science, and great diversity of natural resources. Cuba's greatest richness is in its people who are a magical mix



of native indigenous people, Spanish, African, and Chinese and this is reflected in its culture and idiosyncrasy.

After an inspiring visit to Cuba in 1998 by Wendy Brawer, Mapa Verde Cuba was initiated in 1999 simultaneously in the cities of Holguín and Havana by city youth group leaders. Shortly thereafter the Mapa Verde Cuba Network took shape in community after community. The Network, with the support of the Center Felix Varela, coordinates workshops, learning, and resource development for the whole country.

The **Centro Felix Varela** has coordinated workshops and resource development in schools (all levels), and in cultural, social, and scientific institutions. They have documented the outcomes of more than 100 projects in video, digital newsletters and a special 15th anniversary methodology book. cfv.org.cu

Other institutions involved in the Cuba Green Map network include **Institute of Ecology and Systematics**, the **National Council of Arts Centers**, Cuban schools and universities and the global Green Map System.

Mapa Verde Cuba attributes the success of the project to the strong environmental and social values of the Cuban people. The outstanding work of Mapa Verde Cuba is made possible by project leaders who have shared their work over the years, leading to new initiatives across the island all the time. Mapa Verde Cuba would like to continue creating exchanges with other countries to share and develop their work.

Led by biologist Liana Bidart Cisneros, Mapa Verde Cuba has inspired many community/green mapping projects for sustainable community development, planning and conservation and for school and university learning and projects.

Brazil

Although there is no active central leadership in Brazil, new groups inspired by Cuba and Campinas Brazil Green Mapmaker, Leo de Mello, have gotten involved including Piracicaba (a Sao Paulo satellite city), where the NGO Instituto Ambiente Total has created several Green Maps with diverse community groups; and Curitiba, which has an university-based, multi-disciplinary effort that centers on participatory practices. Featured in the Green Map Impacts book, this project has mapped the neighborhoods around the various branches of the Federal University of Parana throughout a city known for its advanced, inclusive urban planning.

ambientetotal.org.br

Curitiba, Brazil GreenMap bit.ly/CuritibaGreenMap

Europe - The 4Bs Hive

The **4Bs Hive** collaboration involved four European Green Mapmakers who jointly applied for a Gundvig "mobilities" grant. With funding in hand, each of these riverside cities: Berlin Germany, Budapest Hungary, Bristol UK and Bistrita Romania took part. A large and culturally diverse group of



Local icons, Rio de Janeiro

*Brazilian
Green Mapmakers*



adult learners explored each city. They gained technical experience and co-developed four different types of Green Mapmaking methodologies. A wonderful film was produced as was a multilingual book, the 4B Hive Guide to Green Mapmaking. Now translated into Chinese, Hebrew and Spanish, the outcomes of this multicultural, multimedia Green Map project are unique! bit.ly/4BsBlog

Green Map Books that tell more stories!

More stories of Green Mapmaking are available for free!

Why does it matter?

What real change does community mapping lead to?

In central Japan, Green Map Aichi created an outstanding 40-city network, exhibitions and workshops for EXPO 2005. Responding to questions from the thousands of visitors, they realized that short stories written by Green Mapmakers themselves would be a good way to share the many disparate impacts. Partnering with the global office, stories were collected, translated and composed in the free book you can download at GreenMap.org/impacts. The english edition was published in 2009, and later, stories featuring users of the Open Green Map platform were added.

Prior to producing Green Map Impacts, Green Map Japan and Green Map System co-produced the Green Map Atlas, also in both languages. Free as a PDF from GreenAtlas.org, this multimedia anthology of ten "behind the map" stories became the prototype for the profiles of Mapmakers and their maps on GreenMap.org. A limited-edition printed book and a CD-Rom (in English and Japanese) were produced, followed by an exhibition and discussion series.

The collaboratively produced book – Mapping Our Common Ground - you are reading now came next. Published first in 2006, it was translated into Spanish in 2007 and reprinted in English. This book, Mapping our Common Ground was entirely updated in 2015-16, with links to websites, videos, blogs, maps, etc.

While these books inspire as they share the ups and downs of community mapping, Green Map System also provides 'nuts and bolts' for making different types of Green Maps. For example, in 2007, the organization assessed the design and effectiveness of various print editions that had been contributed to the Green Map Archive. This review led to the creation of a Style Guide that helps mapmakers determine everything from choosing colors to how to fold their map. Available in the online Tool Center to logged in Mapmakers (or by request), and has been downloaded over 4,000 times! GreenMap.org/resources



New Green Map Books & Videos

As seen at GreenMap.org/store, find great new books about Green Mapmaking in Chinese, Japanese, Spanish and other languages. In 2007, a new DVD of videos featuring Mapmakers from Cuba, India, Uganda, Japan and other places was produced, too. Find posters, gifts, and Green Maps from around the world, too!

Child and Youth Mapping

Community and Green mapping are powerful tools for working with and involving children of all ages in the design and planning of their community and world.

Children of all ages love to make maps!

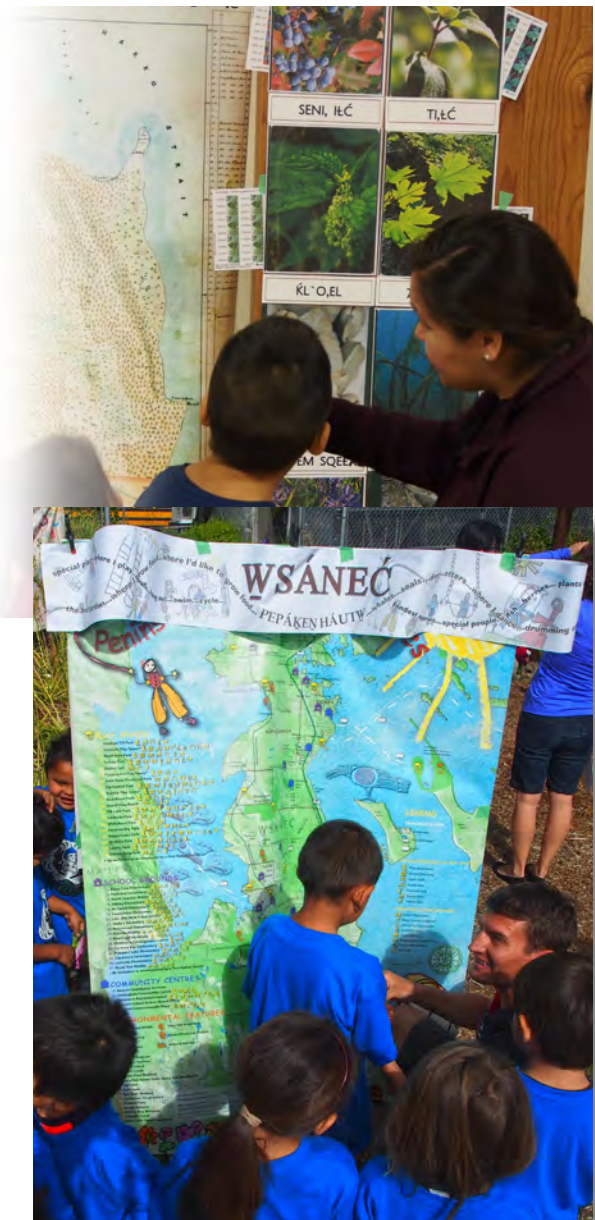
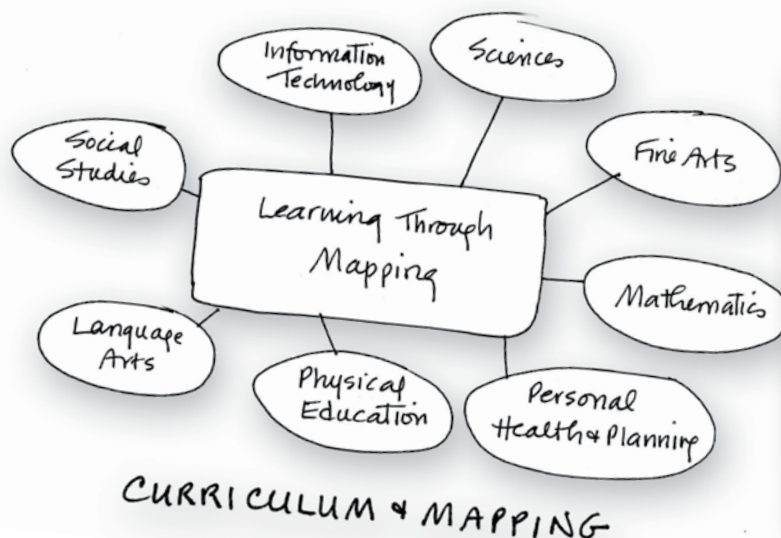
From clay-scale models of classroom furniture, to backyard treasure hunt maps, to schoolyard and school community biodiversity maps, children easily understand the connection between the map and the territory. This connection is especially motivating for young learners when the territory is one they are familiar with or attached to. School yards and school communities are excellent starting places for teaching with and about community mapping.

Connecting Schools to Community

Community mapping engages students in a process that values social, cultural, and ecological aspects of the community. Opportunities for investigation go beyond the boundaries of the school property. The presentation, sharing, or publishing of maps is also part of this process of engagement. When children know that their map work will be seen or used by others in the community, they put greater value on the process and the outcome.

Integrating Learning and Curriculum

Community mapping is ready-made for an integration of the sciences, social studies, language arts, fine arts, civics, mathematics, and information technology. Mapmaking can accommodate a wide range of learning styles and developmental stages as children



*Community mapping students and volunteers support the food education program **PEPÁKEN HÁUTW** at the **LÁU, WELNEW** Tribal School with language and mapping activities*

"For me it is really important that learning not be always a study of what is out there, in other places, all the time. When my class were doing the geography of making their own maps, it was their geography, their place. Today I just came from my class and one of my kids said, "We are history". Mapping has been a wonderful way for them to develop that feeling of being a participant."

*Susan Underwood
Canadian Schoolteacher*

investigate and represent their home territory through a variety of media. Both the scope of the map (size of territory represented) and the method of representation (three-dimension model, panoramic view, aerial view, contour map etc.) can be tailored to children's conceptual and social development. For example, a younger child's "territory" will be smaller in scope—perhaps the house and street, with an easily understood panoramic view as the representation.



Community-engaged, experiential, action-based learning. VicWest neighbourhood, Victoria, BC

Child and Youth Community Mapping

Liberian Clay and Stick Maps

The Liberian Children and Youth Mapping Project 2005 was coordinated by Canadian student Michael Allaway. In Central Roysville, Bomi County, Liberia, Michael worked with teachers and a youth leadership group of 5 and 30 students ages 12-20. Over several months they created an environmental map of the school area using clay and sticks. Then they made detailed diagrams and sketches of local plants, including a rudimentary classification system: Medicine/Food/Decorative/Dangerous. They finished their project by documenting cultural stories of the area, using the map and 'family trees'.



*Liberian Children's map
photo: Michael Allaway*

SeaChange Marine Conservation Society

SeaChange, a BC, Canada based NGO, partners with local W̱SÁNEĆ First Nations to engage school-aged children, youth and adults in hands-on, action-based, cultural and environmental education programs as well as land and water-based restoration activities in **SNIDZEL** (Gowland Tod Inlet). An on-line participatory, interactive **Coastal Community GreenMap** was begun in 2009 where people could post cherished sites and stories (settler as well as First Nations) connected to the Saanich Peninsula and Inlet region. W̱SÁNEĆ First Nations history, traditional placenames, language and cultural practices revitalisation are central to their work. seachangesociety.com bit.ly/coastalCGM



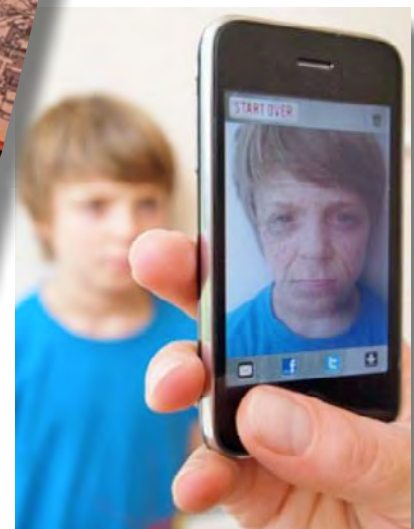
PlaySpaces

The Peninsula Play Spaces map and process, Rediscovering Places to Play on the Saanich Peninsula (BC, Canada) led by the community-based network Peninsula Connections for Early Childhood, engaged hundreds of parents, elders, community leaders and service agencies between 2005-2007 documenting existing and potential services and community/recreational spaces for young children and families. For the first time, indigenous WSANEC parents and elders' voices, place names and cultural knowledge about childrearing were blended into a broader intercultural map. bit.ly/playspaces



Young Digital Citizens(hip)

Using accessible technologies such as ipads, phones, gaming (Minecraft) programs and other creative methods young people in the UK are engaging in neighborhood and regional planning. Also called digital localism local researchers and designers engage a wide range of young people in sharing their ideas and values and inventories of local assets and compile them into interactive on-line mapping. Much of this work has been piloted in the Brighton, Sussex area but has rapidly grown to include other schools and communities nation-wide. community21.org/toolbox



Child and Youth Green Mapmaking

Children and youth get involved in the green map movement through a class project, after school or summer experience. Sometimes they create a neighborhood version of a larger citywide map, other times, an important issue is the focus. Youth often choose to design their own local icons, and write narrative text, add their own photos, drawings and poems – they also produce all kinds of creative ways to present their Green Maps to their peers, policymakers and the community at large.



The Youth Green Mapmaking Resources

Mapping helps youth connect with their own community at a deeper level. At GreenMap.org/youth, find examples, details and some free tools you can use right away. Or, register your project at GreenMap.org/join and download the Green Map Icons, activities, surveys, a sensory journal and other adaptable resource adaptable for use by K-12 teachers and youth groups. Access the entire online toolkit, including graphics, a style guide, slideshows or make an interactive Open Green Map. Links in the same section take you to university student research papers, syllabi and thumbnails of youth-centric Green Maps, as well as videos from around the world.



Republic of Korea

Not far from Seoul, a private-governmental cooperation organization, Gyeonggi 21 has promoted Green Mapmaking throughout the province with several groups, including students. One of special interest is the “Gogangdong Greenmap” which means, Drawn with Both Feet! Fieldwork led to the mapping of hiking trails, nature zones and historic sites. The youth made their own silkscreen and printed base maps on handkerchiefs, then stamped on the paths and sites. This project won an Excellence Award! greenmap.kr



Youth-engaged Summer Projects in New York City

In 2014, youth from Staten Island were inspired by the youth who made Green Maps on difficult topics through the nonprofit [Recycle-A-Bicycle](#). Created from 1999-2005, these middle school age youth learned how to ride in urban traffic and to restore trashed bikes alongside the mapping work. R-A-B utilized the Green Mapmaking to introduce environmental justice issues and build capacity to respond with effective communications resources. Learning from experts, drawing and writing, and presenting to local officials, the youth not only determined map themes, they also had fun getting involved in making the community a better place.

- **Red Hook** (Past Present Future Planning, Brooklyn), 2005
- **Sprout to Action** (local food, upper Manhattan), 2004
- **Space to Breathe** (on air pollution and asthma, upper Manhattan), 2003
- **Go Green NYC** (car-free mobility options, Brooklyn), 2002
- **Stop Fronting** (public access to the East River waterfront, Brooklyn), 2001
- **Are We Trashing the Apple?** (charting poorly planned transfer stations, Brooklyn), 2000
- **Pedaling Brooklyn's Gardens** (saving community gardens in Williamsburg), 1999

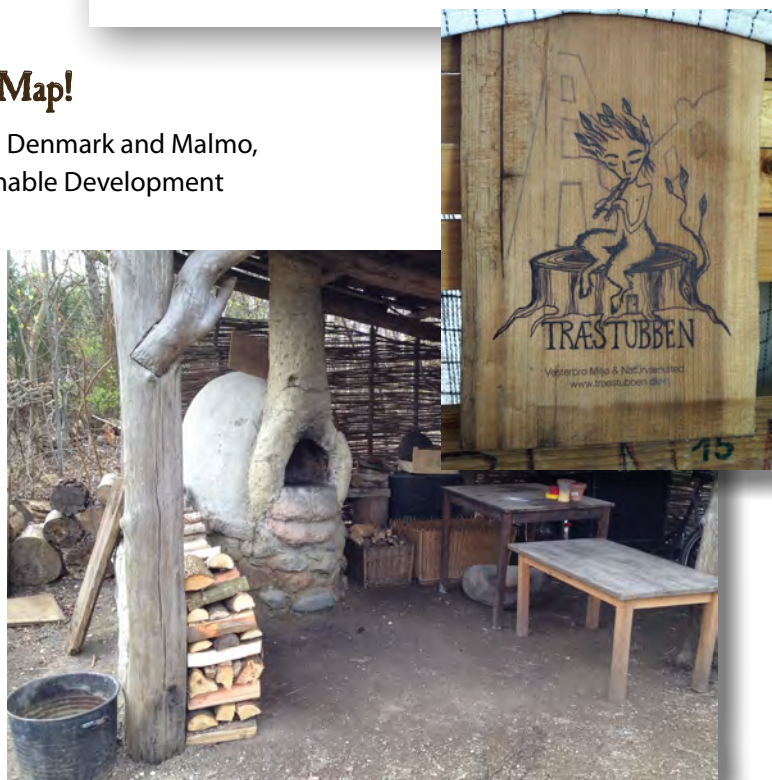


Skill-building and Leadership through Green Mapmaking:

- Technology and Communications for Sustainability
- Promotion for the Social, Green & Low-Carbon Economy
- Cross-culture Collaboration & Exchange
- Create a Lasting Record of Change
- Experiential & Service Learning
- Ecological Literacy, Place-based Planning & Visioning
- Voice Assessment of Current Issues & Innovations
- Orientation to Community Assets & Challenges

For Youth: NatureSchools are on the Map!

Two cities in the Oresund Region – Copenhagen, Denmark and Malmo, Sweden – have a long-term Education for Sustainable Development partnership. A unique aspect is the NatureSchool program – children who choose this option have all classes outdoors! The Green Map shares the locations of all the places in and around both cities that welcome the NatureSchool children, including farms, community gardens, waterfront, forests and other natural areas. The cross-bridge collaboration is effective, whole-child' learning – the NatureSchool students are healthier and score higher on tests! With social inclusion and knowledge sharing in mind, the program has even produced an English version Green Map. oresundsklassrummet.eu
bit.ly/OresundsMap



Future Visions Maps

In many parts of the world, youth have taken part in planning the future of their communities. In Campinas Brazil, the Real City and the Dream City 3D model mapping project fulfilled objectives including raising sensitivity, developing critical awareness, self esteem, and a conscience about the responsibilities students have as citizens of the world. In Staten Island New York, mapping was the starting point of a creative three-year planning process in a Spanish-speaking neighborhood around a city park where major capital investment had taken local residents by surprise.

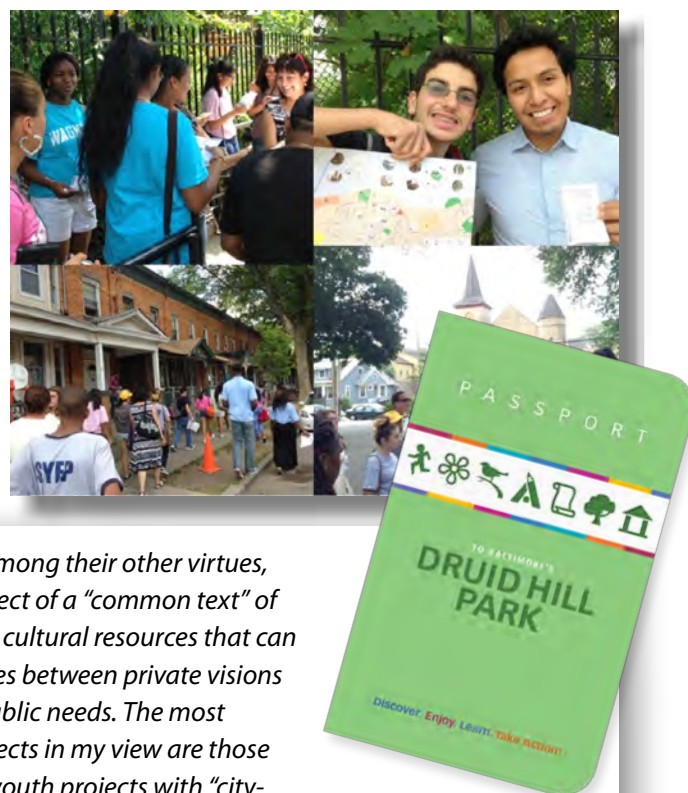
bit.ly/PRsimap

STEM In Baltimore

Baltimore Green Map has applied urban planning techniques to its mapping work with fifth grade students, with the goal of enhancing learning in science, technology, engineering and math. Moreover, Janet Felsten is extending STEM to STEAM by bringing in an arts orientation. This program has partnered with a parks organization to create a successful Kickstarter campaign that resulted in a Druid Hill Park Passport that makes a remarkable city park a much richer experience for all ages. The program works with universities as well as younger students, too, all to meet their mission „Discover. Enjoy. Learn. Take action“. baltogreenmap.org

Green Maps, among their other virtues, offer the prospect of a “common text” of ecological and cultural resources that can provide linkages between private visions and chronic public needs. The most successful projects in my view are those that combine youth projects with “city-wide” projects. Working alongside adults helps students develop skills related to investigation, design, written and oral communication, agriculture, stream and park restoration and more. Kids need skills, and adults need to communicate their respect for youth initiatives without holding youth responsible for ecological problems which we adults have made ourselves.

Dr. Robert Zuber, Green Map Education Director



Kanagawa Japan

Japan has a rapidly aging population. Today, there is great interest in introducing the new generation to traditional production techniques, so these practices – which are often more sustainable and satisfying than modern means – won't be lost. Azuba University students mapped a satoyama' traditional village in Aone. Their experience includes planting rice in a way that seldom seen today – the plant is completely immersed in water, and according to Professor Murayama „Doing so creates an ecosystem in the paddy field where endangered species such as the Japanese diving beetle (gengorou) and tadpoles of the brown frog (akagaeru) can thrive“. Photos of the students planting are included on the printed map. bit.ly/GMAZJPm



Calgary Children's Green Map Converting Military Base to Parks!

The very first youth-made Green Map was made with Child Friendly Calgary when the Building Blocks' Neighborhood Green Map was completed during the summer of 1998. This project gave kids a chance to voice their opinion about what they value at the C.F.B. West military base, which is now converted into a public park in the heart of the city. Even though they created just one large-scale copy, its depth impressed older community members and enabled the young people to have a say in designing the new park. They created several new icons, including one for Youth-friendly eco-spot. It became part of the global lexicon and has appeared on Green Maps around the world.



Ideas!

Create an exhibit for the school that connects your local mapping project to the worldwide movement - download pages from GreenMap.org and GreenAtlas.org, include existing maps of your community, and sketch maps and pictures created by the students.

Cuba Teachers, Youth and Elders Maps

Two school teachers and ten students are Green Mapping the rural area of Bungo La Venta, in the municipality of Contramaestre, in the province of Santiago de Cuba. This is a small community of 74 square km. The Nature Icons reflect the biodiversity of this place. You can find the following Icons: Insect Watching, Bird and Wildlife Watching Site, Wetlands and many more.

Some problems highlighted by the Mapmakers:

- Water pollution source - it was cleaned up by the community, and replaced by a garden.
- Use of slingshots, especially by youth - now they are protecting the birds nests.

One of the future objectives is to build a park for kids, create a place to sell farm products and organize reforestation projects to conserve some native species.

In Holguin, Dr. Rafael Torres Carlos Manuel de Céspedes and Roberto Rodriguez led one of the first Green Map projects in Cuba. The focus was on health-related issues, and the map was created with the help of students in 1999. Now they are working in different areas. They improved the Reparto Lenin Park in coordination with Poder Popular and communal services. The school functions like an environmental reference center and is home of Holguin's Green Map.

In Consejo Popular Príncipe, in the municipality of Plaza, Havana, an intergenerational group of youth and senior citizens developed creative initiatives to recover green spaces and created pocket maps for the elderly. They have used these small Green Maps for city sanitation and social projects. They have some thematic maps about cultural personalities, too.

In San Miguel del Padrón, Havana, youth from Antonio Perez school and the leaders Katia Portal and Mercedes Vega made an biodiversity inventory/ list Green Map. With it, they identified some native animals/plants and traditional medicine sources.



*Former derelict site restored,
Mapa Verde, Cuba*

Working with youth in the schools on Mapa Verde projects helps young people see their work become a transforming movement in their communities. The experience helps reinforce community and environmental values, develop skills, and, create a sense of ownership - these are positive actions for sustainable development.

Mapa Verde Cuba

Green Map System Icons

The Green Map® Icons are the heart of Green Map's global program. This collaboratively designed visual language identifies, promotes and links ecological and cultural resources on every Green Map. In 2016, the Icons are 'going open'!

Icons make the Green Maps

easy to explore, regardless of the language and cultural orientation. There is general agreement on each Icon's meaning, but the local Mapmakers determine precise definitions for the Icons they use. Mapmakers are also continually inventing new local icons, many of which get "adopted" into the globally shared set - young people especially enjoy creating new place-based symbols!

Green Map's Icon Poster can be downloaded in Arabic, Chinese, English, French, German, Hebrew, Indonesian, Japanese, Polish, Portuguese, Russian, Spanish, and Swedish. There are Icon flashcards, too!

The 170 Green Map Icons have been digitized into a font, so they can be typed in from any keyboard. They are also provided in PDF, JPG, SVG and other image formats. And they are built right into the Open Green Map and the mobile Site Collector, too. Check online for updates on how Green Map Icons can be used for your own local projects.

GreenMap.org/icons



Green Map® Icons Version 3

Think Global, Map Local!

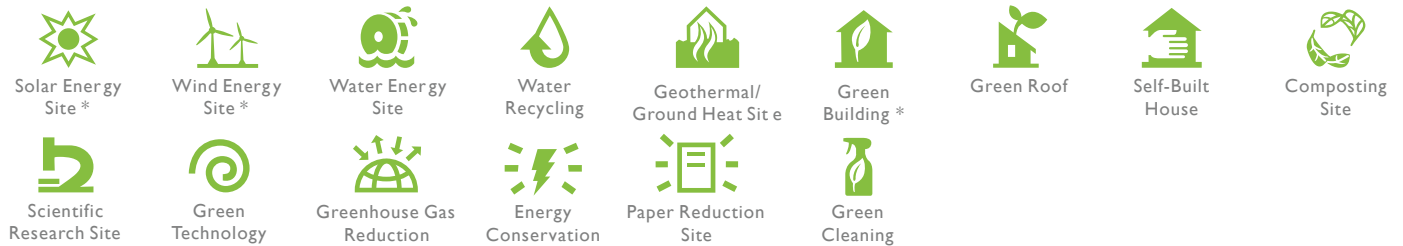
Green Map® System promotes inclusive participation in sustainable community development worldwide, using mapmaking as our medium. This globally-recognized iconography connects communities to diverse local sites, routes and resources. More at GreenMap.org/icons

Sustainable Living

Green Economy



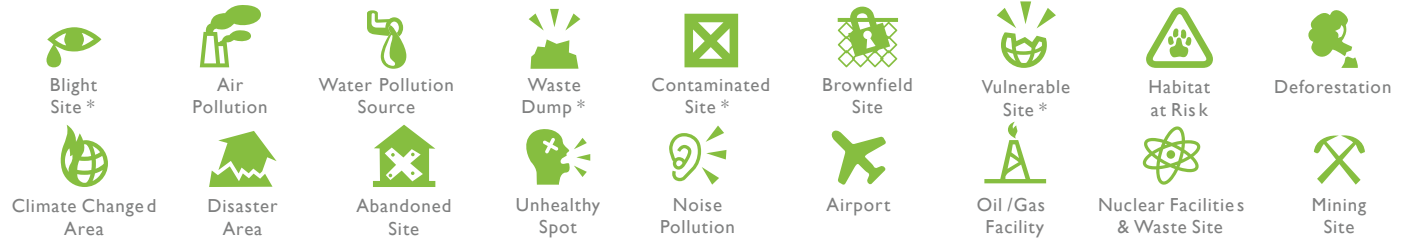
Technology & Design



Mobility

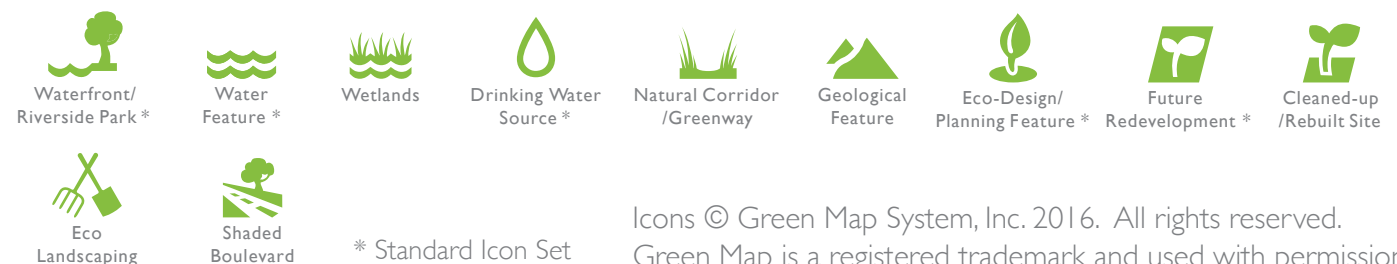


Hazards & Challenges



Nature

Land & Water



* Standard Icon Set

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Flora



Public Forest/
Natural Area *



Special
Tree *



Native Forest
/Plants *



Garden *



Community
Garden *



Spring
Blossoms



Autumn
Leaves



Rapidly
Renewable Plants



Food
Gathering Site

Fauna



Significant
Habitat *



Wildlife
Habitat



Amphibian
Habitat *



Coastal
Habitat *



Aquatic
Habitat *



Wildlife
Center/Zoo *



Protected/
Cultivated Habitat



Insect
Watching Site



Bird & Wildlife
Watching *



Duck
Pond



Farm
Animals



Migration
Zone

Outdoor Activities



Park/
Recreation Area *



Public Space/
Square *



Sport Site/
Play with Nature *



Eco-tour/
Nature Walk



Swimming



Canoe/
Kayak Site



Sailing/Row
Boat Launch



Skateboard
Site



Dog
Run



Snow
Activity Site



Camping



Scenic
Vista



Sunrise/
Sunset Site



Star Gazing
Site

Culture & Society

Cultural Character



Cultural
Site *



Museum



Art
Spot *



Cultural
Performance *



Local
Music



Lively
Spot



Artisan
/Art Studio



Traditional
Way of Life



Historical
Feature *



Archaeological
Site



Traditional
Neighborhood



Diverse
Neighborhood



Community
Center *



Child Friendly
Site *



Senior
Friendly Site *



Eco-spiritual
Site *



Alternative
Health Resource



Memorial/Site
of Conscience

Eco - Information



Eco
Information *



Environmental
Education *



Green
School *



Public
Library *



Green Maps
Available *



Independent
/Eco-Media



Online
Resource *



WiFi
Spot



Pollution
Monitor



Eco
Certification



Special
Site



Appointment
Needed

Justice & Activism



Eco-Justice
Organization *



Eco Club/
Organization *



Significant
Org/Agency *



Volunteer
Site *



Eco
Expert



Social
Service



Food
Bank



Vote Here



Free Speech
Zone



Poor Labor
Practice



Unsustainable
Land Use *



Gentrification



Shanty
Town



Refugee
Area

Public Works & Landmarks



Waste Water
Treatment Plant



Energy
Infrastructure *



Solid Waste
Transfer Station



Landfill



Incinerator



Governmental
Office



Hospital



School



Place of
Worship



Cemetery



Information
Kiosk



Landmark
Dining /Pub



WC/Public
Restroom



Prison/Detention
Center



Military
Site



Landmark *

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Sustainable Living

Green Economy
Technology & Design
Mobility
Hazards & Challenges



Carpinteria
Cuba



Flea Market
Aichi, JP



(Used) Books
Jakarta, Indonesia



Handicrafts
Pune, India



Scenic Road
Oak Bay, BC, CA



Bike Repair Shop
Jakarta, Indonesia

Local Icons

Some of the many local icons being made all over the world!

"New place-based icons are being designed by mapmakers, in addition to the globally shared set of 125 symbols. It is exciting to try to convey a complexity with a single symbol - almost like a logo, it needs to be distinctive looking and easy to recognize. Can you make an icon for a special site? Green Map System collects these for the website, so be sure to send it in!"

Green Map System

www.greenmap.org



Renovated Bldg.
Hakodate, JP



Historic Feature
Aichi, JP



Windmill
Gouda, Holland



Foot Bridge
Guelph, Can



Traffic Hazard
Aichi, JP



Railway
Pune, India



Road Heating
Tokyo, JP



Shrine
Kyoto, JP



Transport
London, UK



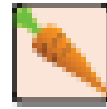
Mass Transpo.
Cuba



Comm. Farm
Tokyo, JP



Berry Gathering
Victoria, BC, CA



Food
London, UK



Garden
London, UK



Accommodations
Toronto, CAN



comm. health-care
Jakarta, Indonesia



Family Doctor
Cuba



Hotel (Budget)
Jakarta, Indonesia



Recycled / Upcycled
Clothing
Victoria, BC, CA



Hotel/hostel
Copenhagen, DK

Nature

Land & Water

Fauna

Flora

Outdoor Activities



Hills
Hakodate, JP



Beaten Track
(trillos) Cuba



Camas Meadow
Victoria, BC, CA



Mixed Forest
Aichi, JP



Whale Witnessing
Victoria, BC, CA



Scented Tree
Tokyo, JP



Native Trees
Adelaide, Aus



Intertidal Zone
Victoria, BC, CA



Sled
Yellowknife, CAN



Golf
Victoria, BC, CA



Boulv. Garden
Guelph, Can



Ecosystem
Cuba



Banana Plantation
Jakarta, Indonesia



Hang Gliding
Rio de Janeiro, BR



Deforestation
Vict Falls, Africa



Garry Oak(s)
Victoria, BC, CA



Edible Plants
Tokyo, JP



Snow Boarding
Yellowknife, CAN



Sea Flora
Victoria, BC, CA



Relaxing Spot
Tokyo, JP



Winter Sports2
Yellowknife, CAN



Comm. Garden
Cuba



Salmon Spawning
Victoria, BC, CA



Kite Flying
Victoria, BC, CA



Tide Pools
Victoria, BC, CA



Osprey Nest
Victoria, BC, CA



Beach Games
Rio de Janeiro, BR

Culture & Society

Cultural Character
Eco-Information
Justice & Activism
Public Works &
Landmarks

	Green School Cuba		Recycling Spot France		Ethnic/Trad. Culinary Jakarta, Indonesia		Info. Center Cuba		Hospitality Aichi, JP		Lighthouse Victoria, BC, CA
	Mystery Site Victoria, BC, CA		People Friendly Aichi, JP		Newcomers Support Service CRD, BC, CA		Aboriginal Feat. Adelaide, Aus		Maori Cultural Site Hamilton, NZ		Colleges Pune, India
	Theater Pune, India		Mapmaker Aichi, JP		Heritage Rural Lan. Aichi, JP		Public Wharf Victoria, BC, CA		Environ. School Hamilton, NZ		Heritage Road Highlands District, BC, CA
	Local Music Cafe Victoria, BC, CA		Culturally Modified Tree Victoria, BC, CA		Cedar Harvesting Victoria, BC, CA		Emergency Transport Haida Gwaii, BC, CA		Newcomers Language Support CRD, BC, CA		Monument Cuba
	Murals Cuba										

Green Map Icon Pattern Code

	Garden		Enterprise		View		Fair		Eco		Building		Global
	Trees		Café		Energy		Caution		Growing		Store		Community
	Wildlife		Tourism		Solar		Negative		Indigenous / Local		House		Person to Person
	Water		Bicycle		Drinking Water		Danger		Organization / Club		Lock		People
	Food		Media		Alight		Waste		Eco Certification		Positive		Official

These Patterns are combined in our global icon set

