

# **BEST PRACTICES ON INTEGRATING THE ENVIRONMENTAL PERSPECTIVE INTO THE IMPLEMENTATION OF SDG 11: Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable**

## **Executive Summary**

*People are an integral part of the whole Earth System, which, like the Sustainable Development Goals (SDGs), is both integrally interlinked and interdependent. No part can be isolated from the rest. Human beings cannot "stand apart", nor can we reliably isolate any one section of a community or any one aspect of which we are an integral part. For this reason, understanding how to make human settlements sustainable and resilient must include a contextual understanding of the larger environment and of Nature itself. To gain this kind of understanding of Nature, we must go beyond hard scientific evidence and formulation. The following Report is a joint initiative by professionals from diverse backgrounds. They include NGO representatives at the UN, people active in Higher Education and highly experienced professional Nature Communicators.*

*In the same way that thriving, safe and resilient cities require us to include diverse nationalities, religions and sexes on a basis of equality, other species of animals and plants must be welcomed in cities and human settlements in such a way that people and Nature have a harmonious and symbiotic relationship to form strong, sustainable ecosystems.*

*Green spaces are essential for human beings to relax and to build awareness of their integral place in the intricately interconnected web of life. It is important that people rekindle their inborn capacity to communicate with Nature and that cities and human settlements embrace the innate wisdom and fulfill the needs of plants and animals, as well as people, so that all can flourish.*

*In many cases, green spaces are already there imprinted on the land. For instance, there may have been an offshoot of a creek, which became a slum area, and which flooded periodically. The green space could be restored to its natural state; and sustainable, affordable and safe housing could be built on higher ground for those who were living there.*

### **Planning, Implementation, Housing, and Transportation**

*Every city and community needs to develop a local strategy and plan for achieving the SDGs. We should include children and youth in developing and implementing each of the local plans and provide them with the educational opportunities needed to be able to fully do so.*

*All people need and deserve adequate, safe and affordable housing so that all individuals can contribute to and be nurtured by the society and community. The solutions that best*

*serve all life can be found in the immediate environment. We can look to nature to create affordable, sustainable, safe, non-toxic, mildew and mold resistant housing that harmonizes with the surrounding environment.*

*By taking time to observe the normal flow of movement through a city or a village, minor changes can be made to greatly enhance the natural flow rather than creating an entirely new transportation system. Many systems have a historic explanation, which actually aligned with Nature, but was lost as change progressed. By recovering and revitalizing such systems we can reawaken the heart of the community while helping to reconnect with nature.*

***Protecting cultural and natural heritage and creating resilience in the face of climate change***

*Our natural and cultural heritage root people in the time in which we live and connect people to both our past and future. In so doing, our cultural heritage also connects us to the culture of people worldwide and our natural heritage to the whole Earth System. It is important to pay attention to the poorest and most vulnerable people who can then become an invaluable asset if they take pride in the place where they live.*

*The more humans work with Nature, the more balance will naturally occur; and as we restore and protect the natural environment deaths from disasters, caused by human intervention, will decrease. Nature, if given a chance, naturally improves air quality and automatically recycles waste. The more we can appreciate, cooperate with and learn from Nature, for example through biological waste treatment processes, the easier air purification and the management of our excesses in waste production are likely to be.*

*During disasters human infrastructure tends to fall away, people in key positions can become unavailable, and what is left is the natural working relationship and bonds among “ordinary” people along with the systems of nature that still remain. It is thus essential to involve the local people in developing preventative and emergency preparedness plans and that we restore the natural environment to create buffer zones around built communities; move people, buildings, and infrastructure out of hazardous areas; and develop resiliency through regenerative practices.*

***This Report contains many suggested actions that align policies and human activity with Nature.***

### **Goal 11. Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable**

It is essential that we learn from Nature as well as from smaller, sustainable communities as we build, design, rebuild, redesign, and further develop our cities and other rural and urban communities.

Examples of sustainable practices modeled everywhere in Nature as well as in ecologically-balanced communities include the use of natural, reusable, recyclable and non-toxic building materials; habitat designs that feature compact, dense neighborhoods surrounded by green open spaces with plenty of room for growing and processing the food, wastes, and other materials upon which the people and community depend; and innovative designs and modes of transportation, heating and cooling, and processing of human and other wastes that use bio-mimicry to emulate 's time-tested patterns and strategies.

Other examples of sustainable practices that consider Nature include decisions to avoid developing and building in areas prone to geographical and geological conditions such as possible landslides, flooding, earthquakes, or other natural phenomena or where human impact would destabilize natural ecosystems.

In the same way that thriving, safe and resilient cities require us to include diverse nationalities, religions and sexes on a basis of equality, we must also include the non-human world of animals and plants in cities and human settlements in such a way that people and Nature have a harmonious and symbiotic relationship to form strong, sustainable ecosystems.

The need to re-connect human communities with the non-human world is crucial.

- Cities have disrupted natural ecosystems, resulting in the eradication of some 150 species each day.
- There are increasing conflicts between city inhabitants and the wild animals whose habitat has been encroached upon by urbanization.
- Modern technological society has led people to minimize or ignore the fact that humans are an integral, inseparable part of Nature. Efforts to stand apart from Nature and guess at Nature's prerequisites have led to increasing present-day threats to our survival.
- Green spaces are essential for human beings to reduce the stress of modern urban life and to rebuild awareness of their integral place in the interconnected web of life.
  - Areas that have been allowed to grow wild in cities and human

settlements allow whole ranges of species to thrive, despite urbanization, and thus contribute not only to the resilience of Nature but also to the resilience of cities and their inhabitants as well.

People must rekindle their inborn capacity to communicate with Nature and embrace the innate wisdom of plants and animals so that all can flourish. Nature and diverse species are an essential part of the multiplicity of life that reinforces and supports all living species, including human beings. Although humans are in constant *unconscious* communication with Nature as a prerequisite for our survival—for example, our bodies naturally know and respond when we are cold, frightened, hungry, thirsty, sleepy—our inborn capacity to understand and communicate *consciously* with the non-human world is reawakened when people are surrounded by other species.

### ***Proposed Actions***

1. Introduce principles of Permaculture—the art of building gardens using ecosystems that require very little maintenance and provide optimal conditions for each of the species that live there.
2. Include and teach Education for Sustainable Development in all of our schools. (See SDG 4, target 4.7.) Given the central need for humanity and our communities to reconnect with, value, protect and restore the natural environment, it is essential that our children learn how to do this through both formal and informal educational opportunities. Formal education should incorporate cultural and traditional practices as well to share this deep connection with the earth that has been practiced by indigenous cultures for millennia.
3. Educate people to recognize the integral relationship between human beings and individual members of the plant and animal kingdoms that are essential for survival, including the many diverse aspects of animal and plant species that can contribute to our personal wellbeing as well as to the welfare of the human species as a whole. Educating people to understand their intrinsic connection to all aspects of Nature increases the likelihood that they will value natural phenomena and treat the non-human world with greater respect.
4. Encourage people to use vacant lots and open spaces to create (rooftop and vertical) gardens with plants and animals they enjoy. Stress the joy of such gardens as sources of food, flowers, enjoyment and relaxation.
5. Make lessons in communication with Nature available with the help of Indigenous Peoples and/or other Nature communicators (many of which are available via the Internet).

6. Take the perspectives of Nature into consideration when developing towns and human settlements.
7. Honor, respect and appreciate the sanctity of our commons as well as our intangible natural heritage - our shared ecosystems, natural environments, and planet earth itself. Include these principles as a primary goal within both our local and national planning processes and implementation plans.
8. Ensure that every city and community develops a local strategy and plan that focuses on achieving the SDGs. They must be based on the Aichi Biodiversity Accords and the Rio Principles, especially those principles calling for the full participation of the people in developing and implementing the plan and in being provided with the information needed to be able to fully do so. They need to explicitly focus on achieving all of the Targets included under SDG11, along with all of the other relevant targets and goals, including SDGs 2, 7, 12, 13, 14 and 15.
9. Include children and youth in developing and implementing each of the local plans and provide them with the educational opportunities necessary to be able to fully do so at their individual level of competence. This can be done as follows:
  - Start by fully incorporating Education for Sustainable Development in the school systems and curriculum at all levels of education;
  - Teach the SDGs at all levels, as a part of the local planning;
  - Ensure all schools focus on how students can contribute to the local implementation processes;
  - Provide all teachers with in-service training to learn about and incorporate the SDGs in their teaching and educational opportunities;
  - Include a primary focus on what is being done in the local community in response to Goal 11 on Cities and Human Settlements, along with all other pertinent goals and issue areas.
10. Fully integrate cities and human settlements (which cover a wide range of territory and area issues) into our National and Regional SDG implementation plans.
11. Provide better opportunities for people to stay in their native rural communities and villages and ensure that basic resources and services are made available to meet their daily needs.
12. Given that one-third of the people living in cities in the developing world live in slum areas, provide the basic services that are needed by all of those currently living in such abhorrent circumstances and situations.

13. Develop new means of funding to make resources available to people in both rural and urban communities to ensure that their basic human needs are met.

### **11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums**

Adequate housing is a matter of survival for all of Nature. In Nature HABITAT is a way for members of a species to become integrated into an ecosystem that nurtures them and to which they contribute in many diverse ways. Habitat provides a means to strengthen not only an entire species but also other interrelated species and ecosystems as well.

To create nurturing habitats for humans that also sustain the natural world, it is in people's interest to help one another find adequate, safe and affordable housing so that individuals can contribute to and be nurtured by society, thus strengthening the human species as a whole. Developing sustainable ecosystems that include habitat for wildlife and native plants creates a vital link in building a sustainable future for human life on Earth.

Solutions that best serve all life are found in the immediate environment. For instance, we can look to Nature to create affordable, sustainable, safe, non-toxic, mildew and mold resistant housing that harmonizes with the surrounding environment. The natural world can be an inspiration for inventors, engineers, architects and builders to study as they design new human environments.

Cities are only as strong and resilient as the weakest part. People without a voice living in slums and hidden from view inevitably weaken the more visible aspects of cities. If we think of a city as a living being, it is vital to pay attention to all parts, working to make every area healthy and thriving. As an interim step to doing away with the slums, these impoverished areas can be made more habitable through public arts and works projects as well as through more accessible public services, such as hospitals, health clinics, and other vital facilities.

When working on this, or any of the SDGs, we have the power to come together with a sense of purpose, united around our highest vision that is heart-centered, heart-supported and heart-driven and inspired by Nature, leaving behind the frantic, constricted energy often found in such planning and implementation processes.

### ***Proposed Actions***

In planning and developing our communities, it is important to:

- Use local knowledge, skills and materials while accepting and appreciating Global support.
- Be open and honest about plans for development and accept feedback and information from all interested parties.
- Take the necessary time to connect with, show respect for and cooperate with the place, the people and environment.
- Acknowledge the challenges and the needs of all life forms sharing the space.

### **11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transportation, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons**

Learning from the natural environment, humans can find greater efficiency and ease in nearly all realms of life. This applies also to the transportation systems (air, road, sea/river and rail). By taking time to observe the normal flow of movement through a city or a village for instance, minor changes in existing transportation systems can often be made to greatly enhance the natural flow of people and goods, as opposed to creating an entirely new system that may not provide significant benefit. Many systems today, such as sea and river ports, rail hubs and highways, have a historic connection with Nature, which has been lost as rapid changes have been made in recent times.

Simple systems that are safe and environmentally respectful are relatively easy to create. Enabling people to connect to one another will enhance safety. For instance, if we relate to each child as our own as is done in communities where all members are interconnected, then we will make sure it is safe.

It is important to engage the people who are most affected by systems (or lack of them) and to provide opportunities to give voice to their experience, to share their wisdom and allow this to inform all activities. This target is about empowering people so that they can join the process. It is about engaging the heart of community, no matter where we are or what the issue.

By working with Nature instead of against her, more sustainable transportation systems can be devised. For example, creating innovative solar-powered or electromagnetically powered transportation systems could sustain a new generation with little or no pollution or waste.

It is time to increase funding to develop new transportation modalities using more sustainable, natural means. Innovative experimentation and creative urban

development designs can foster new modalities to put into practice.

### ***Areas for Attention and Focus***

- As municipal and intercity rail travel tends to be more sustainable than other existing modes of transport, attention should be focused on making rail systems comfortable, affordable and safe for all.
- When designing sustainable transport systems and improved road safety, it is important to notice the flow of energy, where things are located, where people are going and the trends in activity. The natural world can provide a model for improvements and new systems.
- The natural world provides forms of energy that meet the needs of all life and the environment. Nature uses air, magnetism, and the electro-magnetic spectrum. Research in these areas should be funded for the eventual benefit of all of humanity. For example, bio-mimicry provides a number of examples for how Nature's designs can help to improve the efficiency of vehicles and modes of transportation. As one example, airplanes are already being redesigned to take advantage of minute changes in wing and body design.
- Look to diverse cultures that have forms of sustainable transportation that can be used more widely, such as bicycles, boats, walking, carpools and citizen owned vans and taxis.
- Envision and implement beauty and cleanliness throughout the cityscape to uplift people and bring in a greater sense of ease and safety in travel.
- Bring standards of transportation up to a level that meets the needs of all. In addition to functional importance, clean, safe transportation is also visually appealing and fosters engagement of people with each other and the environment around them, and even pride of ownership in the community.

### **11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries**

Inclusive urbanization ideally resembles an ecosystem in which each person plays an integral role in the wellbeing of the whole and provides for the needs of the community, and the community in turn helps to take care of inhabitants' needs.



The more a city can take care of the needs of its inhabitants without dependence on expensive and environmentally harmful transport systems to bring in goods and services, the more wealth will be retained locally and the more sustainable a city will be.

### ***Proposed Actions***

1. Create sustainable development strategies at the local level that are well integrated with the development and implementation of strategies at the national and regional level to enable the implementation of the 2030 Agenda for Sustainable Development;
2. List the occupations required by the city for it to become as self-sufficient and sustainable, as possible.
3. Ensure that meetings between local government and inhabitants take place and are accessible to the citizens and the press, so that citizens can understand the challenges a particular city faces and think along with their representatives.
4. Design cities using natural principles that are the basis for strong and sustainable ecosystems thereby building on time-proven approaches to sustainability.
5. Create urban designs that include wild space and green space to allow for the needs of Earth as well as the needs of people. It is important to realize that all of Nature is important. Even insects play a vital role in the web of life and are thus essential to humans in order to sustain biodiversity and ecosystem functioning,
6. Study the shape and movement of life in the environment (for inspiration when planning and developing areas) so as to align the design and development to harmonize with and enhance the surrounding environment.
7. Focus on lifestyles and behaviors we want to promote and design spaces that encourage these (e.g. parks, meditation spaces, and spaces for healthy social interaction).
8. Use sustainable architecture that can provide housing inexpensively, sustainably and quickly to areas in need; construct homes and community buildings in styles that celebrate the unique heritage of cultures and peoples including compressed earth block or earthen architecture, the use of natural building materials and processes, and indigenous building practices. (See: <http://ecovillage.org/node/5998> under Natural Building and Climate Friendly Architecture for examples.)
9. Introduce gratitude into people's experience of service. Gratitude is a feeling that connects people in powerful ways and brings profound awareness.

Through small actions and selfless service we can achieve our greatest gains.

10. Engage the people who are affected the most in the process and give them an opportunity to give voice to their experience and to share their wisdom. Sustainable development has to be about empowering people so that they can join the process. One of the most powerful ways of achieving this is by engaging the heart of a community, no matter where or what the issue. All activities must be inclusive, integrated and sustainable.
11. Incorporate the concept of *Love* and *Respect* into sustainable development - Respect for the Earth, plants, animals, insects, minerals, and fellow humans. Teach and encourage children to respect the natural world at a young age.

Where cities follow Nature's example, they will be building on time-proven approaches to sustainability.

12. Involve inhabitants and their organizations.
  - Draw on the strength and the creativity of citizens by encouraging town-house meetings and encouraging individual citizens to become a part of problem solving groups.
  - Encourage city dwellers themselves to work locally and where there is a shortage in a specific field, to get the necessary education. Where the education does not exist within schools/universities in the vicinity, the Internet can be a useful tool.
  - Involve city dwellers in waste disposal by educating them in the importance of “each doing their part for the wellbeing of all.”
  - Ensure the young, very old and disabled are given the care they need by allowing them to fulfill a useful role where that is possible or ensure that they have caring members of the community to support them. Giving care is a part of individual personal development and many do this gladly.
13. Support and build on the work being done by diverse forms of commons.
  - Commons work is organized by citizens themselves, often to take care of existing problems that have not (yet) been addressed by governments.
  - Those involved in Commons issues are strongly motivated to succeed because they usually have a common goal and all participants share in both decision-making and benefit sharing.
  - Commons exist in every possible area of human endeavor. There are neighborhood watches and other forms of security measures organized

by citizens. Cooperatives constitute the business branch of the commons and businesses of almost any type are being run as commons. (See below: “cooperatives”). There are groups that organize garbage collections and recycling, Transition Towns which are exploring how to exist without the use of oil, Geocities and Ecovillages, based on active citizen participation. The Ecovillage Network has both an educational system and a handbook for building sustainable villages/cities.

14. Involve the private sector.

- Look for ways in which companies can contribute to the wellbeing of cities and their inhabitants through taxes, providing education for the community and learning situations for students, including in the form of internships.
- Reward those corporations who return a part of their profits to the city in which they are based, including cooperative businesses that do this as a part of their “Cooperative Identity”.
- Cooperatives as a part of their “Cooperative Identity” are based in sharing and community consciousness.
- Cooperatives also contribute to the development of the international community. Here are some facts:
  - There are 2.6 million cooperatives enterprises with one billion members worldwide with annual revenues of US\$3 trillion.
  - They provide 250 million jobs (2% of jobs in G20 countries) and are active in almost all sectors.
  - They contribute daily to the delivery of the sustainable development goals.

15. Provide education

- Build on SDG 4—lifelong learning—to find out where people's true interests lie and help to make training in these fields possible, thus implementing paragraph 26 (2) of the Universal Declaration of Human Rights.
- Encourage schools to engage in municipal sustainable development strategies, teaching children how to participate in town house meetings, helping to problem solve, and undertaking hands-on learning and internships.
- Encourage inhabitants, schools, corporations and other organizations to measure their individual and municipal Global (and other) Footprints as a way of legitimizing their activities. This can be a way for businesses and others to gain positive publicity and can eventually become a factor in the assessment of the effectiveness and degree of community

mindedness of people and organizations.

16. Maximize food production
  - Within towns, encourage people to keep (roof) gardens, use empty lots for children to build school vegetable gardens, and import food from nearby rural areas rather than more distant sources.
17. Generate alternative financing resources where these are lacking.  
Alternative forms of financing can include:
  - Barter, for instance via the LETSystem, which creates local currencies to promote the exchange of goods and services in local communities where the economy is flagging.
  - Alternative tax systems such as the Land Value Capture tax (LVCT), whereby the use of the commons (land, natural resources, the electromagnetic spectrum) is taxed and tax is removed from labour.
    - Such tax practices encourage people to work and also to care for buildings and ensure they remain occupied, since tax is being paid on the land on which these stand.
    - These also discourage speculation. In some countries monies saved from this form of taxation render so much savings (e.g. because of drastically reduced bureaucracy) that it is possible to provide inhabitants with a basic income.
  - Tax people and organizations, including businesses, based on their ecological, global and other footprint. Like in the case of LVCT, this helps to preserve natural resources and generates tax revenues that can be removed from labour.
18. Make sustainable development strategies known to other cities.
  - By using organizations that connect cities, such as ICLEI and/or via UN, and other web sites and data banks, cities can list their best practices so that cities can inspire one another.

#### **11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage**

Nature will protect itself. The question is, "Will it do so in such a way that maintains the conditions that support human life?"

Cultural heritage is often connected to the natural surroundings in which a people live; it is the geography that determines the challenges inhabitants must face and the experiences that are relevant to them on a day-to-day basis.

Our natural and cultural heritage anchors people in historical time and also connects people beyond place and time, spanning both our distant past and our futures. Our cultural heritage connects us to the culture of people worldwide and to the whole Earth System. Protection and safeguarding our cultural and natural heritage involves building a deeply experienced recognition of the importance of both to our personal wellbeing and capacity to survive.

### ***Proposed Actions***

1. Safeguard our heritage.
  - Immediately safeguard natural and cultural heritage sites through the prevention of harmful behaviour by developing relevant new laws and implementing and enforcing those that already exist through local, national and international action.
  - Be intentional where we put our focus. Fear, worry, doubt and past regret cannot liberate, whereas living in harmony with Nature brings awareness to new possibilities and the inspiration of the sheer power and natural intelligence of the environment in which we live.
2. Ensure education about our natural and cultural heritage.
  - Enable people, with the help of education, to reconnect with their capacity to care deeply. Such deep caring begins with the self and can be fostered by the implementation of Article 26 (2) of the Universal Declaration of Human Rights (the development of the full human personality).
  - Expose people to their own cultural and natural heritage so that they recognize how vital these are to their sense of happiness and wellbeing.
  - Protect our cultural and natural heritage by sharing it and communicating about it in a mindful manner through dance, visual arts, story telling, music.
    - “Everyday we create new stories, new heritage. Foster gratitude to our ancestors for their stories, share these stories.”
    - COMMUNICATE in all possible ways. This will make people want to safeguard their natural and cultural heritage, cultivating a deep understanding that these are vital parts of our own home where we can receive sustenance and inspiration at levels not obtainable in any other way, but only if all people take good care of them.
    - Show how connection to our cultural heritage helps people to relax and be inspired by timeless beauty.
  - Foster an appreciation in young people, through formal and informal education as well as the media, for their own culture and how this is connected to others.
    - Encourage pride in one’s own community and its history as the most

- effective safeguard for its treasures. Caring and inclusiveness engender gratitude and celebration in people.
  - Teach specific appreciation for culture—one's own and that of others—as a way of enhancing people's sense of belonging to a certain community as well as their sense of connection to other cultures, helping them to see how cultures are related.
  - Provide insight beyond the specifics of a culture into what connects humanity integrally as a whole with one another and with Nature.
- Create awareness of the devastation that occurs when a people's connection to their cultural or natural heritage is disrupted, as has been done in the past (e.g. to Indigenous Peoples) and is still being done today.
- Foster appreciation for Nature.
  - Encourage the preservation of wild lands, particularly jungles, so that biodiversity can flourish and people can get as close to Nature in its original form as possible. Teach that every species is important.
  - Reinforce the understanding of our interdependence with all aspects of Nature and the importance of what we can learn from Nature in terms of building sustainability.
- As a part of above process, teach all to honor and revere all life, as well as to honor and revere their forbearers while learning to heal that which was not in alignment with the whole of Nature.
  - Be curious and accepting of new information and ways of being that move us toward healing and promote love.

**11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations**

The more humans work with Nature, the more balance will naturally occur on the planet's surface, reducing deaths from "natural" disasters. For example, the Global Ecovillage Network has found that buffer zones created by restoring the natural environment and reforestation of vulnerable coastal areas can protect local villages when tsunamis hit.

It is important to pay attention to the poorest and most vulnerable people and engage their help on how to improve their life. They can be of invaluable assistance if they take pride in the place where they live. By focusing on the most

vulnerable people and the most fragile systems with the purpose of strengthening them, all systems become stronger and greater care is taken to protect them. For instance, if water quality is held as highly important in all areas of a city or country and actions are taken to rectify issues, it is less likely there will be water disasters.

While assisting the most vulnerable, more is learned about the challenges they face and greater cooperation develops. Those assisting others experience the satisfaction of making a difference and those being assisted feel more appreciated and connected as important members of the community. A new level of interaction begins within the community, which challenges people to be their best and creates a spirit of harmony and interdependence.

We are living in a time where people-to-people collaborative economic systems are rapidly taking hold, based on sharing, caring and community (most easily seen on the Internet.) This new mentality is likely to involve rich and poor in the mutual development process, each providing insights from their unique experience. When people are connected to their own inner or higher wisdom as well as to each other, (e.g. as often practiced by traditional Indigenous peoples), they have the capacity to form communities with healthy social connections and boundaries. Collaborative economic systems work to strengthen the bonds of cooperation and interdependence in communities, enhancing the resilience of the entire community as well as its individual members.

**11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management**

Nature produces no waste. Everything in Nature is a part of a universal recycling process. Reducing waste of all sorts – from chemical pollution to overproduction – means being mindful of everything we create, ingest, and cultivate, producing less but producing in better ways. More is not always better. We must appreciate what we already have and share these resources in a fair way.

Nature, if given a chance, naturally improves air quality and automatically recycles waste. Where people produce waste of a type and in such quantities that destroys the conditions that support human life, we rob ourselves of the powerful cooperation of Nature. The more we can appreciate, cooperate with and learn from Nature, the easier we will find sustainable ways to manage our excesses in CO<sub>2</sub> and solid waste production.

As people we tend to objectify Nature and see it as something separate and apart

from ourselves, while in fact we are integral to Nature and its processes of impetus and response. An impetus that is in harmony with Nature elicits a positive response that will enhance human life; an impetus that is in disharmony with the rest of Nature has a boomerang effect and can often harm us.

Living in harmony with Nature is one of the most important challenges humans face. Humanity's immediate task is to break our old habits and find new ways of doing things that are benevolent and respectful of Nature.

Where people are put into a position where they must meet a challenge seemingly beyond their reach, they often demonstrate unexpected capacities, performing at a much higher level than what was thought possible. Facing challenges can bring out the best in humanity, create a sense of connection, and mutual appreciation that enables people to thrive. We must look within ourselves and our communities for these hidden strengths and encourage the development of potential in all.

### ***Proposed Actions***

1. Provide incentives for sustainable business practices at all levels.
  - Impose harsher penalties on polluters. Some of the largest corporations are also some of the worst offenders.
  - Provide incentives for corporations whose practices align with the sustainability of life on the planet.
  - Reward environmentally sustainable practices as well as practices which inspire employees and benefit families and communities.
2. Develop non-toxic, sustainable ways to clean the air and manage waste.
  - Given that 90% of all waste-water in the developing world flows back into the water shed untreated and that some 2.6 billion people lack access to basic sanitation, it is essential that we provide a major focus and attention on dealing with and rectifying these problems.
  - The cheapest and most environmentally benign way to deal with the massive amount of human and biological waste that is created is with biological waste treatment processes, which include composting of human and plant wastes and the use of aquatic plants and settlement ponds to treat waste waters.
  - Grey water systems also need to be much more widely used to avoid having to treat such large volumes of wastewater as well
    - The Global Ecovillage Network has done tremendous work at establishing such systems in small communities and many cities have been implementing such systems as pioneers in communities around the world. Now they need to be replicated and scaled up, not only at the



local level but also as a part of the national and regional plans.

3. Develop new standards and regulation in product manufacture that minimize the creation of pollution and waste.
  - Minimize or eliminate production methods and waste materials that are toxic to life.
  - Be inspired by the life around us for ways to minimize and manage pollution and waste sustainably; for example, study the way trees purify water and clean up toxic environments.

**11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities**

Nature has been our natural home since time immemorial. By creating green spaces that are truly inclusive of Nature, they become places where we can relax, come into our own and feel ourselves to be a part of the larger whole.

As we humans stand on the earth's surface, feeling Nature growing below us, using our feet as support, we become energized. Our thoughts, hopes and wishes are enlivened, offering opportunities for new ways of thinking. Such experiences can remind us that we are loved and teach us how to love in return.

Green spaces in towns can help us to connect back to our natural home and experience our originally supportive connections with the whole Earth System. Such green spaces can achieve this to the degree they are inclusive of and accessible to both human beings and a wide range of other species; "green spaces" also include wild spaces. Access to wild Nature is vital, not only for physical health, but also emotional and spiritual health.

Architects today are equipped to create social infrastructure that will enliven and encourage not only green public spaces but also outdoor public areas for joyous congregating. While examples of enlivening outdoor public areas are found everywhere in the developed world, they are most often absent in blighted areas.

***Proposed Actions***

1. Increase the number of parks (green spaces, See target 11.7) in cities, creating designs that interconnect green spaces as much as possible and provide facilities that make them welcoming to all ages and social backgrounds.
  - Such green spaces help to purify the air, provide shade, stabilize water systems and climate and enable people to relax and appreciate Nature.

- Where green spaces are linked and allowed to grow wild, thriving ecosystems can flourish, becoming natural gathering places of species that often migrate from one green space to another.
2. Provide facilities for diverse types of people (benches for the elderly and disabled, playing fields for children and youth); and HABITAT for animals, plants, insects, birds, trees, and other species.
    - Include areas for dog parks, community gardens with fruit trees and vegetables, safe swimming areas, and wild spaces that honor all of the elements and all life forms and encourage reverence and respect as well as enjoyment and celebration with each other.
  3. Preserve and expand existing green areas.
    - In many cases, green spaces are already there, imprinted on the land. For instance, there may have been an offshoot of a creek, which became a slum area, flooded periodically. The green space could be restored to its natural state and sustainable housing on higher ground be made for those who were living there.
  4. Develop motivated “citizen watches” to steward green spaces as caretakers and maintenance crews.
    - Initiate opportunities through citizen groups to educate visitors on the biodiversity of the local environment.
  5. Encourage people to create roof and other gardens or where this is not possible, keep (individual or communal) plots of land outside of cities where they plant vegetables and flowers, keep small animals and experience Nature for their own enjoyment. Because gardens have similar positive characteristics to parks, they can help people augment their diets and reduce the stress of urban living.
  6. Provide a funding mechanism for green spaces by adopting land value taxation.
    - Land value taxation places a tax on land while limiting or removing it from sale, income or building.
    - Through land value taxation, we can capture the rise in land value that naturally occurs when parks and green spaces are created - due to the increase in the surrounding property values.
    - This can then provide us with the revenue needed to pay for and establish more parks and green spaces and fund additional public amenities. (This policy recommendation was included in the Habitat 2 outcome agreement and in the policy papers for Habitat 3.
  7. Involve those who will be using the green spaces in their planning.
    - Create events where people who live near the site or planned site of the green/public space can provide their input.

8. Develop more ways to live life in harmony with Nature and all life sharing the planet with us. Even small acts can produce visible results.
- Actions taken today will determine how life is experienced in the future. It is how one responds to the challenges presented that allows them to build the strength necessary to continue and to implement the wisdom gained.
  - It is the key element to creating a nurturing, respectful world. Nature is not elitist, it is here for everyone. All humans of all walks of life need to be nurtured by Nature, need to feel that grounding and be reminded that they are loved and can love too.

### **11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning**

In Nature everything is integrally interconnected via the Earth System. In human society the same is true. Currently, to move people and goods, we rely mainly on lengthy transport systems that are costly in fuel, and to the environment. By importing goods and services over long distances, we often mask unsustainable practices.

Sustainability will depend much on the degree to which people are able to meet their needs locally. Positive economic, social and environmental links can be made by connecting urban, peri-urban and rural areas.

This can be done through a system of rewards and penalties levied on the use of air, energy, water —fresh and from the sea, soils and biodiversity, the electromagnetic spectrum, by individual people in each locality, using for example one or more of the following practices.

- By levying Land Value Capture contributions for the use of natural resources to replace tax on labour. (See above 11.7).
- Through Pigouvian taxes whereby the Earth's capacity to recycle becomes the norm and any harm to the Earth System is highly penalized while the person/company that has done the damage is required to restore that part of the Earth System to its original state.
- By requiring people to pay if they use more than their global footprint of natural resources (see above) and providing them with bonuses where they enhance it.

Each of these ways would provide financing to build the required connections between urban, peri-urban and rural areas, encourage people to work because

taxes on labour might no longer be necessary, and perhaps even grant people a basic income to institute more sustainable practices.

There are many ways that the connections between these types of areas and communities can help them to become much more sustainable and it has to be a part of the planning process that each individual community or region goes through at the same time.

For example, biological waste processes probably need to be carried out in peri-urban areas and access to clean water come from nearby and in some cases even further away rural areas; food production would come primarily from rural areas.

Only when the building of transportation systems to connect cities, peri-urban and rural areas in the same vicinity goes hand in hand with sustainable development of these areas, is it possible to ensure these do not mask unsustainable practices.

**11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels**

### ***The environment as a part of a universal process***

Since the Big Bang, the Universe has been diversifying into a wide range of matter and life, including plants, animals and human beings; with the globalization process now unfolding, humans are developing from separate people(s) increasingly into a global whole.

Globalization is an integral part of this universal process, following its own immutable laws and timing that continue to be enacted since before humans developed their own concept of time. Universal timing will therefore always play a role in the enactment of our human goals, even though human beings might not recognize this. For that reason, it is essential that we continue with patience and keep seeding our highest vision of the world we seek and remember that what we might see as a setback can be a part of how the larger Universe works. A positive attitude is extremely important: that we give ourselves credit for what we have achieved and proceed with a sense of gratitude for all that is good.

### ***Integrated policies and plans***

As a part of the National Sustainable Development Strategies, each community,

city or village should develop a high-level assessment of its green spaces, weak/vulnerable areas (for instance slums, dangerous areas), energy uses, energy sources, resource efficiency, resilience to disasters, and climate change indicators and prevention. Here Geographic Information Systems to which all people are linked can be a powerful tool for real-time planning.

Communities, too, can be evaluated with regard to overall “health and wellness” focusing on areas where change is needed and the degree to which they collaborate with neighboring communities that impact them. Indicators of community wellness are based on a foundation of living in harmony with the natural environment in which a community exists. Where communities are in harmony with Nature there is wellness.

Worldwide sharing and cooperation on technology and ideas for quickly transforming all communities to vibrant sustainable dynamic centers will actually lift the spirits of people and create a sense of aliveness and appreciation. Especially when all voices from all countries are valued. When people come together in these ways to urgently transform living situations it is truly inspiring what can be accomplished in a very small amount of time. Here universal access to the Internet can be a powerful factor.

Where people agree on the absolute necessity to make the required change and use as many means at their disposal as possible, including the fast growing collaborative economy based on sharing, and tools such as the Geographic Information System (GIS) and the Internet; and do this in harmony with universal timing, we can transform our communities by 2030.

### ***Resilience in the face of disasters and climate change***

Disasters happen where human beings are at loggerheads with Nature. Since Nature will inevitably win in any head-on conflict, it is up to us to find ways of mitigating disasters by reestablishing a cooperative partnership with Nature based on Nature's terms. Inclusion is a basic principle of Nature as is resource efficiency. For this reason, these two principles are intimately linked with disaster mitigation.

During disasters human infrastructure tends to fall away; people in key positions can become unavailable due to overload, accidents or other unforeseen circumstances. What remains is the natural working relationship and bonds among “ordinary” people (and it helps to develop these before disasters happen;) and the systems of Nature that are still available—for instance, sunlight for warmth and cooking, including for boiling water; vegetation, stones and soil to provide HABITAT and protection from the elements.

### ***Proposed Actions***

Following are examples of the actions needed to counter the effects of disasters.

1. Restore the natural environment to create buffer zones around built communities; move people, buildings, and infrastructure out of hazardous areas; and develop resiliency through regenerative practices.
2. Limit the use of and protect people and the natural environment from coming in contact with toxic substances so as to limit the damage that can come from "natural" disasters.
3. Get all citizens involved in giving their ideas on all aspects of disaster planning that affects them. Ensure that societies are inclusive and foster collaborative relationships among all inhabitants.
4. Provide education to build inclusiveness, collaboration and cooperative decision-making. This can make use of know-how already inherent in cooperative and commons enterprises.
5. Build disaster preparedness teams that are trained in working with Nature, life and Earth's Systems, and preferably also are experienced Nature communicators.

### **11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials**

A city is like a human being: All parts are important and need attention. If we consider all the countries as organs in a larger being—the planet, for instance—we recognize that paying attention to the countries that could use the most assistance helps all nations, particularly if we make use of the ingenuity of people from every nation to develop innovative, sustainable constructions that proudly express the culture of the people and align with Nature.

When insight is shared from one country to another in a program of exchange, each culture of people is honored for its unique wisdom, and all nations are benefitted. In this way nations collaborate on behalf of the highest good for life on the planet and humans live in harmony with Nature.

A typical development model involves sending people from industrialized countries to developing countries to participate in “hands-on” work. In fact, all nations are leaders in their own way and industrialized nations have much to learn

from developing nations as well. So those coming from developed countries should be prepared to learn just as much as those they are coming to help. The same is true with North/South cooperation where it is imperative that we all endeavor to learn from one another.

The same might be true when it comes to constructing resilient buildings from local materials. Where people live closer to Nature without great influence from the technologically advanced world, they tend to build using local materials and architecture that is well adapted to protect from heat and cold.

Such cultures often have expertise in building low-tech, resilient and sustainable housing that can be adapted to high tech societies, where building is often automatically associated with expensive high-tech heating and cooling systems that cost much to operate and are often damaging to the environment.

Institutions of higher learning, such as MIT, are already involved in bringing low-tech solutions from developing countries to industrialized countries.

Development practices that have been copied from the developed world and that make extensive use of unsustainable approaches and materials should be replaced by more sustainable processes and practices that are already being developed in both the developing and developed world and that often borrow from indigenous cultures and experiences.

When we appreciate the opportunity to learn from and collaborate with others on behalf of the best outcomes for all, we can make a significant difference even where small development steps are taken because compassion for others is one of our most powerful tools.

