



APPENDIXES

of the report of the brainstorming meeting
Positive Visions for Biodiversity



Appendixes

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Appendix 1: Vision Themes Discussion

Emerging Vision ideas:

- o Shift in our social organization based on new values - «to be more, not have more»- solidarity, equity at all levels - slow down
- o Landscape organized as a living environment - space for nature - including green cities
- o Decreased population
- o Technology is more green, design inspired by nature
- o Energy based on renewables, incl for transportation
- o Strong local focus - food production, local living
- o Efficient use of resources - consumption patterns have shifted - recycling, less waste
- o Biodiversity is integrated into every part of our lives - education, art, economics

Shift in social organization based on new values : Better adapted local and global governance based on:

- New, biodiversity-sensitive values
- Local decisions, participatory democracy, empowered local communities
- Develop incentives to live close to workplace
- Strong leadership, courageous politicians
- Green government
- Equity, transparency, solidarity as guiding principles
- Finding new ways for stakeholders to interact
- UN system taken more seriously

Landscape organized as a living environment - space for nature, including green cities

- Segregation: people into (mega-)cities to keep space for nature
- Back to nature and rurality: e.g. small farms, stopp urban sprawl, decentralization, deurbanization
- Harmonization between rural and urban areas
- Landscape management: living environment; productive, complex, diverse; incl. aesthetics
- Creation and reconstruction of landscapes
- Green Cities1: biodiversity in cities, cities as living environment;
- Green Cities2: urban planning, modern architecture, green roofs, plants and biodiversity in cities
- Corridors to connect not only habitats but also to connect people with nature

Decreased population

- There are fewer humans on the planet
- «but how?»
- «good family planning»
- «better education»

Technology is more green, design inspired by nature

- «High-tech to build a low-tech world»
- The inspiration for technology and design comes from the way organisms organize themselves
- Production processes are based on circular flows of energy, waste, resources («closed systems», «cradle to cradle», turning waste into energy)
- Technological solutions and values shift need to go hand in hand
- Using nature's capabilities as a model for technology design
- Relying more on nature than on technology

Energy based on renewables, incl. for transportation

- Clean energy sources for developing countries
- Economic incentives for the development of technologies for renewable energy and for increased energy efficiency
- Management of energy consumption
- Reduced reliance on fossil fuels
- Novel transportation systems: more public transportation
- Less travel - increased use of communication systems, teleworking or living close to workplace

Strong local focus - food production, local living

- More food produced locally (and organically)
- Increased diversity in agriculture and food production
- Economic incentives for local food production
- Increased focus on «slow food»

Efficient use of resources

- Only create and develop efficient and effective useful products, including re-usable products
- Consumption, waste, land use, sustainable energy
 - address overconsumption by reducing media stimuli for consumption
 - from less waste to no waste; e.g. packaging innovation and new technology to reduce waste
 - overexploitation of land base
- Develop new economic systems with increased efficiency not focused on profit.
- Develop economies based on a respect for nature
- Learn from historical best practices

Biodiversity is integrated into every part of our lives

- Policy, governance and the economic system support integration
- Integration of biodiversity should be linked to (human) cultural diversity
- Integration is promoted by increased education (as part of life-long learning and including «learning from nature», traditional and local knowledge), communication and public awareness, including innovative use of advertising and the media, including local indicators of biodiversity
- Art and photography provide inspiration for action on biodiversity
- Integration developed in all sectors including tourism, health and business
- Mainstream biodiversity in all relevant scientific disciplines

Appendix 2: Refining the Vision Theme Titles

Better organized local and global governance

- 1/ Build the 21st Century institutions to address 21st Century challenges that can deliver sustainability as their core focus
- 2/ More effective, transparent local and global governance. Governance for people and the planet
- 3/ Mainstreaming biodiversity in local and global governance

Land and Seascape organized as a living environment

- 1/ Sustainable and participatory management of land and seascapes and urban planning
- 2/ Enhanced plans for development of land and seascapes for humans and nature

Sustainable human population

- 1/ Suggestion: «A Human Population Increasing Biodiversity»

Remark: Our first and main important goal about freedom to choose to procreate has not appeared. Our team would see very positively that this oversight is corrected.

Technology is more green, design inspired by nature

- 1/ Tomorrow's technology is used to enhance and protect biodiversity

Energy based on renewables, including transportation

- 1/ «Biodiversity-friendly energy» (biofuels do not qualify)
- 2/ Sustainable renewable energy and transportation, respecting biodiversity

Sustainable food production

- 1/ Knowledge on food production is open source with no intellectual property rights on platform technologies

Efficient use of resources - consumption patterns have shifted - recycling, less waste

- 1/ Biodiversity-friendly production and consumption
- 2/ Conserving biodiversity by sustainable and equitable use of natural resources based on responsible production and consumption
- 3/ Or production and consumption within limits of biodiversity

Biodiversity is integrated into every part of our lives - education, art, economics

- 1/ No more comment

Shifting the Economic Paradigm

- 1/ Transforming the Economic paradigm to more fully reflect biodiversity and human values
- 2/ Economical paradigm focuses on sustainability by including biological and cultural diversity
- 3/ Non monetary economies

Lifestyle & Human values: To be more, not have more

- 1/ Culture, Values and Lifestyle: BE more, and be happy to have less

Appendix 3: Prioritized Goals

The following goals are presented in order of priority:

1. Governance that is more transparent, effective and balances global and local responsibilities	% of Votes
Biodiversity-relevant policies are coordinated at the level that is relevant for the issue and compliance is strictly enforced by independent legal bodies - biodiversity is considered in every decision taken at every level.	20
Sustainability is the core business of governments/ governance e.g. world trade and finance has been dramatically changed.	19
Biodiversity loss is considered as a matter of global security by the UN by 2020.	14
Government institutions take into account interests of relevant stakeholder in a transparent way and limit influence of corporations on legal system.	13
Encourage innovation in sustainable living and safeguarding biodiversity by enabling free thinking, adapting regulation and establishing 'nursery' spaces to experiment.	10
UN Conventions have been strengthened and enforced by 2020.	7
21st century institutions are organized as cross-level networks based on shared values and beliefs.	6
The main institution is the Earth wisdom council.	5
Institutions focus on equity.	3
Institutions deliver peace as precondition for living sustainably with other living beings.	3

2. Sustainable and participatory management of land, seascapes and urban areas	% of Votes
90% of the human population lives in Green Cities (self-sustainable in transport, architecture, infrastructure, water, waste), maximum population depends on the local environment, with measured urban agriculture integration (covering at least 30% of the city).	22
Seascapes and landscapes have been developed to allow natural dynamics to take place.	16
Larger ecosystem areas (x %) is protected including pre-informed consent from indigenous communities, including their cultures and traditional knowledge.	16
A net increase in biodiversity has been achieved.	11
Every new building has sustainable architecture and construction, to create chances for local species.	10
Natural corridors are at the centre of planning.	8
Landscape management that facilitates agriculture, e.g. pollinators, natural enemies.	8
Opportunities for people to live outside towns in order to reduce the ecological footprint have been enhanced.	8

3. A sustainable human population	% of Votes
People are informed and educated about the link between population, resource consumption, and their impact on biodiversity.	27
Good universal family planning practices have been adopted, with empowerment of women through free education everywhere.	26
People do not depend on large family size any longer.	14
There is an accepted indicator for sustainable human population size.	9
There are no wars, no pandemics, no involuntary human sterilisation.	8
Population issues have advertising and education budgets comparable to the biggest corporations.	7
There is a global system for credits that rewards good family planning.	5

4. High technology that is used to build a low-tech world that enhances and protects biodiversity	% of Votes
All technologies are clean and based on sustainable use of natural resources and good recycling practices.	24
Producers are life-long responsible for their waste (i.e., waste management is part of any business plan).	23
Worldwide, technologies are only allowed if they are culturally, socially and environmentally appropriate, and take into account ecological, social, and cultural costs.	21
Energy efficiency is the key criterion for all technology, including (renewable) energy production.	15
Innovation of technology allows humanity to satisfy its resource needs on the land area that was available in 1950.	10
All high-tech innovations (including from military research) with potential benefit for society and biodiversity are allowed into civil use.	5

5. Sustainable renewable energy and transportation	% of Votes
Global energy consumption is reduced to the level that can be provided by renewable energy sources (wind, solar, local, tidal).	24
Maintenance of biodiversity is a major criterion in selecting renewable energy - the entire life cycle should be considered.	21
All people enjoy equal access to the resources, research technology and training to produce and use renewable energy.	15
Each individual has a quota of (sustainable) energy to use.	10
Half the homes are powered by home-generated, renewable energy.	9
There is a tenfold increase in the budget for research on renewable, clean energies.	6
Transportation has less impact on nature and is more efficient.	5
Solar energy panels are widely used as road surfaces.	4
Bicycles are used for 80% of travel.	4
High speed trains are developed and include bridges to avoid ecofragmentation.	3

6. Sustainable food production, using minimum energy and resources	% of Votes
Food production applies the ecosystem approach, guaranteeing the maintenance of landscapes that function to conserve biodiversity.	29
Consumers are fully aware of how food is produced and what effect its production has on the environment/biodiversity (the ecological footprint): they select food based on these factors rather than on price alone.	18
The sea is harvested within the limits of marine ecosystems and damaged marine environments have been restored.	16
The entire human population has enough food of high quality.	10
Incentives have been introduced to favour local producers and varieties.	9
50% of all meals are vegetarian.	6
Food production creates zero waste.	4
People are encouraged to cook well as part of their culture, thereby increasing human health.	4
A fair price is ensured for natural components and methods of food production.	3

7. Efficient use of resources through responsible production and consumption, recycling and eliminating waste	% of Votes
All renewable biological resources (e.g. fisheries, forestry, agricultural land) are managed and utilised only within safe ecological limits as to maintain natural system productivity.	25
Product-labeling is obligatory: everyone knows where the products they use come from, how they were produced and what impact they have had on biodiversity. Every product must include lifecycle analysis and cradle-to-cradle cycles. Advertising that encourages consumption is prohibited.	21
Throw away products or planned obsolescence are ended. Products are designed with a maximum life span to minimize the materials used, achieve total recyclability, minimize waste and avoid adverse impacts on biodiversity.	20
Concrete targets are achieved: All new buildings are zero energy houses. 95% of all products are recycable. 90% of all resources are renewable resources. 75 % of new urban developments are in brownfields.	13
Education and research for good and sustainable design is included in primary and secondary education.	13
Green accounting is everywhere.	8

8. The integration of biodiversity into every part of life	% of Votes
There is awareness of the value of biodiversity in our daily lives including the value of food on our plate, leisure, clothing and shelter.	31
People are provided with incentives to opt for environmentally friendly solutions.	20
Every human being is provided with the means for understanding the drama of what biodiversity is, and why it is essential to sustain the human species and to maintain our quality of life.	18
A culture of cooperation exists among humans and between humans and other living beings.	17
Biodiversity has UNESCO cultural status, on a par with built monuments/national parks/art.	12

9. Transforming the economic paradigm to fully reflect biodiversity and human values	% of Votes
Economic decisions incorporate realistic natural and social costs and benefits, using macroindicators as metrics for social and economic performance in e.g. health, biodiversity, sustainability, well-being.	36
All people, in particular children, are educated as responsible consumers and can calculate their ecological footprint.	24
Non-monetary economies favouring biodiversity conservation & local subsistence are strengthened e.g. with raw materials & energy as a key currency, or bartering.	22
Enforceable mechanisms to underpin sustainable development are in place.	16

10. Values and behaviors appropriate to a more harmonious way of life	% of Votes
Biodiversity, and value and respect for nature, are part of the formal curricula, including medical school curricula, and are taught based on a holistic approach at all educational levels, and as a result are an integral part of society.	24
All consumers to have access to detailed 'footprint' information on all products - biodiversity, water, carbon, fair trade - so informed choices can be made.	19
New performance indicators such as biodiversity and happiness indexes are implemented by 2050 so that human well-being has increased by 20% globally.	18
The dominant paradigm has become «Be more and be happy with having less».	18
Buying local helps local economies.	10
Research results on how to avoid destroying ourselves are widely disseminated and applied in education.	10

Appendix 4: All changes as presented during the Gallery walk

Changes are not listed in order of priority

THEME 1: Governance that is more transparent and effective and that balances global and local responsibilities

GOAL 1: Biodiversity policies are coordinated at the level that is relevant for the issue. Compliance is strictly enforced by legal/independent bodies.

- 1- There will be a legal UN biodiversity charter
- All countries will have signed up by 2050
- This will include over arching principles everyone must follow
- It will detail specific responsibilities for different stakeholders

Result : Biodiversity is common property that everyone has responsibility for. Ownership is forbidden. All people have voice, decision making is participatory.

Stakeholders : A bottom-up process in which local level stakeholders will feed up to regional councils. Regional councils are coordinators of all other bodies. They will consult the different levels.

Step 1 : Establish participatory development from all stakeholders at all levels.
Charter established by 2015.

2- Biodiversity is constituted at every level.

Following a global charter that will be a court of justice for environmental sustainability (inc. biodiversity)

Result : There will be a strict enforcement of laws and regulations to make sure biodiversity is protected and ecosystems restored through the charter responsibilities.

Stakeholders : Made up of Regional Council participants - includes international bodies - like the court ft Human Rights

Next step : It is part of the biodiversity charter and people must sign this first.

GOAL 2: Sustainability is at the core business of government and governance, e.g. world trade and finance.

1- Biodiversity impact assessment will be completed by all business or anyone impacting biodiversity in their actions. This will be a global regulation.

Result : By 2013 this biodiversity impact assessment will be used by Regional Councils to make decisions on actions and projects (from building a bridge, to making a highway)

Stakeholders : EU commission will propose this and regional councils will develop it as project leaders

Next step : Put a proposal forward to EU agenda

2- We will use all existing and future funds (structural, agricultural and national) to protect biodiversity and recreate ecosystems.

Result : Biodiversity and ecosystems will be a key priority for everyone. This will be achieved in the EU by 2013 and internationally 2025

Stakeholders :

- Business, science, universities and users
- Those that fall under the structure of users (business, government) and providers

Initial step : Put a proposal forward to get this onto EU agenda

THEME 2: Sustainable and participatory management of land, seascapes and urban areas

GOAL 1: 90% of the urban population lives in Green Cities.

1- Include both formal and practical education in the curriculum of all urban people on the benefit of ecosystem services and how best to use innovative techniques and technologies and the tools to make use of them. It should be implemented by 2015 and mainstream by 2020. This would be the responsibility of schools, citizens and policy makers. The first step would be to have demonstration sites and to have all new schools apply these elements.

2- Within the next 5 years, Use local knowledge to inform planning and legislation that facilitates and gives incentives to use innovative techniques that create space for biodiversity and enable the recycling of resources. This would be the responsibility of policy makers, civil society engagement, experts, corporations. The first step could be to have small scale pilot programmes in every city.

1- By 2025, Transform grey to green cities to have a more nature friendly food production with involvement of people. This would be the responsibility of Municipalities, citizens, schools and companies. The next step is to design and monitor these production systems, to identify spatial opportunities and to raise awareness and promote education.

1- By 2025, Reconcile agri/aqua culture with nature. Have an ecosystem based agri/aqua culture to maintain biodiversity, recycle nutrients, diversify produced varieties. The outcomes will be new cultural landscapes and an agriculture that creates opportunities for biodiversity. This involves consumers, farmers/fishermen, policy makers. The first step would be to have a legal framework to raise awareness and educate consumers.

GOAL 2: larger ecosystem areas (x %) is protected including pre-informed consent from indigenous communities, including their cultures and traditional knowledge

1- By 2020, Protect 20% of each coastal and marine ecosystem from human activities and strengthen sustainable management legislation for the rest to create corridors and support reproduction. This will be the responsibility of policy makers and Fishermen. The next step should be to stop subsidies and find alternative income sources for fishermen in protected areas.

2- From now to 2030: Remove the dichotomy between protected areas and human settlement. Soften the borders of protected areas to allow them to expand to create corridors and respond to climate change. Legislate to enable communities to benefit directly from biodiversity conservation. This would be the responsibility of policy makers and local communities. Important to consult with stakeholders who live on the borders of protected areas.

1- Participation of local and key actors for sustainable development

By 2030 have a governance which integrates and revitalizes local technology and knowledge & other types of technology and knowledge such as (Research, Management, companies...) to develop a common vision for development.

First step could be to develop a governance toolbox & pilot projects on involvement of local populations, involving experts to provoke and initiate discussion.

1- By 2040, Integrate ecosystem services in (peri)urban planning to increase contribution, role and links of ecosystem services to urban well-being (e.g. Quality of water, of Air, land-coasts interactions). This would be the responsibility of municipalities, academics, citizens, bio-engineers.

The first step would be to have a green master planning, to identify critical ecosystem services and to raise awareness.

THEME 3 : A sustainable Human Population

GOAL 1: People are informed and educated about the link between population, resource consumption and their impact on biodiversity.

1- Introduce free and mandatory primary and secondary education for boys and girls all countries
- by 2020

- governments (UN, national), NGOs and donors (pressure groups)

Result : Educated and empowered women make informed decisions regarding reproductive health (this will lead to less children)

Initial step : Develop educational programs related to population size, resource corruption and biodiversity impact

2- Use popular culture, fiction, mass media and role models to change the mentality regarding family size, birth control and human reproduction

- by 2015-2020

- artists, NGOs, UNESCO, media, social networks (internet)

Result : Increased awareness and change in attitude towards family planning

Initial step : Set up an initiative group with opinion leaders and fund raisers to start a worldwide campaign in 2015

GOAL 2: Good Universal family planning practices have been adapted, with empowerment of women through free education everywhere.

1- Introduce legislation on population management in all countries by 2020, based on internationally agreed indicators on what sustainable population is. This may include taxes or rewards as well as access to family planning methods

- by 2020

- governments + international bodies (UNFPA)

Result : reduction in family size in countries with high population growth.

Initial step : International conference on population growth (follow-up with religious, cultural and political leaders to agree on indicators)

2-To develop alternative systems of social security, and less labour-intensive agricultural practices in order to reduce the dependence on children/large families in developing countries.

- by 2020-2030

- governments, research development organizations

Result : reduced pressure to have large families and eventually reduced family size.

Initial step : Funded pilot projects in selected countries.

THEME 4: High technology that is used to build a low-tech world that enhances and protects biodiversity

1. Develop sustainable high technology using eco-system approach inspired by nature with indicators for pollution

Result : new design paradigm implement cradle to cradle from selling products to satisfying needs.

Stakeholders : entrepreneur, investors, authorities, researchers, consumers.

Timeframe : develop educational program, implement eco-approach in research, paradigm-shift in 10 years

2. Integrate biodiversity thinking, including bio-compatible technology, in all levels of education starting with elementary school and research.

Result : biodiversity thinking integrated in all curricula informed stakeholders

Stakeholders : education authorities, media, NGOs, unions, financial comity

- Tomorrow we start by approaching education authorities, communicate to starting entrepreneurs, within 3 years biodiversity thinking will be integrated in all system.

- Workforce to implement biodiversity in Wikipedia.

THEME 5 Sustainable renewable energy and transportation

GOAL 1: Global energy consumption is reduced to the level that can be provided by renewable energy

1- Accounting system in place to reflect real environmental and social costs + benefits of energy production + use

Stakeholders : national policy + law

Initial step : Effective carbon pricing accountancy system in place by 2020.

2- Achieve a 100% of renewable energy by 2050 at least at EU level

Stakeholders : EU, industry

Initial step : Developing Super-Grid by 2030 in EU, 2040 beyond EU

GOAL 2: 2. Maintenance of biodiversity is a major criterion in selecting renewable energy - the entire life cycle should be considered

1- Develop standard Life-Cycle-Assessment methodologies (including Cost-Benefits-Analyses) which incorporate biodiversity considerations by 2015

Stakeholders : research to develop, governments to legislate, industry to adapt

Initial step : Funding according research

2- Develop metrics to assess the selective impacts on biodiversity of climate change and renewable energy technologies and production in order to identify trade-offs (including short VS long term issues)

Stakeholders : research and legislation

Initial step : Initial research until 2015, implementation afterwards

THEME 6: Sustainable food production, using minimum energy and resources

GOAL 1: Food production applies the ecosystem approach, guaranteeing the maintenance of landscapes that function to conserve biodiversity

1- All food policies in Europe should support the promotion of biodiversity. Outcome: an increase of key biodiversity indicators.

Stakeholders: Farmers, fishers, food manufacturers, general community

2- Reduce the reliance of use of fossil fuels. Implement agreement that production systems should all be low impact. Reduce aquaculture's dependency upon fish oil and fish meat. Food policies in Europe should not allow to "export" issues to other parts of the world.

3- Land planning ensures that there is no negative impact on overall biodiversity. (e.g. keep productive land in food production) (6)

Outcome: sufficient land available for food production

Stakeholders: communities

Initial step: Engage with planning of multi-actors/politicians at local, regional and country level.

1- In 20 years, all agriculture and apiculture will be sustainable (organic, permaculture, integrated agriculture etc.)

Step 1 : Develop research on how to improve the effectiveness of these production systems

(including comparison to conventional agriculture)

Step 2 : Change Common Agriculture Policy to implement good sustainable practices (less energy, no synthetic pesticides, less water, etc.)

Step 3 : Regulate food importation in order to promote sustainable food production

1- The harvesting of wild stocks and products (fish, berries, herbs, grains) is made sustainable by 2015 :

-Overuse is stopped

-Genetic resources are conserved

-Use of non-used products is promoted

Step 1 : Each country set up stock assessment of harvested species. To set up an international and national legal framework.

Step 2 : To develop education in harvesting

1- Food prices reflect their environmental costs (e.g. Carbon, biodiversity impacts) by 2020

First step: assess the economic costs of the whole production process including social and environmental costs.

Set up legislation and implement it

GOAL 2: Consumers are fully aware of how food is produced and what effect its production has on the environment/ biodiversity (the ecological footprint): they select food based on these factors rather than on price alone

1- All food products have labelling which correctly inform consumers about where the food comes from, how it is produced, and environmental performance indicators that would be harmonized across countries.

Outcome: people trust labelling, there is transparency in production and processing.

Stakeholders: consumers, scientists, manufacturers, retailers

Initial step: Establish standardized environmental performance indicators, implement in a way that is usable (using modern technology, apps etc.)

2- By 2050 consumers only buy food when they understand the environmental impact.

Outcome: sustainable food system, health and well being is positively impacted, reduction in price of currently expensive food (whole foods, fresh food, organics)

People will eat more fresh fruits and vegetables so there is an increase in overall health.

Stakeholders: consumers, governments/elected authorities, retailers/manufacturers

Initial step: Labelling create peer pressure.

1- Every citizen produces at least 1% of their food by 2015

Step 1 : Every school class has "vegetable box" in order to educate pupils

Step 2 : Each building is equipped to support boxes and hanging gardens

Step 3 : To plant fruit trees instead of only ornamental trees

Step 4 : Every family (or constitution) has 2 chicken roofs.

THEME 7: Efficient use of resources through responsible production and consumption, recycling and eliminating waste

GOAL 1: All renewable biological resources are managed and utilised only within safe ecological limits as to maintain natural system productivity.

1- Within the next 2 years every town and city has a central biodiversity information hub with an education & action plan.

2- In 2011, the pilot for BIODIVERSITY FACTOR airs to millions worldwide. The media accurately portray an account of technologies & action that harm biodiversity. The public votes for which to ban in their country

1- All producers are 100% responsible for managing their waste.

2- Create an independently funded governmental regulatory body to enforce legislation aiming for a sustainable industry (fisheries, forestry, agriculture...)

GOAL 2: Product-labeling is obligatory: everyone knows where the products they use come from, how they were produced and what impact they have had on biodiversity. Every product must include lifecycle analysis and cradle-to-cradle cycles.

1- Promote and implement a common standardized scale of green eco-labelling for products and services

2- All retail companies must prominently display a product report written by a consumer association appointed eco-consultant

Both GOAL 1 & 2:

Major media campaigns to educate and inform the public

By 2015 create an additional core curriculum subject on biodiversity and sustainability to sit alongside literacy and numeracy and runs through to secondary level and beyond

THEME 8: Integration of Biodiversity into every part of life

GOAL 1: There is awareness of the value of biodiversity in our daily lives including the value of food on our plate, leisure, clothing and shelter.

1- Young people lead and catalyse changes in the decision-making process.

Stakeholders : young-makers, policy-makers, business

Initial step (short term) : a worldwide campaign led by young people inspires their generation to make a real change for biodiversity.

2- Education is discovery-based and experiential. It inspires and prepares students to understand biodiversity and make it part of their lifestyle.

Stakeholders : young generation, education professionals, policy makers, parents

Initial step: every school spends 20% of their curricula outdoors (short-term)

The education system fosters grass-roots innovation by young people (short-term)

1- develop new means and support of communication to raise interest, awareness and ownership of the sense of biodiversity in our daily lives.

Stakeholders : artists, civil society, scientists, communicators, media-world, educators.

First Steps : every country brings together representatives from different audiences in open forums to prepare programs and plans of action, including educational programs on biodiversity for schools, etc.

2. Start now to effectively support and sustain projects that allow transmission of traditional and cultural knowledge on biodiversity at all levels.

Stakeholders : media, journalists, educators, researchers, governments, NGOs, communities, families

Initial steps : participatory process, access to media and information, adaptation of student training programs

Examples : sustainable tourism, eco-travels for schools, eco-buildings, gardening at school, eco-clothing

GOAL 2: People are provided with incentives to opt for environmentally friendly solutions.

1- Rewarding biodiversity-friendly behavior by increasing social benefits.

Stakeholders : consumers, health sector, insurance sector, policy makers

Initial steps : Environmental liability is reflected in personal insurance premiums and benefits, and environmental responsibility rewarded fiscally.

2- Encouraging biodiversity-focused business development through economic and social incentives.

Stakeholders: business, policy-makers, consumers

Initial step : set up and promote mechanisms to encourage biodiversity - focused start ups

A worldwide campaign to share success stories of green business visible to the world

3- The price of a product reflects faithfully its social and environmental footprint.

Stakeholders : consumers, producers, business, policy-makers

Initial step : Eco-labeling systems become transparent, gradual(instead of qualitative) and adaptive (i.e. regulations are updated)

THEME 9: Transforming the economic paradigm to reflect fully biodiversity and human values

GOAL 1: Economic decisions incorporate realistic natural and social costs and benefits, using macroindicators as metrics for social and economic performance in e.g. health, biodiversity, sustainability, and well-being.

- 1- Profits as means not as an end. Change the business model to move from profit to wealth creation (evaluation social + environmental costs)
- 2- Change accountings and reporting systems for business and nations to truly integrate social and environmental dimensions
- 3- Reintroduce ethics at the wealth of economic + business systems including regulation for more transparency and accountability

1- Equity in access to benefits from biodiversity involving sacrifice of current consumption –based lifestyles and redistribution to eliminate poverty. The stakeholders: scientists, politicians, media, local communities, artists, spiritual leaders, business leaders, marketing people, consumers, international organisations, NGOs.

First step by 2015: Create a body like IPCC in order to calculate impacts of biodiversity loss (financial and intrinsic) and mobilize international action.

By 2020 Assess and take into account biodiversity impact before any land changes. By 20?? Poverty elimination to avoid biodiversity exploitation because of survival needs..

2- Total Internalisation of costs/benefits into supply of goods and services involving life cycle approach and use of “ecosystem” thinking to ensure resilience of biodiversity in our ecosystems.

Results:

- integration of costs and benefits into business strategies
- long-term impacts on biodiversity included in business and public decisions
- use of Green DP rather than GDP
- Strengthened natural ecosystem capability of producing services

First steps:

adopt legislation nationally and at EU level by 2020 and internationally by 2030 to: change accounting rules to include all environmental and social costs/benefits (triple bottom line)

Establish consequences (penalties and rewards) including taxation and other economic instruments to ensure externalities are accounted for and paid for.

GOAL 3: Non-monetary economies favouring biodiversity conservation & local subsistence are strengthened e.g. with raw materials & energy as a key currency, or bartering.

1- Acknowledge the diversity of existing and potential non-monetary and/or local + alternative economies. Create space for different economic paradigms not only focused on growth, exploitation, accumulation.

2- Invest into more transdisciplinary research to bring economics into its broader context (e.g. natural, societal, etc.). Remain open to plurality of intellectual approaches

THEME 10 : Values and behaviors appropriate to a more harmonious way of life

GOAL 1: Biodiversity, and value and respect for nature, are part of the formal curricula, including medical school curricula, and are taught based on a holistic approach at all educational levels, and as a result are an integral part of society.

1- Awareness raising (head) and creating emotional connections (heart) through education.

Formal education:

Incorporate this in all formal curricula from kindergarten over university to life long learning by 2015. Role for UN ?

Informal education:

- strengthen traditional knowledge
- all wisdom built during 1000 years on sustainable living
- participatory theater
- popular radio, soaps, etc.

2-Awareness raising (head) and creating emotional connections (heart) through

Exposing people to nature :

- attention to harmful tourism
- focus on local nature experiences

3- Awareness raising (head) and creating emotional connections (heart) through corporate level :

- Create partnerships between business and organizations
- Try to find support in business
- Focus and strengthen green economy
- Partnership between business and governments, also on local levels
- Promote biodiversity towards local authorities.

4- Awareness raising (head) and creating emotional connections (heart) through media :

- advertisement : stop the promotion of consumerism, especially with regard to children and health (food and medicine)
- stimulate relevant, correct information on Biodiversity and ecosystems
- public media : impose info ethics, biodiversity
- ombudsman who checks info and signals unethical practices, supported by independent scientists
- subsidize and stimulate good documentaries

5- Awareness raising (head) and creating emotional connections (heart) through policies :

- rights of nature are included in constitutions of all nations, for example, constitution in Ecuador by 2020
- guarantee legal enforcement of these rights through class actions, national and international sanctions by 2020
- reinforce organizations, for example, Global Alliance and Rights of Nature by 2011 -> provide resources capacity building
- All policy choices in all areas should reflect and be coherent with biodiversity by 2015

6- Awareness raising (head) and creating emotional connections (heart) through art /artists by :

- providing resources (financial, logistic, intellectual, education, ...) for artists related to biodiversity
- touch the heart of artists, for example, by offering nature experiences such as residencies in nature areas, within NGO, tribe, ...
- contest

1. We need to identify a minimal common ground of values

Change #1 : Some aspects of value system :

- Balance intrinsic and anthropocentric value
- Build environmental knowledge for old, shamanistic knowledge systems all the way up to high tech environmental knowledge
- Make use of peasant culture (beliefs + behavior)
- Rediscover the environment nearby local

- Consider the power of sacred and the ritualization of nature
- New paradigm of environmental logic and cosmology
- Decision making delegated to children.

2. Changes in behavior/life style

Change #2 :

- Reduce consumption of meat
- Reduce production of industrialized meat
- Reduce consumption
- Naked food: no/kss packaging + reuse
- Locally : go to nature, be in contact
- Better balance between religious and scientific beliefs

3. Practical : how, where ?

Change #3 :

- Get into educational networks : teach value system ; 50% learning outdoors ; small gardening
- We have IPCC (international panel on climate change), we need international panels on oceans, fresh water, air pollution, depletion of resources
- Get into field of advertisement and change the message!
- Exchange: spaces where people meet to discuss, make use of social networks.
- Step into religious networks
- Step into civil society networks

1- Change your heart !

Connect with your nature inside! Discover life close to you!

Feel your interconnectedness, look at your fears, listen to your spirits, nurture your love for nature!

Result : We feel we are part of nature !

Stakeholders : Everyone ! Me !

Initial step : Do it now! Here !

Trick 1 : Kiss your hand, it's nature !

Trick 2 : Ask for help!

2- Change our institutions !

Results :

- Biodiversity is at the top of the agendas of governments + UN
- Value of biodiversity is visible and respected in national accounting systems, all sectors including business
- Biodiversity integrated in development strategies + programs (including poverty alleviation strategies). Green Political economy
- Guardians for biodiversity ?

Stakeholders : governments, policy-makers, CEOs, researchers, key influencers (media, opinion leaders, ...)

Initial step: do it (implement CBD COP decision/ nagoya) ; develop right indicators of success

We need our institutions to reflect what we value back to us! And our governments have to mean it (a piece of paper without power can be worse than nothing).

1- Change Teaching ! Let nature teach you !

All students need to spend part of their time in education immersed in biodiversity.

Trick: Everyone should have access to a beautiful natural place at least once a year.

Result : Awareness, responsibility, willingness to act

Stakeholders : teachers, educators, artists

Initial step : identify and promote existing best practices

2- Change your way of life

Garden in your place and garden in yourself !

Understand impacts of your consumption!

Make nature fashionable !

Let nature take control !

Results : we live green! we lower strongly our negative impacts on nature! consume less (in the West)

Stakeholders : Individuals and groups united with lifestyle mates pushing for support from governments and business leaders.

Initial step: Diversity scores you, accept it!

Trick 1 : Lie down on the grass

Trick 2: Walk barefoot into a dark forest

1- Result : Global populations mindset has changed by 2020 in a way that modesty and self-awareness are rewarded with respect, i.e. less is more.

Steps : Awaken collective actions, e.g. by use of social networks and media

Stakeholders : Every single person, educators, opinion-leaders and sociologists

2- Result : All formal curricula should include learning how to act as a global responsible citizen

Steps : Reformulate all curricula levels and guarantee access to education for all citizens

Stakeholders : Politicians, educators, policy makers, all citizens

GOAL2: All people have access to detailed 'footprint' information on all products - biodiversity, water, carbon, and fair trade - so informed choices can be made.

1- Result : Markets and commerce work under ethics and transparency by 2015

Steps : Change market rules, i.e. legislation

Stakeholders : Industry, commerce and final consumers

2- Result: Everybody has affordable access to products, which have a low footprint and are under fair trade and people refrain from buying products that do not meet standards of low footprint

Steps : Change consumers behaviors, provide information, public petitions calling for access

Stakeholders : the European commission, national governments, WTO, media, NGOs, final consumers

Appendix 5: Meeting Evaluation

Polling results on the meeting Evaluation:

On a scale of 1-5, what is your level of satisfaction with the conversations at your table? (multiple choice)

Responses	(%)
Very low	0%
Low	2,48%
Neutral / Not sure	16,53%
High	45,45%
Very High	35,54%

On a scale of 1-5, what is your level of satisfaction with the use of computer and polling technology? (multiple choice)

Responses	(%)
Very low	5,93%
Low	7,63%
Neutral / Not sure	9,32%
High	41,53%
Very High	35,59%

Evaluation forms summary:

	Day 1		Day 2
Max total of voters	171		121
Number of returned forms	144		93
Number of forms satisfied globally	127		83
Number of forms unsatisfied globally	17		10
Main things that were best appreciated (answers/comments, several can be cited in one form)	Number of times it was cited		Number of times it was cited
Table Discussions/Brainstorming/diversity of participants	85	Friendly and interesting discussions at the table	48
Dreaming of the future	25	Very good scope of experts present/ Diversity of views/enthusiasm of people	43
voting/quick results	19	Innovative method/Technology, voting for reaching consensus	14
Discussion on Goals: more specific	16	the outcomes	9
Martin Sharman's Presentation	11	Working on concrete actions	3
Develop a vision with common themes and common interests	8	Galery Walk	3
Theming results	3	Good facilitation	2
Breaks	2	Fast dissemination of the results	1

Quiz	1	Brochure Branding Biodiversity Futerra	1
		Horst Korn words (reference to heart and not just head)	1
		Theme team work	1
		Writing changes together	1
		Transparency of communication	1

Main things that were least appreciated (answers/ comments, several can be cited in one form)	Number of times it was cited		Number of times it was cited
Themes/Theming: lowest common denominator, lost of innovative ideas, not enough visionary	43	Not enough time for discussion/Less work on slogans or voting	17
not enough discussion time/Too much voting	32	Gallery Walk/Green dot voting	15
No possibility to work on preferred theme	24	Too general ideas, need more concrete proposals	9
voting sub-themes/goals	16	lead facilitation/too much interruption/too structured	9
Lead facilitation too talkative and/or dominant	13	Not enough related to emotions/hearts/ creative outputs	5
Overall methodology & outputs	10	More preparatory discussions/ expert presentations before the meeting/on other topics such as values	5
Pressure to approve themes and goals/ forced upon the group	8	Evaluation and personal commitments	5
Background information/numbers on specific topics/too general	7	Session on follow up activities was too long and sliced	4
Table facilitation	5	single ideas from discussions not reflected on the screen and in the top changes	3
Vision too generic	4	voting	3
representativity of participants	3	Not sharing enough with other tables	3
Music	3	Discussion not enough structured	2
Link with Biodiversity	3	Negative attitude of scientists/BD experts toward different views	2
Language issue	3	More information on follow up and who we are addressing	2
Dreaming	3	No reference to real biodiversity conservation issues: extinction of sp, GMOs	2
Table laptop reporter	3	More young people could be invited	1
Less American/more European	2	Preferred to not change table from the first day	1
Not enough realistic	2	Not enough emphasis on complicated painful issues (e.g. Human population growth)	1
Quiz	2	More visualisation for the concepts	1
real impact on decision makers possibility	1	More links to the results of COP10	1
		Not inspiring themes	1

Appendix 6: “Remarkables”

To complete the first day results, the «Theme team» went screened all data sets again at the end of the day to extract some of the most interesting “Gems”.

These should be taken as informative, and do not represent a consensus from participants. Statements are listed with the sequence number in which they were submitted (they can be found in the full record report available as pdf on our website). Thus 020 means that this was the 20th statement submitted.

Statements are grouped under headings for the ease of processing the information but other groupings could have been possible.

Some statements about “Responsibility”

020 Everyone will feel the ‘ownership’ of the world

459 We need to take personal responsibility and not rely on brands.

Some statements about “Energy”

041 the world is unplugged on a regular basis driving community interaction

600 more energy is harvested from human activities

Some statements about “Food and Agriculture”

088 agricultural systems which are build like rainforest, meaning more complex.

171 A lot more people will be involved in growing food, also as a spiritual activity, essential for life

360 we need to re-discover the delight of food production

380 FOOD: look into the eyes of what we eat, confront the existence of death = what attaches us to nature.

550 local food will be free as highly educated and consciousness people only eat what they need

566 in the West, we start to show that we can take 1/3 of our agricultural fields and make it nature

569 shared kitchens will be common

570 monoculture is extinct

646 permaculture rather than monoculture

Some statements about Values

303 be inspired by Japanese who value inner values rather than large physical space

303 children should be valued by the community rather than just the nuclear family

303 habitat - think about our footprint with our housing and cars; shift mentality of population

457 modesty in every aspect of life

549 Inspiration based society

567 security is fundamental: health, feeling guarantees for the future

Some statements about Attitudes

176 redefined wants versus needs - what we depend on and what we indulge in

191 Stop seeing nature as dangerous or something we need to control.

274 humans learn from insects behaviours to develop sustainable processes

484 solve the problem of «egology»

582 Should we try and be happy with less biodiversity?

625 the concept of private property will be rethought and perhaps overcome

Some statements about Spirituality

- 118 we dance and admire and we know we are blessed
- 200 develop idea of PEACE... peace of nature includes peace with humans
- 229 We will learn to live life in a more spiritual way
- 297 idea of immortality and salvation is renounced in many religious teachings
- 303 * financial experts will become more spiritual
- 502 spiritual leaders can help integrate biodiversity into their messages

Some statements on “Visions of the world”

- 104 global discourse has to integrate non-occidental visions of nature.
- 182 it is natural to be respectful and aware that we are part of something bigger
- 199 artists are important to show how to live with less
- 220 natural ecosystems to be equally valued like cultural, artistic or scientific masterpieces
- 232 Having less change (i.e. sense of slow), we would be more comfortable.
- 348 arts hold weight against science
- 437 Biodiversity should be estimated in terms of «pleasure», not «utility», as it was in classical and romantic periods
- 480 Artists more involved in nature, they will change the design in our life, this will have mental influence
- 194 happiness depends on the sustainability of several different parts of the puzzle
- 524 Make your personal environment so interesting (nature and social environment) that people do not need to escape from their dull environment and travel a lot to nice places

Some statements about “Economy”

- 145 labour free of charge, any consumption of nature very costly
- 161 industry will no longer create useless needs just to increase revenue.
- 212 we live off the interest not the natural capital
- 228 Economy at the service of nature
- 303 * world that is more collaborative and stock markets will be extinct
- 322 Economy should become a motor for sustainability.
- 363 local currencies, no more central banks, profit not at the only motive of human occupation
- 388 TAX on natural resources

Some statements about “Society”

- 154 we're no longer divided in arbitrary political systems, but sustainable groups
- 228 No global mixing (biodiversity & people),
- 256 * local is key
- 303 * people are more connected and talk more to each other
- 462 Trust self-organizing processes in communities; we don't need political direction there

Some statements about “Water”

- 192 less and smarter use of water

Some statements about “Transport”

- 256 * international trade: stop all trade that isn't necessary and the rest is by sailing ships, zeppelins and other slow, silent technologies.
- 401 move traffic underground

Some statements about “Conservation”

- 302 A quarter of the earth's surface should be protected areas, both land and sea
- 635 all oceans and seas to be protected areas

Some statements on “Settlements and housing”

- 303 * let nature grow into our cities -
- 317 Invite nature into the cities - Hunt our food
- 325 Cities as providers of food and roof, incorporating biodiversity
- 489 as people live in smaller communities, there is less need for mobility
- 518 car free settlements with the legal and financial systems to make it possible
- 649 A brick house isn't a luxury, it is a crime

Some statements on “Human population”

- 346 control birth control

Some statements on “Education and communication”

- 349 Nobel prize for biodiversity, visibility of actions
- 393 Mexican flu made everyone fear for their lives, how can this be applied to biodiversity?
- 422 At biodiversity conference there will be no plastic bottles

Some “curiosities”

- 431 readjust our ideas of what is necessary. Natural systems provide light, heat and fertilizers, using synthesized versions is socially unacceptable and seems weird.
- 431 mixing of current technologies (computers) with biology - hybrid projects
- 431 future machines could be 'alive'
- 431 expand well beyond the earth; including seed banks stored on other planets
- 645 biodiversity will have changed and be based on virtual environments and only limited by our imagination

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