

Policy Statement

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"Our purpose here is to reconcile man's legitimate, immediate ambitions with the rights of others, with respect for all life supporting systems, and with the rights of generations yet unborn. Our purpose is the enrichment of mankind in every sense of that phrase. We wish to advance – not recklessly, ignorantly, selfishly and perilously as we have done in the past – but with greater understanding, wisdom and vision. We are anxious, and rightly so, to eliminate poverty, hunger, disease, racial prejudice and the glaring economic inequalities between human beings."

- Maurice Strong

Honourable Ministers, Excellencies, Ladies and Gentlemen,

At this seminal moment in the delivery of the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate Change and the Sendai Framework for Disaster Risk Reduction, that quotation from Maurice Strong speaks to the scope and the scale of the task before us; an unprecedented undertaking in response to an unparalleled situation of our own making. Most of all, it speaks to the speed with which we must now respond to that task; because too much time and with it lost opportunities have passed since Maurice Strong's words echoed through the hall at the United Nations Conference on the Human Environment in Stockholm in 1972, more than 40 years ago.

Four decades can seem a very long time or a very short time, depending on the point of view. Long for those desperate to arrive at solutions for problems virtually everyone wants solved. But short for those who recognize the unprecedented advances we have made in that time toward a better world.

We live on a planet of over seven billion people and almost 200 countries of enormously varied cultures, traditions and geographies. A better world for all does not arrive overnight and it can only arrive by agreement, not division. We now have that agreement.

This great agreement, this great realization, which the world came to over the last 40 years, underpins the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate Change and the Sendai Framework for Disaster Risk Reduction. This agreement is that the environment is at the heart of everything. Poverty, hunger, disease, inequity – all the

scourges of Maurice Strong's appeal for action - the world has come to understand their deep and indivisible relationship with an ailing environment.

The converse is naturally also true. Economies and societies are healthier when the environment is healthier. We have a greater understanding of this fact than ever before.

This "declaration of interdependence" cannot be underestimated in both its exceptionality in human history and its importance to our collective future.

From this point of view, 1972 can feel like yesterday.

We will not change the world overnight, even with such a realization. But it is deceptively easy to fall into the trap of focusing on all of the obstacles, the challenges and the individual problems that increase by an order of magnitude until they create fear rather than progress.

Transforming every sector in the next three to four decades will take us all into uncharted territory, but there has never been a better time to be an 'environmentalist', whether you are a policy maker, a legislator, a scientist or a citizen.

We have the understanding. In the seminal agreements of 2015, we have the aspiration. We now need to leverage the force of both to bring about implementation.

Much remains to be done in this respect, but we can already take stock of a growing list of examples of where the environment has taken prominence in policy and become much more integrated into social and economic problem-solving.

Learn from the progress already delivered by science, policy and legislation

We have already seen a growing number international instruments and over a hundred national constitutions now refer to the *right* to a healthy environment. When science highlights a danger and policy acts on it, the ability to enforce the rule of law is essential for national, regional and global results.

The impact is already visible in many areas of daily lives. For example, in 1973, the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) marked a turning point in the regulation or ban in trading at-risk species. In 1982, the Montevideo Programme set priorities for global lawmaking and led

to the Basel, Rotterdam and Stockholm Conventions governing chemical and hazardous waste management. In 1987, the Montreal Protocol responded to what science identified as the "ozone hole" and the depletion of ozone layer from chemicals that were reaching the stratosphere. And in 2010 the Intergovernmental Science-Policy Platform on Biodiversity Ecosystem Services (IPBES) helped focus efforts by bridging the gap between science and policy.

However, the most important thing about such agreements is not the careful wording or our ability to recite the number of signatories; it is the benefits already being delivered on the ground. For example, lead in paint is regulated in 59 countries and lead in vehicle fuel has been eliminated in all but three countries, preventing around a million premature deaths and saving some \$2.45 trillion per year. Likewise, reductions in short-lived climate pollutants, like black carbon and methane, are helping to reduce global warming by 0.5°C by 2050 and to save some 2.4 million lives per year from air pollution by 2030.

The growing use of clean, renewable energy and energy efficiency will improve these figures even further. Already, 2015 set new records, with more than half of new investment in power generation capacity now coming from renewables. This increased electricity capacity worldwide to just over ten per cent and prevented 1.5 gigatonnes of CO_2 emissions. It also reflects an increasing shift in the markets, where 360 leading financial organizations in the Global Investor Statement on Climate Change are pushing for a controlled move away from fossil fuels

towards renewable technologies and the Portfolio Decarbonisation Coalition, a group of pension funds and insurers have committed to shifting \$600 billion of their funds to greener stocks – a ten-fold increase in just the last year. This goes hand in hand with efforts to increase the energy efficiency and decrease the energy consumption of the energy needed for growth across the globe.

These shifts in energy also cut demand for wood as a fuel, helping to slow the rate of deforestation in some areas. In the last five years, Africa reported the highest annual increase in the area of forest for conservation while 13 percent of global forest cover is now designated primarily for biodiversity conservation. This progress feeds into wider efforts on ecosystem-based climate adaptation in over 40

countries and the work of the UN REDD programme, which is now addressing forest loss and degradation in 64 countries.

But of course, reducing deforestation reduces soil degradation and run-off into our rivers and oceans. This supports wider efforts, such as the growing number of areas covered by the 143 countries working with the Regional Seas Programme to protect the marine environment, which we all share, but still know too little about.

We also have much to learn about zoonotic diseases, but the rapid containment of SARS in 2003 is one of the biggest public health successes in recent years. From the WHO alerting the world to an unknown severe respiratory syndrome, to diagnosis, treatment and stopping the spread took just six months. That experience will serve us well, especially in tackling the ongoing

The illegal wildlife trade just got personal

Ahead of UNEA and World Environment Day I visited Virunga National Park in the Democratic Republic of Congo. It is home to millions of people and to some of the last mountain gorillas in the wild. This puts the park and the remaining 880 gorillas on the front line of conservation and in direct competition with front line armed conflict, oil extraction and illegal trade in wildlife and logging.

The illegal trade in wildlife is the fourth largest after the trafficking of drugs, people and arms. Earlier this year, we were brutally reminded of the impact on local communities when Virunga Ranger, Sebinyenzi Bavukirahe Yacinth, joined the roll call of more than a thousand park rangers murdered in defense of this incredible natural heritage.

Fortunately Virunga has a survival strategy, which harnesses its natural resources to promote sustainable peace and prosperity in the local community. Partnerships with organizations like The Institut Congolais pour la Conservation de la Nature (ICCN), the Virunga Foundation and Stanford University are making it an intrinsic part of the local economy by embracing development opportunities such as micro-hydroelectric power, agribusiness and tourism. What's more, tourism revenues are shared through the Greater Virunga Transboudary Agreement with neighboring Uganda and Rwanda. This means the park and its gorillas won't only be protected as a natural treasure by a 'defensive frontline' but cherished as an economic necessity by many.

Wherever we live - the illegal trade in wildlife is not inevitable and everyone has a role in stopping to it. So please, join the United Nation's campaign to mobilize millions of people around the world to take personal action against illegal trade at www.wildfor.life

threats from increased antibiotic resistance and the diseases that have been more difficult to bring under control like Ebola, Zika and yellow fever, which are not only major risks for health in developed and developing nations alike, but also for global security and the economy.

Because, as Margaret Chan, Director-General of the World Health Organisation said: "Many people have asked me why the outbreak of Ebola virus disease in West Africa is so large, so severe and so difficult to contain. These questions can be answered with a single word: poverty."

That is why the extraordinary progress already made in the transition towards an inclusive green economy is so important in breaking the poverty cycle. Having matured rapidly from the Economics of Ecosystems and Biodiversity concept during the past ten years, the inclusive green economy is now driven as much by the finance, insurance and manufacturing sectors as it is by the

"The world has enough for everyone's needs, but not everyone's greed."

- Mahatma Gandhi

policy makers, is embedded in discussions at the G20 and the Financial Stability Board, and underpins the delivery of the Addis Ababa Action Agenda on financing for development, the Paris Agreement and the entire 2030 Agenda.

And of course, these landmark agreements have secured public and private sector backing that was unimaginable when we gathered in Nairobi for the Climate Change COP in 2006. This confirms that the tide of opinion has turned in favour of stewarding, rather than liquidating natural assets, focusing on what the majority need rather than what a privileged few want; in other words, when it comes to promoting sustainability, it is time to lean forward, not back.

Imagining the world we could have by 2050

So yes, while the obstacles that lie ahead of us are daunting and there is more to be done, everything that has been achieved in the last 40 years should give us confidence in our ability to deliver. All too often when we look decades ahead it is with a sense of foreboding.

By 2050, we say, sea levels will have risen by so many centimeters, the climate will have warmed by so many degrees and so many species will have disappeared from the planet. Such predictions are important to remind us of the choices we are called upon to make today and it is our duty to heed them. But I challenge us all to remember the other side of the coin: to have the courage to imagine a world in 2050 in which we have solved many of our most pressing environmental and sustainability challenges, a world in which we have actually delivered – at least in part – a healthy planet for healthy people. Because the progress, knowledge and the technology now at our disposal make it entirely within our grasp to use evidence-based policy to create the world we want for ourselves and for future generations.

The power for transformation

Just 15 years ago, producing three per cent of global energy from non-hydro renewables seemed optimistic, yet we already produce three times that. The cost of solar cells has dropped by 80 per cent in the last five years and cost-effective energy storage is maturing, shifting solar energy close to, even below, grid parity in many countries. This is accelerating entrepreneurial solutions like M-Kopa "pay-as-you-go" off-grid solar energy, which has already connected hundreds of thousands of homes in Kenya, Tanzania and Uganda.

Such advances could transform five hundred million lives by 2030; something that was plain to see when we joined the Kenya Under-15 boys' team for a 'Solar Soccer' match to unofficially kick-off UNEA-2 in Nairobi's Mathare neighbourhood, which is home to around half a million people. The LED-floodlit match was intended to demonstrate the power of renewable energy to transform such a poor area through community lighting centers.

In the end, the real demonstration came from a 10 year old girl called Shanize Njeri, who used the floodlighting to do her homework in the cybercafe, and a 20 year old barber called Paul 'Alphonse' Mutua, who runs a barber shop in the center. Because Shanize and Alphonse remind us that in a country like Kenya, where almost three quarters of the population is below the age of 30, there is an even bigger power for transformation to be found in the young people determined to improve the world they will inherit. UNEA must give them their chance.

In the 2050 world I imagine, pollutionrelated health issues would be reduced by a factor of ten in many countries, as clean renewable electricity production would reach close to 100 per cent, building on the milestone in May 2016 when Germany, Portugal and Denmark achieved this for the first time – albeit for a few hours. This progress would be accelerated by more countries joining the 82 that already in 2015 were providing incentives for renewable energy, cleaner production, energy efficiency and pollution control. And it would be aided by the transition to an inclusive green economy, which encouraged the shift towards carbon-free growth, leveraging financial markets worth up to \$400 trillion to meet the \$5-7 trillion a year cost of realizing the 2030 Agenda.

In the 2050 world I imagine, the benefits of this progress would be multiplied by an end to open burning of agricultural and municipal waste and the widespread adoption of strict air quality measures. This would also highlight the benefit of policies and standards that cut emissions by 90 per cent through cleaner fuels and advanced vehicles, freeing up close to \$1 trillion in health related benefits for OECD countries alone.

And in the 2050 world I imagine, there would be a drastic increase in the number of countries making significant investments in public transport systems – many more than the 65 doing so today. This would be supported by scaling up of emerging sustainable energy sources like fuel cells, value chain biofuels and even solar power,

as we have seen demonstrated by UNEP Goodwill Ambassador and Champion of the Earth, Bertrand Piccard, and the Solar Impulse team's round the world flight powered only by the solar panels on the aircraft.

Instead of continuing to waste food worth \$750 billion a year, the world in 2050 could feed an additional two billion people, more than double the number of malnourished people in the world today. Local food security and economies could be

Thanks to the Tree Huggers

Taking their name from the Hindi word for 'embrace', the *Chipko Andolan* - or the *Chipko Tree Huggers* as they became known around the world - was a mainly female group in India in the seventies. They hugged the trees to prevent commercial loggers from destroying the forest and to highlight the rights of indigenous communities over the natural resources on which they depend. Their efforts helped to secure a 15 year ban on tree felling and led to the 2006 Forest Rights Act, designed to protect both the trees and the indigenous communities around them.

It was a story repeated around the world. In the seventies and eighties, Chico Mendes, President of the Rural Workers' Union of Brazil, led the fight against the cattle ranchers' destruction of the rainforest and its indigenous communities. Murdered for his effort, he showed that what happened in his small corner of forest affected the entire world: "At first I thought I was fighting to save rubber trees, then I thought I was fighting to save the Amazon rainforest. Now I realize I am fighting for humanity."

This is no exaggeration: the destruction and degradation of forests account for over ten per cent of global greenhouse gas emissions, which is more than either the transport or energy sector, making it practically impossible to save this planet from climate change without first saving the forests from ourselves.

That's why we owe a debt of gratitude to the tree huggers of the world whose legacy continues today through the women and men who campaign for environmental rights in the face of expanding industrialization and urbanization around the world.

strengthened by the empowerment of the women farmers who often account for up to 80 per cent of food production in developing countries. Successful delivery of the Aichi Biodiversity targets could reinforce those moves, ending hunger and poverty by supporting wider ecosystem management to restore land and other degraded natural resources. Fish stocks in particular could be boosted by upgrading the original target of designating 10 per cent of the oceans as Marine Protected Areas by 2020 to a target of 30 per cent by 2030, increasing the ratio of social and economic benefits to cost, from 3:1 to 20:1 in a dramatic demonstration of how the blue-green economy can both benefit from an integrated approach to sustainable development and contribute to delivering the 2030 Agenda.

I imagine a world where three billion people who currently rely on solid fuels and open fires, to have switched to cleaner, healthier options. Millions of people would gain access to electricity by 2020, when the Africa Renewable Energy Initiative (AREI) reaches its target of doubling renewable energy capacity on the continent.

This would in turn have a considerable impact on the reduction of greenhouse gas emissions and the outcome of the New York Declaration, which could be delivering far beyond its initial commitment to end deforestation by 2030. Growing steadily from the 20 countries involved at the beginning of the process with UNEP and REDD, the 100 million hectares of forest ecosystems restored by 2020 could already be maturing and, along with the additional 250 million hectares restored by 2030,

could provide food, shelter and livelihoods for millions and store more carbon dioxide than every car in 2016 combined.

Managing risks in an age of uncertainty

Certainly the science and our understanding evolve as we gather more data, more experience and a more granular knowledge of how one factor or one act can impact another. And, history is littered with grand predictions that didn't come to fruition.

However, when over a million people have been killed by natural disasters in the last 15 years and 2.7 billion affected by them, to deny our responsibility for the problem or delay the response is irresponsible. We do not have the luxury of waiting for the science or the policies to be perfect, so we must use the underlying patterns of failure to identify solutions that are rapid and robust enough to manage risks and secure progress for our priorities, rather than watching the situation deteriorate while we search for perfection.

"How could intelligent beings seek to control a few unwanted species by a method that contaminated the entire environment and brought the threat of disease and death even to their own kind?"

The risk of waiting for a perfect, but unattainable solution, speaks for itself.

Since 1980, global warming in the arctic has increased at twice the global average.

In the last seven years, sudden-onset disasters have displaced one person every second. And in just one year, as we were sadly reminded by the recent mudslides in Sri Lanka and Cyclone Roanu in India, more than 12.6 million people die from living or working in an unhealthy environment, which is perhaps not surprising when you consider that more than 60 per cent of our ecosystems and their services are already degraded or exploited unsustainably.

Already today, on land batteries account for 80 per cent of lead production, related poisoning kills around 143,000 people year and leaves 600,000 children with intellectual disabilities; a third of our food feeds landfill instead of people, including the 50 largest dumpsites in the world, which affect 64 million people and contribute to the methane gas emissions that increase global warming; and 60 per cent of all infectious diseases and 75 per cent of emerging diseases are zoonotic, with a new disease emerging in humans every four months often linked to environmental change.

Already, in the sea, human activities have destroyed almost a third of sea-grass beds and more than a fifth of mangroves and, of course, coral reefs face severe impacts from global warming, even if mitigation targets of the Paris Agreement are met. Likewise, almost a third of the world's fish stocks are overexploited, depleted or recovering, with more than half already

thought to be fully exploited. Some two thirds of the world's estuaries and deltas are in decline, while the threat from increasing sea levels on the rise. Louisiana has witnessed America's first climate change refugees receive federal funds for relocation. In the Philippines we have seen the rise in sea levels translate into storm surges that killed more than 6,000 people, displaced another four million and contaminated water sources for years to come. And we have seen Kirabati resort to buying land on the neighboring Fiji Islands to rehome its entire population if necessary.

And, already the air we breathe kills some seven million people a year from the impact of air pollution. More than 80 per cent of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed levels recommended by the World Health Organization, with some parts of the Eastern Mediterranean and South East Asia averaging up to ten times those recommendations.

"If you do not change direction, you may end up where you are heading"

- Lao Tzu

On top of this, while 2015 was the hottest year to date, it may be quickly surpassed with April 2016 confirmed as the seventh month in a row to break temperature records and the extreme heatwaves that used to occur twice a century now expected twice a decade.

This will have far reaching consequences for a third of the global population already being hit by desertification, land degradation and drought, and for the 70 per cent of agricultural production that relies on rainfall; exacerbating the accumulation of nitrates and mycotoxins in vulnerable crops like barley, maize, wheat, coffee and oilseeds. None of which is welcome news: for the 20 million people without enough food because of ongoing drought, mainly on the African continent where conflict and poverty compound shortages; for the people of Rajasthan sweltering through heatwave temperatures of over 50°C; or for the people of California experiencing the most severe drought in over 1,200 years at a cost of \$2.7 billion to the agriculture sector in 2015 alone.

When such stresses on health and natural resources are combined with a growing population, the environment becomes a risk multiplier that can all too easily create conflict, which triggers a vicious cycle with devastating consequences for people's health, livelihoods and security. We have already seen at least 40 per cent of intrastate conflicts in the last 60 years linked to natural resources and 18 civil wars since 1990 financed by their illegal exploitation. At a human level, that means that in nations like Afghanistan, where some areas have up to 95 per cent deforestation,

Action on pollution and inequality

Air pollution is creating a global public health emergency, which claims more than seven million lives every year, growing by some eight per cent in just five years at the expense of our health, our society and our economy.

The good news is that the new UNEP Report "Actions on Air Quality" points to a growing momentum for change, with an analysis of 193 countries showing that at least 82 are actively promoting investment in renewable energy production, cleaner production and energy efficiency and/or pollution control equipment. Unfortunately, the bad news is that it also shows most countries have still not adopted the ten key policy actions to improve air quality.

Such progress is too little, too late for people like Chamagul in the remote Afghan province of Bamyan, using an old stove so bad her "eyes get blind", or Malita in Malawi, who risks being sexually assaulted when she collects firewood. Chamagul and Malita highlight the impact of pollution and climate change on the very poorest – 70 per cent of whom are women, with the least access to education and the greatest dependency on natural resources for food, water and fuel.

To better understand how to change this, UNEP, UN Women and other partners have launched the first Global Gender Environment Outlook and the Women Entrepreneurs for Renewable Energy Project to examine the complexities of everything from land rights and education to technology and the green economy. Combined with Actions on Air Quality, it is a potent reminder of the role of the science-policy interface in changing real lives, every day.

the destruction of vital ecosystems creates additional tensions between those who rely on the remaining resources for cooking, heating or income.

Managing complexity when time is not on our side

Faced with the scale and the scope of the task at hand, it would be easy to be diverted either because we think the outcome is inevitable or because we think the task is simply too big. But this isn't one big problem; it is a myriad of different problems, which are interconnected, but which can each be tackled using policies that adapt quickly to the best available knowledge and the simplest available solutions.

For example, it will take time to recalibrate the balance away from fossil fuels and

to restore the ecosystems that provide natural carbon dioxide sinks. But we can also accelerate parallel actions to reduce the short-lived pollutants that contribute to global warming. This includes the hydroflurocarbons (HFCs) initially introduced as a common replacement for the cholorflurocarbons (CFCs), which the Montreal Protocol phased out along with other older chemicals to protect the ozone layer and to prevent up to two million cases of skin cancer and millions more cases of cataracts. By doing so, it has also averted the equivalent of 135 billion tonnes of CO₂. Mainly used in refrigerants, HFCs were a good, fast solution to a critical problem. However, as the science evolved it became clear that HFCs could actually have 2,000 times more impact on global warming than CO₂, so they in turn need to be phased out. The success of the Montreal Protocol

means the same effective mechanism can now be rapidly put into service to phase out HFCs, tapping into the existing national and international infrastructure. which includes an Ozone Office in every developing country that member states have empowered with the resources and the knowledge to act. Government negotiations on HFCs started in November and could reach agreement this year, which would protect the ozone layer, mitigate global warming and demonstrate the speed with which we can translate scientific data into policies, legislation and industrial regulations to deliver change on the ground. And prove once more that collective action through multilateral agreements can work.

This is good news and a poignant reminder that we can achieve global change on a massive scale. However, there are still too many cases where our

The harried public official

As a human rights lawyer and the Minister of Water Affairs and Forestry under Nelson Mandela, Kader Asmal, understood the importance of environmental rule of law only too well. He prioritized the water needs of people and essential ecosystems alongside those of industry, irrigation and other economic uses, creating 20,000 jobs and restoring over a million hectares of the environment at the same time. Ten years later, the number of people in South Africa lacking access to clean water had been slashed from 16 million to 1.5 million. That experience is just as relevant today. He said: "Telling me, a harried public official who must answer to 48 million restless, hungry and thirsty people, to 'Ensure development is sustainable and humane' is like warning me, 'Operate, but don't inflict new wounds'. I know that. What I don't know is how to do it....Our healing must emerge not through anecdotes, but through a complex, coherent and cohesive argument that shows clearly where we have been, what happened, why we're in conflict and how we can, with proper understanding, heal ourselves.

"This world's not going to change unless we're willing to change ourselves."

- Rigoberta Menchú

evidence is weak or incomplete, such as the increase of microplastics and acidity in our oceans; just as there are still too many cases where we react too slowly to sound evidence, as we have seen with mercury poisoning and climate change. This highlights a bigger point about the challenges of solving problems one chemical, one solution at a time. It is neither a robust nor a viable way forward, when time is not on our side.

Living in the Age of the Anthropocene

So, if we know what we do or do not want the world to look like in 2050, we know what we have already achieved and we know where we stand today, then the big question must be: how will we ensure that by 2030, nations, citizens and business are well positioned to deliver a healthy planet, with healthy people without constantly having to re-evaluate problems and reinvent solutions?

UNEP spent much of its first 40 years focusing on the imperative to act, because

the world did not recognize or appreciate what was happening to its own future. That meant investing a great deal of time and effort in gathering the empirical evidence to deepen our understanding and trigger a sense of urgency and of opportunity; but it worked. It is no accident that the 2030 Agenda, Paris Agreement and UNEA came into being when the world was moving beyond the economy versus environment mindset.

Human activity now has such an impact on the atmosphere, geology and ecosystems of the planet that, assuming there are actually still people on this planet millions of years from now, they will see very clear traces of our existence in the rocks and ice. Living in this "Age of the Anthropocene" is complex and it is going to get a lot more complex, much faster. This means that our institutional architecture, tools and processes are becoming liabilities and it means that as climate change really starts to bite, too many member states, communities and sectors of our economies will be too busy firefighting to tackle the root cause of the crises.

"I think the environmental problem will be the number one item on the agenda of the 21st century... This is a problem that cannot be postponed."

- Mikhail Gorbachev

In that context, our resources must expand to encompass the traditional knowledge of indigenous people and the new realms of citizen science in this digital age, while our governance must evolve beyond tackling one legal instrument, one substance or one chemical after the other. We cannot regulate the behavior of seven billion people by sending out a new regulation every other week.

Given that we can outrun neither evolution nor globalization, we must mitigate all of the risks equipped with imperfect, if evolving, knowledge, tools and processes. These mechanisms may not be perfect, but neither is the United Nations. Yet only the United Nations could convene the representatives from 193 countries, with different priorities and expectations, behind a workable agenda for improving the prospects of both developed and developing countries. And only UNEP could work with 66 countries to save \$7.5 billion and 35 million tonnes of CO₂ per year through efficient lighting; help 140 countries transition to more sustainable supply chains; and co-ordinate national environmental data flows through its new UNEPLive platform.

In recognizing the environment as a red thread that ties together the sustainable development goals, the 2030 Agenda is already a significant move towards a more rights based approach to environmental management: the right to clean air and water, to safe food and habitats, to the equitable sharing of a natural heritage that is protected beyond one generation.

From problem solving to systemic solutions

So, the new imperative is for UNEP to rise to the challenge of the exponentially growing scope, scale and speed of environmental change. We must move away from the problem fixing focus of the past towards a more holistic and systemic approach, with policies and partnerships that are agile enough to evolve with the science, relevant enough to deliver action in the real world and integrated enough to align the expertise of public and private decision makers, as well as individual citizens, from fields as diverse as education, finance, infrastructure, health, agriculture, defense and foreign policy.

International agreements that are too large for accountability or measurable decision making, must be consigned to history, along with the increasingly anachronistic, first generation institutional architecture and governance tools that I mentioned earlier. The critical negotiations that get buried by disagreements over punctuation, must be freed up to include common sense interpretation at the regional, national and local level. And, perhaps most importantly of all, we must build more agile links between UN agencies, member states and all stakeholders essential to delivering change in real world, competitive conditions. While science can identify the issues and solutions, and public policies can catalyze and regulate economies and markets, it is in the consumption, production and investment choices of our societies that impacts become scalable and effective.

Indeed, given the growing number of industries, even companies, that have environmental, economic and consumer influence greater than many countries, our understanding and our decision making has to include some of the innovative partners that would previously have been considered unorthodox. After all, where game changers like big data, space exploration or transformative technologies like 3D printing, artificial intelligence or satellite communications were once in the hands of governments, today they are just as likely to be the domain of individual pioneers with the funds and the freedom to advance their vision at an extraordinary pace. This opens possibilities to deliver the aspirations of developing nations by facilitating the kind of technology leap frog that we have already see with mobile phones or off-grid solar power.

We cannot afford to forget that technology can be a double edged sword. We have already seen the speed with which the 'plastic fantastic' has transformed into the 'microplastic plague', absorbing heavy metals and infesting our food chain, from Mongolian mountain lakes to five kilometers below the sea, the table salt we sprinkle on top and the drinking water we wash it down with. And with e-Waste increasing by 25 per cent in just four years, it has quickly become the fastest growing waste stream in the world; expected to reach 50 million tonnes in 2018.

So, we need to understand the implications of such developments on our health and that of the planet. However, many environmental science and research programmes are struggling for funding.

This means UNEP is uniquely placed, even compelled, to act as a science-policy catalyst, connecting member states with other stakeholders to harness the incredible knowledge, passion and entrepreneurial spirit available beyond our traditional partnerships.

United Nations Environment Assembly (UNEA) - a new chapter in global environmental governance

The critical enabler for all of this is, of course, the United Nations Environment Assembly (UNEA), which is the only UN assembly apart from United Nations General Assembly to have universal membership.

On the 18th of February 2013, in his message to the 27th session of UNEP's Governing Council and Global Ministerial Environment Forum, Ban Ki-moon, the Secretary General of the United Nations, emphasized how the universal membership of UNEP's governing body – a deliberate decision by heads of state and governments at the Rio+20 UN Conference on Sustainable Development – "reflects its key role as a policy making forum on the environmental dimension of sustainable development", urging us "to make the most of this opportunity".

The first UNEA marked a new chapter in the story of environmental governance, reflecting a basic shift in mindset around social, economic and environmental progress, which our former Deputy Executive Director Angela Cropper referred to as a "triple helix of sustainable development" to reflect not only that the three strands constitute the DNA of our entire world, but that if you damage or pull at one strand, the others will start to unrayel.

This approach is starting to permeate into all aspects of national governance and has become the central principle of the 2030 Agenda and UNEP, with UNEA-2 bringing science and policies together to conceive, debate, decide and act on that basis. The big question is: can it be a powerful parliament for the environment with the necessary scope, scale and speed to deliver the 2030 Agenda?

To that end the UNEP medium-term strategy for 2018-2021, which will be adopted this week, echoes the need for rethinking and refocusing our approach and ambitions through the seven subprogrammes, including Climate Change, Disasters and Conflicts, Ecosystem Management, Environmental Governance, Chemicals and Waste, Resource Efficiency and Environment Under Review.

We will also continue to implement lessons learned from previous strategy reviews. For example, experience has shown that the outcomes of many initiatives become visible after a sustained engagement of ten or more years, but the resources and progress reports must be managed over shorter time periods. Likewise, while sequential planning allows the medium term strategy and the program of work

to be clearly defined before a project can be confirmed, a tandem development will enable it to be delivered more quickly. We have made great efforts in retooling UNEP as a results-based organization, working with a clear 'theory of change' approach to provide greater transparency and accountability.

We have not yet turned the corner when it comes to the metrics, but we are making good progress. For example, UNEP's six Regional Environmental Information Networks (REIN) and alignment with over 1,200 scientists, hundreds of scientific institutions and 160 governments on the Global Environment Outlook (GEO) provides granularity for national and regional decision makers and strong foundations for the Global Sustainable Development Report.

UNEP will also strengthen partnerships across networks such as the Science and Technology Alliance for Sustainable Development and across the Multilateral Environment Agreement (MEA) secretariats, with a broader community of stakeholders and wider participation in the generation and dissemination of knowledge, building on the considerable success of conventions like those on biodiversity, ozone, waste, chemicals and ecosystems mentioned at the beginning of this statement.

"We must build spiritual and scientific bridges linking the nations of the world."

- Albert Finstein

The launch of the regional GEO chapters and the first ever Science-Policy Forum, which preceded the official opening of UNEA-2, confirm the maturity and effectiveness of the science-policy relationship. But science cannot answer every question and policy alone cannot deliver every solution. So, we must reframe and refocus their impact by also strengthening the rule of law and the leaislative bodies that must uphold it: helping them to be fit for purpose in the complex reality of a fast moving, globalized world. Only then, will our aspirations, values and ethics reshape the norms of society, the behavior of individuals and their influence on the markets, in turn, to deliver a massive ground swell for change, which is what we see happening now in the renewable energy sector.

"We the peoples" – lest we forget

Initiating change on such a scale will have social, economic and environmental implications never before encountered. We are starting to understand that there is an extraordinary complex relationship between our actions, however geographically or politically removed, but we do not yet understand the sensitivity or consequences that our efforts to tackle one of the 2030 targets will have on all of the others. Yet, we must make a start for time is against us.

So, we have a moral and ethical duty to ensure that however big the challenges and however urgent the delivery, all of the science, the policies and decisions are directed at improving lives, not just metrics.

The legacy of Ken Saro-Wiwa

In 1995, when Ken Saro-Wiwa and eight of his compatriots were hanged for trying to draw the world's attention to the human and ecological crisis unfolding in the Nigerian region of Ogoniland, their families swore that their deaths would not be in vain. Extensive field work by UNEP later confirmed that decades of oil spills would require the most ambitious environmental assessment ever undertaken by the organization. UNEP's report outlined immediate actions to be taken and strategies to support the region's long-term recovery. The Nigerian government has acted on those recommendations and is now working with civil society, communities and industry to implement a \$1 billion programme for the environmental restoration of Ogoniland.

Because the Charter of the United Nations is not written in the name of a conference, a committee or a convention; it is written in the name of "We The Peoples". And for too many ordinary people, cutting down a tree doesn't represent deforestation, global warming and the loss of biodiversity, it represents a hot meal for their children and a roof over their head. As the Kenyan Nobel Laureate Wangari Maathai said: "We are very fond of blaming the poor for destroying the environment. But often it is the powerful, including governments, that are responsible."

The new GEO regional reports illustrate how critical this junction between science, policy and people really is, with 250 million people in the Americas and the Caribbean at risk from air pollution; 91 per cent of the people killed by natural disasters being citizens of Asia Pacific, where a third of the population drink water contaminated by human feces; people living in 8 out of 12 countries in West Asia facing water scarcity that exacerbates the problems created by 2.97 million refugees; and

millions of people across Africa are being hit by erosion, salinization, pollution and deforestation across 500,000 square km; People breathing polluted air; people dying; people drinking contaminated water; people unable to grow food – the very people that the United Nations invoked in 1948 when it referred to "We The Peoples".

It is within our power to transform this narrative. The United Nations was created in a world torn between fear and freedom, by people with the courage of their conviction. Too many of those people, who fought for recognition of the role of the environment in our societies, remain unsung heroes. In my tenure as Executive Director of the United Nations Environment Programme I have been privileged to know. to work with and to learn from many of them. I have tried to recognize at least a few in this statement who symbolize the many local and global leaders, among them one who, ten years ago, inspired and motivated me to join the United Nations family - Kofi Annan.

In his "We The Peoples" address as Secretary-General of the United Nations at the turn of the century, he reminded us all that:

"The central challenge we face today is to ensure that globalization becomes a positive force for all the world's people, instead of leaving billions of them behind in squalor...

It requires a broader effort to create a shared future, based upon our common humanity in all its diversity...

...We must also adapt international institutions, through which states govern together, to the realities of the new era. We must form coalitions for change, often with partners well beyond the precincts of officialdom. No shift in the way we think or act can be more critical than this: we must put people at the center of everything we do.

No calling is more noble, and no responsibility greater, than that of enabling men, women and children, in cities and villages around the world, to make their lives better. Only when that begins to happen will we know that globalization is indeed becoming inclusive, allowing everyone to share its opportunities.

We must do more than talk about our future, however, we must start to create it, now."

- Kofi Annan

Thank you for the privilege of serving you and the United Nations Environment Programme.

Achim Steiner