**GSP Civil Society Consultation Questions**

## *1. Context: assessing progress towards global sustainability*

### a) What is your objective assessment of progress (or regress) in the achievement of global sustainability over the past few decades?

It is nearly 20 years since the Rio Earth Summit in 1992, where both the biodiversity and climate change conventions were born. Yet despite numerous international commitments, meetings and activities that have led to small pockets of protection and progress, both biodiversity loss and climate change threaten our very existence. We are still a long way off from achieving global sustainability, and in many cases, the situation has worsened in the past decades, pushing our planet to the brink of no return.

When scientists are predicting that Earth is entering the sixth major extinction event in its history, it is impossible to argue that global sustainability has even been partially achieved. The current extinction rate of plant and animal species is around 1,000 times faster than it was in pre-human times – and this will increase to 10,000 times faster by 2050. Ancient forests are being wiped out, oceans are plundered to the point of no return, agricultural biodiversity is in meltdown from modern industrial farming, and in combination with the impacts of climate change we are causing irreversible damage to our planet and threaten food security for millions of people.

Take the world's fisheries as an example. The FAO estimates that more than 70% of the world's fisheries are fully exploited, overexploited or significantly deleted. Populations of top predators, a key indicator of ecosystem health, are disappearing at a frightening rate, and 90% of the large fish that many of us love to eat, such as tuna, swordfish, marlin, cod, halibut, skate, and flounder - have been fished out since large scale industrial fishing began in the 1950s

The CBD's Global Biodiversity Outlook 3 suggests that most future scenarios show continuing high levels of extinctions and loss of habitats throughout this century, with associated decline of some ecosystem services important to human well-being. The report is very clear on the need to protect ecosystem services, as well as the fact cumulative pressures are edging many ecosystems on both land and sea towards certain thresholds or tipping points, which if reached, will lead to massive biodiversity loss.

### b) Why have the three pillars of sustainable development (social, economic and environmental) not been better integrated into coherent policy making?

Since 1992, there has been a lot of talk about "balancing" social, economic and environmental needs. But without the environmental base, without the natural environment and the services it provides, there is no economy - nor any basis for livelihoods for the poor. It is high time that governments admit this. The talk of three pillars is meaningless, as society and economy are in fact a subset of the natural environment. We must go beyond the misleading "three pillar" analogy.

This is reflected in the strength of multilateral agreements. While the trade agreements are backed up by strong compliance regimes with sanctions, environmental agreements are not as

strong. Consequently, international environmental regulation is often treated as “optional” or “aspirational”.

One key reason why short-term economic gains for the few continues to overrule longer term social and environmental benefits for many, and why the compliance regimes of MEAs have remained weak is that corporate polluters have effectively undermined stringer regulation over the last twenty years. They are sabotaging environmental and social legislation on a national level and creating a race to the bottom by scaremongering, with loss of competitiveness in the absence of a global level playing field. At the same time, those same companies are doing their best to prevent strong global regulation. To illustrate, one has only to recall the WSSD agreement whereby governments agreed that binding global rules for business should be developed. Since then, no such rules have been developed (and the International Chamber of Commerce and others have continued to argue that they should not be).

One of the key problems associated with the lack of biodiversity protection and unsustainable natural resource use is that decisions continue to be made that do not take into account the value of natural capital. Short term economic gains trump long-term benefits of intact and healthy ecosystems. There is a lack of understanding of the huge economic returns that are to be had in investing in biodiversity protection, and there is little or no accountability for the impacts of the loss of nature. The cost of not acting now far outweighs the costs of acting. Therefore, a much better understanding and quantitative measurement of the value of biodiversity and ecosystem values and services are necessary to ensure that sound policy decisions are made.

As long as environmental externalities are not included in market transactions (i.e. as long as full-cost pricing practices are not integrated into policy making), sustainable development is not possible. To the extent that polluters do not pay environmental costs and consumers do not pay the full cost of what they purchase, resources will not be allocated efficiently.

The Economics of Ecosystems and Biodiversity (TEEB) report which was released last year highlighted the enormous economic value of forests, freshwater, soils, coral reefs etc, and the high social and economic costs of their loss. The failure of business to account for the value of natural capital, especially in sectors such as forestry, fisheries, mining and agriculture, poses huge risks for biodiversity.

The report made a number of recommendations, including one which was taken up in target 2 of the recently agreed 10 year Strategic Plan of the CBD, which calls on governments to ensure: “By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting system.” The effective implementation of this target will be key to ensuring more coherent policy making. Other key recommendations include ecosystem protection and implementing a global network of protected areas on land and sea.

**c) What do key contemporaneous factors (e.g. growing inequalities, chronic mass unemployment and underemployment, the global economic, food and climate crises, new geopolitical realities) imply in terms of both risks and opportunities for a “quantum leap” towards policy and institutional reforms for global sustainability?**

*Risks:* The multiple challenges the world is facing can and must be approached in a holistic manner. All of them can be substantially mitigated, but none of them can be solved - in a sustainable manner - in isolation. The risk is however, that the crises that are most tangible and visible get most attention and are treated as urgent challenges, while challenges that “can’t be televised”, such as biodiversity loss, climate change and ocean acidification, or that don’t have immediate implications on the lives of the wealthy, are de-prioritised or delayed.

The obvious risk posed by the factors listed above is a further and deeper division into winners and losers. In a developed nation like the US or most of Europe, agriculture is less than 5 percent of gross national product. These countries have technologies and other means to adapt their food production to the changing climate and they have money to buy more expensive food.

The risk of deepening divisions into rich and poor, or winners and losers, of course goes beyond national boundaries. As the middle classes in emerging economies grow bigger and pursue the same standard of living as the west, inequalities can increase. For example, the shift toward consumption of meat will raise food prices everywhere; because richer people eat more meat, the poor will have to pay more for their rice and bread. Deepening inequalities can thus increase tensions and conflicts within and between countries, which can lead to resources being wasted on fighting and rearmament, while they should be spent on preserving and restoring natural resources and securing their sustainable and more fair use.

*Opportunities:* The new geopolitical realities force governments, companies and individuals to face the limits to material growth and pollution. The world simply cannot physically cope with billions of people pursuing the Western style of severely harmful over-consumption. The words of Mahatma Gandhi are now more true than ever: "There is enough for everybody's need, but not enough for anybody's greed".

We are facing unprecedented challenges, but we are also equipped with unprecedented tools to tackle them. For example, we have the technology we need to switch to 100% renewables in our energy production. We have means of eco-farming which could double food production in poor countries within five to ten years. We have a success story from Brazil where tropical deforestation was cut by 75 % in just a few years and we have studies showing how a network of Marine Protected Areas could be implemented, with indisputable benefits.

The role of new social media cannot be underestimated as a forum that connects people in new ways across national borders and social groups, encourages new ways of networking and cooperation, empowers people to promote solutions and enables new ways of participation in decision-making. While the longer-term impacts of the uprisings in the Arab world are yet to be understood, it has been a good reminder that “quantum leaps” can happen, when enough people decide to catalyze change. It is also a good lesson of the fact that changes don’t always happen top-down, through traditional governance structures and established constituencies.

There are no silver bullet solutions and recipes to overcome the present multiple crises – financial, food, climate, energy. But solutions do exist and the challenges can be overcome. The key is to finally acknowledge that none of these problems can be solved in isolation. Myriads of steps need to be taken and pragmatically combined according to the large diversity of agro-ecological, social and cultural environments.

It is clear when assessing the different factors facing our planet today that the current system is not working. We are on a path that is pushing us further into economic, environmental and social instability. Business as usual is not an option. The time is ripe for a “quantum leap”, and we must take this opportunity to move swiftly to make those policy and institutional reforms that would address the global economic, food and climate crises.

Taking the necessary quantum leaps will require unprecedented leadership and commitment that exceeds election cycles. At a time of global economic crisis, it will mean governments, companies and consumers will have to take tough decisions on spending patterns and priorities. However, shifting financial flows from accelerating problems to catalyzing solutions is an essential investment, which will reap long-term and sustainable benefits, as noted in the UNEP report on the Green Economy.

## *2. Foundations for a new vision of sustainability*

**a) How would you define the new vision (or “paradigm shift”) required to transform economic development dynamics in a manner that simultaneously pursues the goals of poverty eradication, full and decent employment and reducing inequalities, while promoting social and environmental regeneration and sustainability?**

A paradigm shifts requires clear and tangible visions on what is possible. For example: If you cannot picture an energy system that runs almost fully with renewables, you will not be able to identify the structural changes and timely investments that need to take place already within the next decade, to enable reaching the long-term goal. The Energy [r]evolution reports done jointly with Greenpeace International and the European renewable energy industry association (EREC) outline how an energy system run by renewables would look like, and what are the timely investments and paradigm shifts needed to get there. Some governments (such as Denmark, Germany and Austria) or their appointed advisory bodies have already outlined 100 % renewables roadmaps for themselves.

In its Final Report, the Global Sustainability Panel should outline a vision for 100 % renewables energy supply (or highlight those presented by others), along with other visions for solutions and related pathways. In this context, it would be key to acknowledge what “paradigm shifts” mean when they are translated into timelines: In order to reach a goal in 2050, what needs to happen within the next five years (length of an election cycle), what needs to happen within the next 10 years (a period which we can still envisage in pretty much detail) and what are the changes that can wait a bit longer, or where we can assume developments that we can’t yet foresee.

As we approach Rio+20 we need to resurrect a notion of sustainability that fully respects ecological limits and makes the economy a mechanism to deliver our societal goals. The world is now focusing on what a green economy could look like, and what are the necessary changes needed to transition into a greener, more equitable, low carbon and resource efficient economy.

The recent UNEP report on the green economy outlines some possible pathways. It concludes that following the initial investments in transitioning to a green economy, the long term benefits are potentially huge. The transition to truly global sustainability will alleviate poverty, create new jobs that over time will exceed losses in the brown economy, protect the planet’s natural wealth, create greater food security, and actually produce a higher growth in GDP and GDP per capita. A key to achieve this shift would be redirection of subsidies: Investing just two per cent of global

GDP into ten key sectors can kick-start a transition towards a low-carbon, resource-efficient economy. At the same time environmentally harmful subsidies for the energy, water, fisheries and agricultural sectors are estimated to amount to between one and two per cent of global GDP.

However, unfortunately the UNEP report is also an example of misinformed visions: In the energy sector, the assumptions for renewable energy are low and emissions in the whole sector are only assumed to be returned back to 1990 levels by 2050. So there would be no global $CO_2$ reductions below the UN Climate Convention's reference year (1990). This is clearly far from a sustainable energy pathway. The first step towards achieving a paradigm shift is admitting the true scale of the challenge.

The IPCC is expected to approve its Special Report on renewable energy in May 2011. Greenpeace recommends the Global Sustainability Panel to study this report carefully, and assume maximum implementation of sustainable renewable energy.

Moving toward sustainability will require government, business and civil society to engage closely to sort out several contemporaneous environmental and social challenges. There is a need to redesign and reform the finance and energy systems among many others, i.e. we need to change the rules of the game if we want to assure our survival on this planet. We need to accept the constraints of our planet and act from there. We need a new system of global governance capable to address all the policy changes that are needed.

First and foremost, a paradigm shift requires reclaiming the power from the corporations to democratically elected regimes. Central governments for their behalf need to empower and enable local communities to implement local solutions.

There is a growing movement to adopt a more democratic approach to agriculture and food supply. Food sovereignty promotes sustainable, small scale family farm based food production, it emphasizes equitable access to land, seeds, water and other productive resources, and the development of local markets and economies rather than export economies.

Farmers have for many years formed co-operatives and producer groups - the idea is that with more to sell they can demand a better price and fairer terms of trade. Co-ops are locally owned, creating and retaining profits and jobs within their communities. New community-based food networks, such as farmers markets, producer groups, growers co-operatives, food co-operatives and community supported agriculture are taking power away from the corporate-controlled food system.

Prevention must be the basis of global chemicals policy. When it comes to eliminating hazardous chemicals the paradigm shift must be the goal to completely eliminate all uses and discharges of hazardous chemicals. Today, the focus is on chemical substitution and green chemistry research. Preventing pollution and substituting hazardous chemicals with safer alternatives can bring multiple benefits by cutting waste, especially hazardous waste, and the cost of its disposal, making the workplace safer and even delivering substantial economic benefits to manufacturing costs through increased understanding of inefficiencies and focus on innovation in both products and production processes.

**b) Should components of this new vision be turned into new international time-bound Sustainable Development Goals? If so, how would you define these new Goals and what**

**should be the relationship between these goals and the current Millennium Development Goals framework?**

Developing time-bound sustainable development goals that respect ecological limits will be necessary to focus activities and encourage timely action to avoid further deepening of the crisis. Transitioning to global sustainability is completely intertwined with poverty alleviation. The drivers and factors that affect poverty are the same as those that need to be addressed to ensure ecological sustainability.

It is vital that the goals reflect a realistic understanding of the ecological limits of the planet and the true scale of the urgent steps the global community needs to take. Such goals should include:

* A global goal of securing access to modern energy services for all people by 2020, without locking them into a high GHG intensity development path.

* A global goal of halting gross emissions from deforestation and forest degradation by 2020, in a manner that protects biodiversity and fully respects the rights of indigenous peoples and local communities.

* Commitment to eliminating the excess capacity of the world's fishing fleet. Given that more than 70 percent of the world's fisheries are already fully exploited, over exploited or significantly depleted, the measures to tackle overfishing cannot be modest.

* Commitment to zero discharge of all hazardous substances within one generation, based on the precautionary principle and a preventative approach to chemicals management with the substitution principle at its core and producer responsibility to drive innovation in Green Chemistry and Toxics Use Elimination

* An immediate halt to the expansion of genetically modified organisms

However, setting goals is one thing. Implementing them is quite another. Setting new goals is worthless if there are no signs of governments even trying to reach their existing goals. If Rio+20 is to inspire people, then governments need to prove that they can and want to protect their citizens from multiple crisis. They need to commit to achieving their existing environmental and social goals with new vigour and determination.

* The year 2012 marks the deadline for the establishment of networks of marine protected areas in the world's oceans, as agreed by states in the Johannesburg Plan of Implementation (JPOI) of the 2002 World Summit on Sustainable Development and the CBD. Today however, MPAs cover a mere 5.9% of territorial seas and only 0.5% of areas beyond national jurisdiction, far less than the 40% that is needed to effectively protect the oceans. The gaps in oceans governance that are hampering progress on marine protection must be addressed at Rio+20.

* In the UNFCCC COP16 in Cancun governments agreed, among other things, to limit global temperature increase to less than 2 degrees Celsius compared to pre-industrial levels, and that developed countries will mobilise jointly USD 100 billion per year by 2020 to address the needs of developing countries. However, measures to implement these goals are missing. According to the UNEP, the non-binding emission reduction pledges countries have put forward imply a temperature increase of between 2.5 ℃ to 5℃ before the end of the century. For long-term

finance no pledges or mechanisms exist so far. In Rio+20 governments must outline how they plan to meet these goals they have committed to.

* The new 10 year Strategic Plan agreed under the CBD includes a number of very important targets that have been set to “take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication. To implement these targets governments need to ensure that adequate financial, human and technical resources are provided, especially for developing countries.

Mitigating environmental challenges with urgent and determined action is crucial to enable progress with the UN Millennium Development Goals, and to protect the permanence of the progress achieved.

The current Millennium Development Goals framework does not address growth or governance. This is an opportunity to link the MDGs to Sustainable Development Goals.

### *3. Better and more coherent policies and institutional mechanisms*

**a) What better policies and measures are required at national and international levels to put into practice the goals of the new development paradigm? These can be discussed generically, or in relation to particular sectors such as agriculture, forestry, extractives, services (including social/environmental services), manufacturing, water, energy, housing, etc.**

Greenpeace believes that following measures and activities are essential to ensure a new development:

* Support an energy revolution based on renewable energy and energy efficiency and provide access to energy for all – see www.greenpeace.org/energyrevolution. The energy revolution must be the cornerstone of any green economy roadmaps. This requires, among other things, introducing mandatory targets and standards for renewable energy and energy efficiency on a domestic level; facing out subsidies for dirty energy - which altogether receive more than 10 times the support given to renewable energy; introducing robust feed-in tariffs for renewables on a national level; guaranteeing priority access to grid for renewables and outlining a long-term grid investment plan that enables 100 % uptake of renewables; funding policies and technologies that enable modern energy access for the poor; reflecting the true price of dirty energy in energy costs, for example through the pricing of carbon.

* Achieving zero deforestation by 2020 requires commitment and actions by both governments and businesses around the world. Developed countries and corporations must end policies and funding that drive deforestation. In order to reduce pressure on forests, developed countries need to address demand-side causes of deforestation and implement policies and measures to reduce and ultimately stop the import and consumption of goods stemming from deforestation and degradation (including unsustainable timber, palm oil, and other commodities).

The global community needs to establish and implement strong safeguards to ensure (a) the protection of natural forests, (b) maintenance of native biodiversity, and (c) the recognition of the rights of indigenous peoples in international mechanisms and funds for forests.

* Make the transition to a green economy fair and equitable and commit to a decent jobs agenda by committing to making national just transition plans.

* Strengthen the governance system that delivers an "environment for development" by upgrading the UN Environment Programme to specialized agency status. Sustainable development needs a global authority on the environment and stronger implementation mechanisms.

* Ecosystem-based management must form the cornerstone on how we manage activities that impact on ecosystems. It is essential to follow an integrated management approach that takes into account ecological, social, and economic goals and recognizes humans as key components of the ecosystem.

* Invest greater resources into expanding a global network of protected areas on land and sea as a key contribution to safeguarding the planet's natural capital and ecosystem services, as well as ensuring food security. Protected areas should form the basis of ecosystem based management. They are the cornerstone of conservation policies and provide multiple benefits and play a significant role in supporting livelihoods.

- On land, strengthening existing protected areas for forests, and creating a global network of forest protected areas must be the cornerstone of biodiversity and climate protection. Protected areas provide what "sustainable" logging practices cannot. They maintain the resilience of the forest to climate change, thereby increasing the probability of maintaining essential ecosystem services and allowing species adaptation. Local and indigenous communities are an important aspect of protected areas. Local communities restrict their consumption of forest products when they own forest commons, thereby improving governance and increasing carbon storage.

- On sea, networks of marine reserves are a powerful tool for preserving marine biodiversity and maintaining vital ecosystem functions so enhancing the resilience of our ocean ecosystems and ensuring food security. At a time when ocean ecosystems all over the world may be reaching tipping points, establishing networks of large-scale marine reserves becomes an indispensable tool to building resilience in ocean ecosystems against the impacts of climate change and ocean acidification. It has been estimated that conserving 20-30% of global oceans through a network of Marine Protected Areas could create a million jobs, sustain a marine fish catch worth US$70-80 billion/year[1]. Greenpeace recommends large no-take marine protected areas covering 40% of the high seas should be established[2].

* Address gaps in oceans governance that are hampering progress on marine protection must be addressed at Rio+20. Greenpeace recommends for an intergovernmental conference under

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[1] Balmford, A.; Gravestock, P.; Hockley, N.; McClean, C. J. and Roberts, C. M. (2004) The worldwide costs of marine protected areas. Proceedings of the National Academy of Science 101: 9694-9697. URL: http://www.pnas.org/content/101/26/9694. full.pdf+html (last access Nov 6, 2009).

[2] See Greenpeace's *Emergency Oceans Rescue Plan: Implementing the Marine Reserves Roadmap to Recovery* for a proposal for a global network of marine reserves

United Nations auspices on strengthening high seas governance, with a clear and specific mandate to:

- agree to governance reforms that fulfil States' commitments under the United Nations Convention on the Law of the Sea for the effective conservation and protection of the marine environment and marine biodiversity in areas beyond national jurisdiction, on a precautionary and integrated basis.

- establish a mechanism for the establishment and management within five years of a fully comprehensive, effectively managed and globally representative system of high seas MPAs and no-take reserves.

* Cut overcapacity of the world's fishing fleets, and provide priority access to fish resources for low-impact small-scale fisheries, as well as investing and invest in sound economic and sustainable fishing practices that maximize benefits to local communities. It has been estimated that the world fishing fleet is able to catch up to 2.5 times the level corresponding to maximum sustainable yield globally. The recent UNEP report on the Green Economy highlighted 160,000 of the world's fishing vessels catch the same amount of fish as 3.84m vessels. Therefore prioritizing effort reduction on large-scale vessels and ensuring priority access for small-scale fisheries will have lower socio-economic costs to society, in particular in terms of limiting impacts on livelihoods and jobs.

Agriculture is a complex arena. However, we believe that there are some principles that point to the way forward: simple steps in the right direction.

* Food First. Agriculture should provide all residents of a region first and foremost with the necessary means to feed themselves a healthy diet.

* Smallholders are the key to sustainable food security. As hunger is still a predominantly rural menace, efforts to eradicate hunger and to direct agriculture towards sustainability must focus on serving the needs of small farmers, including ensuring secure access to and control over land, water, seeds, markets, capital, and basic human right

* Grow and produce food as close to those who eat it as possible. There are various good reasons for this approach: Food sovereignty: Independence from external factors beyond the control of local communities decreases risks and improves the ability to adapt environmental, social and cultural impacts of food production and consumption.

* Replace monocultures with diversity. Implementation of industrial concepts of economies of scale into agriculture has not only miserably failed to fulfil the goals of feeding the world in a sustainable way, it is also among the greatest risks of an uncertain future of climate change, oil peak and global environmental threats.

* Design agricultural policies that support and enhance the multiple ecological functions of agriculture. Redirect research and investment funding towards ecological farming systems. Shift public financial support away from subsidies that promote unsustainable inputs, input-intensive industrial agriculture and export-oriented farming models towards rewarding environmental sustainability and ensuring the food and livelihood security of small-scale, subsistence and family farmers.

* Escape the pesticide treadmill. While some of the long term impacts of pesticides are only starting to show, farming experience clearly proves that the chemical war against pests will never be won. Replacing toxic pest management strategies with biological and agro-ecological ones is one of the most formidable challenges of modern agriculture.

* Reduce waste of food and other agricultural products at every step of production, processing and distribution.

* Minimise fossil fuel dependency. As a general rule reducing fossil-fuel-based external inputs is not only an imperative from the overall global warming perspective, but also a much needed insurance against price shocks and shortage of supply.

* Reduce and optimise meat production and consumption. As meat production beyond the bearing capacity of pasture grassland is one of the most profound challenges to sustainability of agricultural production, there is an urgent need to substantially reduce over-consumption of meat, eggs and milk.

* Continue global multi-stakeholder exchange of knowledge and views. Establishing a permanent intergovernmental body of experts, similar to the IAASTD, to assess and monitor all aspects of multi-functional agriculture, food production and consumption, based on a multi-stakeholder governing body would be an important contribution to enhancing our global capacity of change not only at the grassroots-level, but also at the level of UN institutions and international governance and national governments.

The framework of principles for elimination of hazardous chemical use:

First it is important to know and disclose all chemicals in use and prioritize action on the most hazardous. To achieve this, and to establish a clear road map, governments must establish a list of priority chemicals which are locally relevant – based on their intrinsic hazards properties, in line with the approaches and processes used to establish existing priority substances lists under international and regional policies[3].Beginning with the most threatening and evolving with time towards the elimination of all releases of hazardous chemicals (zero discharges).

Second, it is important to focus on prevention, clean production[4] and prioritize the substitution principle[5] so that inherently hazardous chemicals are continually redesigned out of production processes and products. Green chemistry promotes the design and use of inherently non

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[3] such as the Convention for the protection of the marine environment of the NE Atlantic ( OSPAR) and the EU chemicals management Regulation (REACH)

[4] Note: It is important to make a distinction between Cleaner Production and Clean Production. Clean production is any practice which eliminates at source the use or formation of hazardous substances through the use of non hazardous chemicals in production processes, or through product or process redesign, and thereby prevents releases of hazardous substances into the environment by all routes, directly or indirectly.
Cleaner production includes conserving raw materials and energy; eliminating toxic raw materials; and reducing the quantity and toxicity of all emissions and wastes before they leave a process (UNEP Cleaner Production Program - http://www.unido.org/index.php?id=o5152). In other words clean production requires elimination and cleaner production requires only reductions.

[5] the substitution principle requires finding solutions through non hazardous alternatives and not simply transforming a hazard into another hazard or substituting a hazard with another slightly less hazardous but still problematic chemical

hazardous chemistry. This focus on inherently non hazardous chemicals, rather than exposure control, must be the clear policy goal for all hazardous chemicals. Greener chemicals innovation in the market place rests on the ability of companies to develop the knowledge about safer products and avoid the costs associated with hazardous chemicals in their production facilities, and in the chemicals lifecycles.

Third, targets are important. International conventions such as OSPAR for the North East Atlantic or Stockholm on POPs call for the elimination of highly hazardous chemical emissions into the environment within one generation.

Greenpeace is calling for a paradigm shift that should consist of:

1- an international political commitment to:
- zero discharge[6] of all hazardous substances within one generation[7], based on the precautionary principle and a preventative approach to chemicals management with the substitution principle at its core and producer responsibility[8] to drive innovation in Green Chemistry and Toxics Use Elimination

2- an international implementation plan to:
- establish a dynamic priority hazardous substance list for immediate action[9]
- establish intermediate targets to meet the generation goal above
- establish a publicly available register of data about discharge emissions and losses of hazardous substances

and in addition, international and national resources to ensure infrastructure and policies to support implementation, including

- identifying priority substance restrictions
- policies and regulations that require mandatory audits and planning
- the provision of technical help and appropriate financial incentives
- research and support for innovation in green chemistry

**b) What obstacles (at the national or international level) need to be overcome in implementing these new policies and measures? What are fair and politically acceptable ways of overcoming these challenges?**

The main argument used repeatedly in these times of economic crisis, is to ask where the money will come from to finance these large-scale changes in how we run the planet. There are sufficient sources of money, but it is a case of redirecting these sources towards sustainable activities, as well as mobilizing them from other sources in order to ensure a swifter and smoother transition to a truly sustainable future.

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[6] discharge means all discharges, emissions and losses

[7] typically one generation is understood to be 20-25 years

[8] such as `no data, no market´ provisions

[9] based on the 8 basic intrinsic properties of hazardousness – Persistence, Bioaccumulation, Toxicity, Carcinogenic Mutagenic and Reprotoxic, Endocrine disruption and equivalent concern

For example, a clear starting point will be to reallocate perverse subsidies to conservation and renewable technologies. Approximately US$ 1,000 billion of public money is spent by governments every year on subsidies harmful to the environment and biodiversity, including agriculture, forestry and fishing sectors. Promoting sustainable development is meaningless unless it ends unsustainable practices, such as governments giving billions in subsidies to produce climate-damaging fossil fuels, or support for new coal fired power stations.

A new report “Incentive measures for the conservation and sustainable use of biological diversity: case-studies and lessons learned” from the Convention on Biodiversity highlights the role of economic incentives in changing practices that impact on the environment. The report also concluded that removing environmentally damaging subsidies and channelling the money into positive incentives can produce high economic and environmental rewards.

Reforming perverse incentives, in particular environmentally harmful subsidies that under-price natural resources or encourage unsustainable increases in production, for example, has multiple benefits. It stops encouraging environmentally harmful behaviour, may remove wider economic distortions, and, in the case of harmful subsidies, may free up scarce fiscal resources. Moreover, removing or mitigating perverse incentives can reduce the need to introduce positive incentive measures.

Whilst subsidies are one type of negative policy incentives, they are not the only economic policy tools that currently favour unsustainable production methods over sustainable ones. Funding that is currently going into technology research should be directed away from inherently unsustainable practices which threaten biodiversity, towards sustainable practices. For example, funding for agricultural research should be directed away from genetic engineering and chemical-intensive agriculture towards sustainable practices. Agricultural research directions taken today shape what sort of agricultural systems we will have in 20 years. It is essential that we not only develop positive incentives for conservation and sustainable use of agricultural biodiversity, but that agricultural research is oriented towards developing sustainable practices.

With respect to the implementation of hazardous substances elimination policies, many of the obstacles are being tackled by voluntary harmonization approaches – global harmonized system on chemical labelling and classification. These processes need to be bound by a new legal framework. The current voluntary SAICM process should be transformed to implement these new international goals and should be laid down in an international convention. National chemical management frameworks should be revised or created to support the implementation of the goals above and national frameworks that could deliver the commitments and processes.

Historically there was a large investment in transfer of knowledge and support to industry and governments for a transition to cleaner production. This original UNEP network needs to be reinforced re-resourced and focused on the next step - `clean´ production (i.e. elimination of use and discharges of hazardous chemicals) and green chemistry.

An important financial tool/mechanism that should be applied is a self-financing mechanism that does not require government funding. The problem side of the equation, e.g., manufacturers and users of hazardous substances would be subject to a fee. The fee could be low at first, and commensurate with a just transition period, could increase over time. The proceeds from the fee could go to a fund to finance the solution implementation, e.g., substitutes for the hazardous chemicals undergoing elimination. This sends a clear message to the industrial sector and motivates them to actively pursue research, development and implementation of substitutes. In effect, it is a way to internalize the environmental and human health costs that are currently

external economic costs without the need to create values. An example of this is the fee charges by the US Massachusetts Toxics Use Reduction Act on hazardous chemical users that funds technical support, planning and research for planning reductions and finding alternatives.

### *4. Measures of progress beyond GDP*

**a) A number of alternative progress indicators (beyond GDP) have been developed to assess progress on sustainable development (e.g. UNDP's Human Development Index (HDI), the work of the Stiglitz/Sen/Fitoussi Commission, the Kingdom of Bhutan's Gross Happiness Index). What are your preferred indicators and why?**

We need indicators that are
- easily understandable by the public
- give policy-relevant information
- allow transparent measuring, reporting and evaluation
- measure against the end goals we are trying to reach instead of the means to get there
- take into account the ecological limits of the planet
-are not biased to favour rich countries by undervaluing impacts taking place outside of national boundaries

Instead of searching for any one single best indicator which could "challenge" GDP, governments should endorse and apply a group of several existing indicators and indices which serve different (yet inter-linked) end goals. Some of the promising ones include:
- Bhutan's Gross Happiness Index
- New Economics Foundation's Happy Planet Index
- WWF's Living Planet Index
...and there are others. The indicators must serve the sustainable development goals set.
An example of a good end-goal focused index is the Renewable Energy Attractiveness Index by Ernst & Young, which assesses the attractiveness of investment environments for renewable energies.

**b) How can they be combined or built upon to provide clear indication of progress on global sustainability?**

We already have a number of well-developed indicators. The question should not really be about how to combine or improve them, but about how to bring them to the core of decision making at the sub-national, national, regional and global levels. We should not waste any more time into the academic debate on indicators, but apply those we have and act on them.

**c) How could these indicators become associated with time-bound targets that could be a part of new sustainability goals?**

At the Rio+20 Summit governments should endorse a group of indicators that are relevant for the agreed goals. (For goals proposed by Greenpeace, see question 3.)

### *5. Any other feedback and input*

**a) Based on the Terms of Reference for the GSP, what are your hopes and expectations regarding their recommendations for new mechanisms to ensure the achievement of the Panel's overall vision? The TOR for the GSP can be found here:**

The GSP should produce a report that:

* Offers a vision of the future we can and want to have within a lifetime. Will the world in 2050 look like the multiple challenges world is today facing have been seriously addressed? Can the Panel consisting of representatives from different parts of the world, outline a joint, desirable future, which is based on a realistic assessment of the ecological limits of the planet? Can they draw conclusions from the fact that the unsustainable consumption patterns of the rich simply cannot continue if we are serious about keeping the planet habitable?
* Is easily understandable and concise. This should not be an academic or bureaucratic exercise which produces a report which is only read by policy wonks steeped in the minute. . Nor should it be a repetition of the UNEP and OECD green growth reports.
* Is not written for environment ministers. Once the Commission on Sustainable Development (CSD) was established, it soon declined into just another forum for senior environmental officials. The report by GSP needs to go beyond this group. The report should outline clear recommendations and relevant key data for policymakers.
* Outlines what is possible - and necessary - within an election period and what isn't. Big decisions can no longer be postponed into some future point in time. Yet decisions taken in a short-term will not bear fruit within the same election period, which is a disincentive for today's decision makers. A better understanding is needed about what achieving long-term goals means for short-term policy making, and what are the implications of delaying the necessary decisions.
* Outlines three scenarios for the future: a) business as usual, b) too light or delayed policies c) adequate policies and assesses them against certain tipping points, after which speeding up preventive measures is not an option anymore, but the only option we are left with is forced adaptation.
* Does not re-invent the wheel. The discourse about sustainable development has continued for more than 40 years now. A lot of the solutions considered today have been in consideration for years or decades already: alternative indicators to GDP; growth not being an end goal in itself; internalising external costs; redirecting subsidies; need of coherence in policy making etc. We don't need yet another report which lists general level observations on what should be done. We need a report that provokes decision makers to be bold and brave, and helps people to understand what "running out of time" means for the children living today. We are no longer talking about impacts that could theoretically materialise sometime in the future.
* Provides concrete tools for those beyond policy makers who want to be part of the solution. This means for example, that the Panel produces 3-10 key graphs that outline the true scale of the challenges and their solutions. These are graphs that everybody would want to have in their presentations and annual reports. For example: most IPCC graphs are not simple enough to serve this purpose, where as the IEA (with its 450 ppm emission reduction wedges) and McKinsey (with its marginal abatement costs curves) have been more successful. Note however, that if these graphs fail to outline a realistic picture of the challenges or their solutions, if the truth is too inconvenient for some members of the Panel, then they can be dangerously misleading and lead to perverse implications.