

New Global Environmental Organization, to head United Nations, and embrace present failings and shortcomings, for protection, care and maintenance of our planet.

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Abstract

There is a pressing need for a comprehensive 'Protocol for a Global Organization', designed to supersede existing fragmented legal systems that are shaped by diverse cultures, religious influences, and national boundaries. The principal objectives should address major global concerns and Environmental Social Governance, including climate change, population growth, and the development of a universal framework of environmental principles and laws applicable to all earthborn¹ creatures. This would facilitate responsible anthropogenic initiatives focused on the care, maintenance, and management of life on Earth.

The establishment of a World Body with Tier 1 status, senior to the United Nations, and grounded in the principles of Biological Diversity—as exemplified by the Protocol on Environmental Protection to the Antarctic Treaty—is recommended, and to be based on the five major continents. Such a world body should incorporate a structured suite of Environmental Impact Assessment master handbooks, serving as effective tools for monitoring and controlling global environmental processes. Crucially, this organization must address current gaps in United Nations responsibilities, including the failings and shortcomings. It must embrace the creation of a comprehensive, structured Total Renewable Energy Master Plan for the long-term sustainability of the planet, to be used for peaceful purposes, as per Chapter 1 of the UN Charter.

This strategy must embrace Earth's Environmental Mechanisms and empower humanity to responsibly manage the stewardship of our unique world.

Keywords: Earthborn dominance, Environmental Impact Analysis (EIAA), Global Environmental Legislature, Total Renewable Energy Security, Project Management Services Solutions (APMS).

Introduction

The United Nations was established on 24 October 1945 by 51 Countries, shortly after the end of the second World War, and was formed to maintain peace through the cooperation of its member countries².

The 4 main Purposes³ of the United Nations are classified under Article 1 of the Charter as:

- (1) to maintain international peace and security,
- (2) to develop friendly relations among nations,
- (3) to achieve international co-operation,
- (4) to be a centre for harmonising the actions of nations.

It is most important to take account and digest the full wording of each of these important sub-articles, particularly 1.3 which emphasises, '*without distinction as to race, sex, language, or religion*'. See Appendix1 – Facts Sheet: UN Charter

The 7 main Principles are furnished in Appendix 1, together with other important Articles of the complete 111 Articles, comprising the 19 Chapters of the Charter.

In the 80 years since its foundation, the United Nations has maintained its purpose and the related Policies, though in recent years doubts and questions have risen. Indeed, the United Nations now has a complex legacy⁴, compared to the earlier years' remarkable successes in peacekeeping, human rights and global cooperation⁵, the world is once again focused on its significant failures⁶.

Over these years, UN multidimensional peacekeeping missions have failed in Somalia, Rwanda, Angola and Bosnia⁷. Now, in just the last 12 months, the top policies furnished in the main Articles 1 and 2, have been ignored by permanent members of the 'Big Five'.

On June 13, 2025, Israel launched devastating strikes against military targets in Iran and assassinated several of the country's top nuclear physicists. This was followed days later, on June 21, when the United States escalated the crisis further by striking Iran's nuclear facilities at Fordow, Natanz, and Isfahan. Under the convention these strikes by the United States on Iran amount to an unprovoked and unlawful assault on a sovereign nation. They were not authorised by the UN Security Council and are unlawful against the UN Charter, indeed they were totally ignored⁸.

Similarly, in the last decade, Russia's invasion of Ukraine and Israel's continuing occupation of Palestinian⁹ territories represent a breakdown of the international legal order that the UN¹⁰ was founded upon in 1945.

The most difficult decision for the United Nations was one inherited from [Anthropogenic] history and the League of Nations transition of powers to the United Nations. In 1947 the UN did initially have the intention to recognise¹¹ the single state of Israel within the footprint of the land of Palestine, though no final decision was taken. The failure to endorse this decision has affected the history of the UN throughout its tenure, and its decision-making process must be examined.

It is now time for a 1st Tier Global Organization, based on Environmental Principles to be established, with the necessary powers to protect and care for our small planet¹².

Global Structure Framework

A founding Global Environmental Organization, requires a comprehensive Environmental Structure Plan to be set out as a basic framework¹³, established and then developed for all earthborn creatures on our small planet, based on three principal limbs for our common future, and targeted at 'successful long-term sustainability': these being Environmental Impact Analysis (EIA) / Legislative Regulations / Financial Services Structure.

To be classified as First Tier status, senior to the anthropogenic 'United Nations', and founded on the principles and main objective of the highly successful *Antarctic Treaty* originated in Washington on 1 December 1959¹⁴, which entered into force in 1998. It designates Antarctica as a "natural reserve, devoted to peace and science".¹⁵

The structure plan to be subdivided to embrace the two main fields of responsibility namely: '**Anthropogenic**' / '**Non-Anthropogenic**'. The main Purposes are listed in Appendix 2, and must be absent of all influences of cultures, religions and unrealistic anthropogenic boundaries.

To embrace the present framework of the UNFCCC 'Conference of Parties'(COP), and Biological Diversity (BD) of life on Earth (earthborn), at all levels – genetic, population, species, habitat, and ecosystem, it requires two main responsibility spines:

- for ESG governance principles to be legal framework for the anthropogenic side, and,
- the Biological Diversity framework for the legal services in CBD Convention.

The global 'size' and 'decision-making process' to embrace the present structure, and performance, including all successes / failings:

Anthropogenic:

Global Size: The COP is attended by all Countries that have signed and ratified the Convention, and 198 countries participated is one of the largest multilateral bodies recorded in the UN systems (1 Apr 2025). *Immediately upon returning to office, President Trump initiated the withdrawal of the United States from the World Health Organization the Paris Climate Agreement, resulting in 197 Countries.* (7 Jan 2026)

Decision Making Process: A Completely new approach is required, caused by the initial failure to reach the correct decision in 1947¹⁶, and recent major failings of the UN Stewardship. (Period: 2022 / 26.)

Non-Anthropogenic: To embrace major environmental priorities:

The Convention on Biological Diversity (CBD) signed by nations at the Earth Summit at Rio de Janeiro in Brazil on June 5, 1992, came into force on December 29, 1993.

The 1982 United Nations Convention on the Law of the Sea (UNCLOS), which came into force on November 16, 1994, is an international treaty that provides a regulatory framework for the use of the world's seas and oceans, inter alia, to ensure the conservation and equitable usage of resources and the marine environment.

Earth's surface is covered by over 70% water, with the main boundary between *land* and *water* being defined as the *coastal transition zone*.

The atmosphere above the surface is controlled by earth's environmental mechanisms through the radiant heat from the Sun. Pollution legislative controls demand careful legislature.

Global Atmosphere Management Structure Framework:

The environmental mechanisms¹⁷ on earth allows the air to rise at the equator and flow to the 30° latitudes, creating three cells for each hemisphere, (Hadley / Ferrel / Polar). [see Appendix 3 – Atmospheric Prevailing Winds.

A **global atmospheric organizational plan** proposes embracing Mans Science's Fluid Mechanics¹⁸ to manage elastic¹⁹ fluids without boundary conditions in Earth's atmosphere. Legislation must be continent based to regulate air pollution between land masses, enabling effective legal processes. The framework to be governed through *transitional coastal plan zones* of the five²⁰ main continents—two in the northern hemisphere and three in the southern hemisphere.

The importance of the boundary condition *Coastal Transition Zone* is paramount for anthropogenic reasons, to allow mankind to perceive a boundary condition tool, to be able to monitor / record / control the movement of elastic fluids in Earth's atmosphere, and the main continents may be used for this environmental management plan.

The concept for integrated Coastal Zone Management (ICZM) was first introduced at the national policy scale in the Coastal Zone Management Act (CZMA) enacted by the Congress of the United States in 1972; Master Plans for regional coastal management around the globe then evolved and developed around the globe. A Convention on Coastal Management took place in the UK²¹ in September 2025, with the theme '*Creating a Climate for Change*'.

A Global 'Environmental Coastal Management Plan Model'²² is now required for our unique planet, to embrace, develop and manage several important tasks including, Oceans Plastics Pollution / Ocean total renewable Energy facilities / Global Atmospheric Pollution (monitor, recording, controls) / Climate Change, as well as the Beaches, Rivers, Coastal areas normally identified.

Anthropology

Climate Change:

The International Court of Justice (**ICJ**): On 23 July 2025, the 'advisory opinion' marks the first time that the ICJ, the United Nations' principal judicial organ, has examined the international legal framework applicable to climate change.

The International Court of Justice (ICJ) opinion²³ largely rejects the arguments put by major emitters of greenhouse gases (historical and current), including the UK. The 15 judges adopted an expansive interpretation of states' obligations. Despite being non-legally binding, the advisory opinion has significant implications for national climate policies and international climate negotiations. It also opens new pathways for international and domestic litigation against governments.

This briefing presents the origins of the proceedings, summarises the ICJ's key findings and outlines domestic and international reactions.

UN Failings:

A major United Nations failing in 1947 may have resulted from their fragmented set of rules²⁴, stipulated under Article 27, which allows special status for the five Countries who created the Charter, and with the omission of linkage to proper legislative powers and lacking specialist primary courts endorsing correct decisions.

Indeed, the UN General Assembly prepared sound findings in 1947, with resolution 181(ii) *for establishing Arab and Jewish States in Palestine, with an international regime in Jerusalem*, yet this was never endorsed. These are two proud Nations, each with hundreds of years history, and unfortunately, the proud Palestinian people, who were under the Ottoman rule for over 400 years, did not receive any 'State' acceptance.

Recently in the last few years the UN authority has been totally ignored by members of the big 5, following the war in Ukraine, now in its 4th year, and the attacks on Iran by the USA and Isreal.

For these important failings, a new Global Organization is now urgently required, structured under a fresh approach to that of the UN Charter, with a different voting system to that under Article 27, together with a completely different decision-making process²⁵. (See Appendix 1).

Specialised Courts:

There is a relatively long history of criticism of the existing arrangements for access to justice on environmental matters in the UK.²⁶ However, *Environmental Courts and Tribunals* are now found on every inhabited continent, under democratic and nondemocratic regimes, in rich developed nations and the poorest least developed nations alike²⁷.

"The judiciary has a role to play in the interpretation, explanation and enforcement of laws and regulations. ... Increasingly, it is being recognized that a court with special expertise in environmental matters is best placed to play this role in the achievement of ecologically sustainable development."²⁸

New Zealand have adopted environmental courts for several years. which involves their Resource Management Act 1991. The court largely deals in matters which involves the Resource Management Act 1991. The court largely deals with appeals about the contents of regional and district plans and appeals, arising out of applications for resource consents the Environment Court sits in several courthouses in different parts of the country.

Environmental Harm, embracing Climate Change.

Air Pollution:

UK Air pollution legislation has evolved over the last 30 years with Part 1 of the EPA 1990 seeking prevention of Air pollution through permit-based control, leading to the Environmental Permitting

Regulations for England and Wales and progressive amendments. This was followed by the Clean Air Act 1993²⁹ to address vehicle emissions. The Environment Act 1995 created the establishment and operation for 'GHG' emissions trading scheme, embracing the importance of transboundary effects around the globe. After Brexit, the Environment Act 2021³⁰ recalled the importance of Air Quality and smoke control regulations in England and Wales.

Pollutants causing concern are carbon monoxide, nitrogen oxide and ozone³¹. Fine particles in vehicle emissions, each less than 10 micrometres across, 'PM10', cause respiration problems by entry of chemicals into the lungs. Ozone at ground or at tropospheric levels is a highly corrosive pollution, based on reaction between sunlight / NO₂ / volatile organic compounds (VOCs) causing summer problems in cities, and 'photochemical smog', comprising micro particles of VOCs/ NO_x.

The Secretary of State's Guidance Note 6/9 (04)³² issued conditions for emissions into the air and guidance on Best Available Techniques (BAT) not entailing excessive cost.

Defra's 'Air Pollution in the UK 2019'³³ was issued in September 2020, as the UK was required to report air quality data on an annual basis under various³⁴ EU Directives. The Report provides background information on pollutants covered by various EU Directives and UK's Air Quality Strategy: covering the sources / effects / monitoring networks / UK's modelling methodology. The pollutants covered in the report are SO₂ / NO / NO₂ / PM10 & PM2.5 particles/ Benzene/ 1,3-Butadiene CO / Metals/ PAH/ O₃.

Sulphur dioxide is another major pollutant produced by chemical plants and not effectively controlled under earlier legislation of the 1950s. The method of control was to discharge at height over the surroundings which dispersed over a wide area and fell as acid rain harming freshwater and terrestrial ecosystems in UK and beyond into Europe indicating incompleteness.

The earth's wind pattern forces³⁵ change, North / South, at 30° and 60° latitudes along 'fronts', while rotational deflections travel great distances around East / West hemispheres in what is called the 'Coriolis'³⁶ effect over the surface, spreading man's pollution. Careful global organization from all cultures is now urgently required. Reference Appendix 3.

The fragmented progress of UK Air Pollution legislation has lacked structure and remains incomplete, also lacking any unified co-ordinated directive from the global stage. It is now essential to restructure an intelligent approach towards setting out a UK structured framework for 'air pollution' controls based upon 'common but differential responsibility'.³⁷

Water Pollution.

The EU 'Water Framework Directive' (WFD) is a complex and particularly elaborate measure which is unusually difficult to understand'.³⁸ In the case **C-461/13 Bund fur Umwelt und Naturschutz Deutschland**, Advocate General Jaaskinen said 'The WFD is a complex and particularly elaborate measure which is unusually difficult to understand'.

However, the EU WFD does cover all the main aspects relating to Water Pollution control.

In the UK, the Water Framework Directive (WFD) regulatory controls were transposed in 2003³⁹ and updated in 2017⁴⁰. It focuses target performance⁴¹ (for member states) to undertake to achieve 'good status'⁴², whereas regulatory controls based on specification standards *to harness nutrient controls* appears to be the preferred choice for 'protecting the water, soil and air'.⁴³

Agricultural Pollution.

After Brexit there is an opportunity for UK policy and regulatory control to give greater emphasis to specification and process standards, followed by performance targets, through a clearer programme of measures⁴⁴ for 'River Basin Management Plans' (RBMP) for nutrient control defined standard levels.

A comprehensive updated co-ordinated planned framework is required to embrace the 'UK Implementation of the Nitrates Directive in England'.⁴⁵ This, with the follow up 'Explanatory Memorandum' of NPPR 2008⁴⁶ and 'Consultation Guidance'⁴⁷, together with 'several important Nitrate Pollution Regulations' (NPPR 2016⁴⁸, RPADPR 2018⁴⁹, FW (EU Exit) R 2019⁵⁰).

Following exit from the EU, an approach to reference these important pieces of legislation in a 'reference Chart for environmental legislation for agricultural nutrient controls chart' would be a useful tool, Reference, Appendix 4 – Agricultural Legislation Controls Chart⁵¹. This coordinated structure plan approach requires as a starting point a particular 'environmental impact analysis tool mechanism for managing UK Water Pollution' which would embrace a UK Common Agricultural Policy (CAPUK), good agricultural and environmental conditions for UK farms (GAECUK)⁵²

Plastics Pollution:

The 'Resolution adopted by the United Nations Environment Assembly' on 2 March 2022, to 'End plastic pollution'⁵³, recalled the United Nations Environment Assembly resolutions 1/6, 2/11, 3/7, 4/6, 4/7 and 4/9.

They affirmed the urgent need to strengthen global coordination, cooperation and governance to take immediate action towards the long-term elimination of plastic pollution in marine and other environments, and to avoid detriment from plastic pollution to ecosystems and the human activities dependent on them⁵⁴.

"The Intergovernmental Negotiating Committee to develop an internationally legally binding instrument on plastic pollution, including in the marine environment", noted with concern the high and rapidly increasing levels of plastic pollution, including in the marine environment.⁵⁵

The draft 'Chair's Text'⁵⁶, stated, in December 2024, the objective of this Convention is to protect human health and the environment from plastic pollution.⁵⁷

Major quantities of plastic accumulate in our Oceans, particularly in huge subtropical oceanic areas called gyres. – these are massive circular currents that trap floating debris for decades. [*See, Appendix 5 – File Note: Plastic Pollution.*]

Climate Change [Reference Chart on History of Climate Change]

Over a decade ago, the UK put into force the Climate Change Act (CCA) 2008⁵⁸, setting targets for a reduction of Greenhouse Gases by 2050, to provide for a system of carbon budgeting⁵⁹ for the purpose of limiting GHG from the atmosphere. The Act established 'The Committee on Climate Change'⁶⁰(CCC) to assist in 'carbon management', to monitor, advise and report with 'carbon budgets' and on 'monitoring / control' procedures towards the '2050 target'⁶¹ for reduction of GHG.

Under general ancillary powers⁶² the committee may exercise its duties to take action to ensure it carries out its functions under the guidance of National Authorities and the Secretary of State. The British Standards Institute (BSI) fast tracked their Specification for 'Carbon management in Infrastructure'⁶³ in May 2016, to enable accuracy, transparency, consistency, relevance and completeness of carbon management and GHG emissions quantification. The scope of PAS 2080 is about Carbon management as part of wider climate change mitigation; it is not about wider environmental or sustainability issues⁶⁴.

Under the specification the management of 'whole life carbon' in UK infrastructure is defined as embracing the 'transport', 'energy', 'water', 'waste' and 'communication' sectors⁶⁵, and the management services covers the assessment, removal and reduction of GHG emissions measured as 'carbon dioxide equivalent', which relates and covers for the 6 gases quoted in the Kyoto protocol⁶⁶.

The methodology control procedures for the 'practitioner' calculating Infrastructure GHG emissions, is covered in the specification,⁶⁷ which were responsible for over half of the UK's GHG consumption in 2010 emissions, a total: 981 million tonnes Mt CO₂e⁶⁸ and a programmed emissions target of 178 Mt CO₂e in 2050. CO₂e is a unit for comparing the radiative forcing of a greenhouse gas to carbon dioxide⁶⁹ and is calculated using the mass of a given GHG multiplied by its global warming potential. 'GWP' which is the factor describing the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of CO₂ over a given period⁷⁰. In 2019 the Climate Change Committee

(CCC) Report, 'Net Zero - The UK's contribution to stopping global warming'⁷¹, led to the (CCC) committing the UK Government by law to reduce greenhouse gas emissions by at least 100% of 1990 levels by 2050, which relates to 'net zero'.

The 'Office of Environmental Protection'⁷² (OEP) is responsible for Environmental governance, including environmental targets, environmental improvement plans, environmental monitoring and importantly to embrace compliance with the five main environmental principles⁷³ recorded in the Environment Act 2021.

Following Brexit, and the one-year transition period, the ECJ responsibility as the supreme court in UK ceased. This is now the opportunity for the UK to set out a new structure plan framework for climate change, based on CCA 2008 and augmented to include relevant latest global 'climate change' targets all as set out under the UNFCCC on climate change⁷⁴. It is important to ensure comprehensive environmental analysis on climate change is included in a suite of EIA handbooks.

Deep Sea Mining Debate

Deep Sea Mining is the extraction of rare minerals from the seabed in the deepest areas of the Oceans. The main ores of commercial interest are polymetallic nodules, lying on the seabed and can be found at depths of 2.5 to 3.5 mile, primarily on the abyssal plain. Minerals include copper, nickel, cobalt and manganese.

The **International Seabed Authority (ISA)**⁷⁵ is the regulating body that controls and grants exploration licences.

In April 2025 U S A President Trump signed executive orders instructing the National Oceanic and Atmospheric Administration, to allow permits for Companies to mine in International and US waters, under the 1980 Deep Seabed Hard Minerals Resource Act.

In July 2025, a request was made for the ISA Secretariat to investigate whether deep-sea mining companies applying for licenses and permits under the United States' mining code are at risk of violating existing ISA exploration contracts⁷⁶. UNCLOS prohibits mining activities, and mining companies may have their exploration contracts revoked, if found to have violated such action, and this may prevent mining companies from carrying out such mining in international waters.

The International Seabed Authority (ISA) was set up by the U.N. in 1994, and the organization granted the first license for exploring polymetallic nodules to our subsidiary Nauru Ocean Resources Inc. (NORI) in 2011⁷⁷. The Metals Company now holds certain rights to exploration contracts granted by the ISA through two subsidiaries: NORI, sponsored by the Republic of Nauru; and TOML, sponsored by the Kingdom of Tonga⁷⁸.

Potential climate impacts: The ocean is the world's largest carbon sink, absorbing around 25% of all carbon dioxide emissions⁷⁹. Microscopic organisms play a critical role in this climate-regulating system, helping to sequester carbon in the deep sea and reduce emissions of other planet-warming gases (such as methane) from seabed sediments. The loss of deep-sea biodiversity following mining activity could impact the ocean's carbon cycle and reduce its ability to mitigate the global temperature rise.

While the deep sea was at one time considered to be devoid of life⁸⁰, we now know that it is the largest habitable place on the planet and home to an awesome array of species⁸¹. Indeed, there are thousands of species already identified, and, in the Clarion-Clipperton Zone, which is a key area of interest for deep-sea mining, researchers have recently identified thousands more species that were entirely new to science.⁸²

Social and governance risks: When extraction occurs offshore, deep-sea mining industry will need shoreline facilities for processing and trans-shipment of material. This must be embraced in a global Coastal Management Plan.

This **Science Brief on Deep-sea Mining⁸³ (DSM)** covers an introduction to the technology, a discussion of recent developments, direct and indirect risks of mining on the seabed, and key considerations. DSM involves extracting minerals from the ocean. These resources are critical for renewable energy technologies, fuelling growing interest in commercial exploitation.

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Non-Anthropogenic Priorities

UNCLOS

The United Nations (UN) Convention on the Law of the Sea was signed⁸⁴ in December 1982 and its present separate legalised marine areas are Internal Waters, Territorial Sea, Contiguous zone, Exclusive Economic Zone⁸⁵ and the High Seas, at present 72% of earth's surface. It is the transitional zone boundary condition between land and sea. It is an international framework that governs the use on management of the world's oceans, including navigation rights, territorial waters and resource exploitation, and is crucial for maintaining security, environmental protection, and fair resource sharing among nations.

UNCLOS⁸⁶ had been ratified by 168 parties (167 States less Palestine), as well as the UN and the Cook Islands and Niue (Appendix 3). The United States, one of the big 5, objected to Part XI of the Convention on several grounds, arguing that the treaty was unfavourable to American economic and security interests.

The High Seas Treaty⁸⁷: (BBNJ): The Agreement Under the United Nations Convention on the Law of the Sea, on the Conservation and Sustainable use of Marine **B**iological Diversity of Areas **B**eyond **N**ational **J**urisdiction. It was open for signature by all States and regional economic integration organizations, under the fast-track ratification process⁸⁸ from 20 September 2023 to 20 September 2025 and entered into force on 17 January 2026 . It is a legally binding instrument for the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

Coastal Zones

The concept for Integrated Coastal Zone Management (ICZM) was first introduced at the national policy scale in the Coastal Zone Management Act (CZMA), enacted by the Congress of the United States in 1972.

In UK, Coastal resource management (CRM) is one of the major strategies to address the varied, wide-ranging and often interconnected issues that impact coastal areas. One such strategy around the UK coastal area is termed a *Shoreline Management Plan*, and England alone has twenty⁸⁹ SMPs.

An SMP provides a management policy for a section of the coast defined by the geography of the area and coastal processes, 4 typical aims for: *Hold the Line, Managed Realignment, No Active Intervention and Advance the Line*. Other important strategies are to reduce the risk of flooding in identified areas, dissipate wave energy wherever necessary and hold back waves.

Soft Engineering Coastal Management techniques adopt '*Soft engineering works in tandem with nature*', and these include maintaining mangroves, forests to mitigate tropical storm impacts, and beach nourishment to enlarge a beach using sediment from other locations.

It is also important to identify Maritime zones and how they are determined⁹⁰.

A Long-term sustainability Strategy is essential, and now urgent, to combat climate change and other harmful anthropogenic effects, which cause serious harm to the footprints of the continental shelves, their margins and the less saline coastal waters⁹¹. A Global Environmental Coastal Structure Plan is required to embrace all climatic and anthropogenic effects, and most important, to include for measures to accommodate the near future infrastructure projects⁹² for the harnessing of the massive quantities of kinetic energy resulting from the perpetual motion of earth's oceans.

Biodiversity Convention

The **Convention on Biological Diversity (CBD)** endorsed the Rio Declaration & Forest Principles, and adopted Agenda 21⁹³, for sustainable development, which was an integral part of the 2nd Earth

Summit in 1992. At this summit, the United Nations Commission on **Sustainable Development (CSD)** was established by the UN General Assembly to ensure effective follow-up of the United Nations Conference on Environment and Development (UNCED).

The United Nations Framework Convention on Climate Change (UNFCCC) was formed in 1994, to stabilize the greenhouse gas emissions and to protect the earth from the threat of Climate Change. The **Conference of the Parties (COP)** followed, as the UNFCCC Apex decision-making body, under two distinct limbs:

- **[COP – Biodiversity]:** CSD Strategy meets **in two-year cycles**, to monitor and report on the implementation of the CBD. This includes two supplementary agreements: Cartagena Protocol & Nagoya Protocol, embracing Biosafety and LMOs (governing movement of *Living Modified Organisms*).
- **[COP – Climate Change]:** In 1995 the first '**Conference of the Parties**' (COP 1) commenced **on an annual basis** to fully monitor, discuss, evaluate, evolve and plan on matters of Climate Change and all Environmental Topics.

The evolving UN approach towards discussions to *cover all forms of life from microscopic viruses to the largest living species*, was targeted at COP15 for Kunming, China. Due to the protracted delays associated with COVID19 pandemic, it was split in two parts, and ended in Montreal Canada, on 19 December 2022 with the landmark agreement, known as the '**Kunming Declaration**⁹⁴'. This was to guide local action on nature to 2030.

This UN Biodiversity Conference was Chaired by China and hosted by Canada, which had representatives from 188 governments in Montreal over the 2-week period, and resulted in the adoption of the **Kunming-Montreal Biodiversity Framework (GBF)**.

COP15 [Biodiversity] aims to protect and restore the Earth's biodiversity processes, *such as the carbonaceous and nitrogenous cycles, which are not possible without a variety of organisms at every stage, while ecosystem services such as pollination and flood prevention are inextricably linked with life on Earth, as part of the **biogeochemical mechanisms***.

COP16 [Biodiversity] took place from 21st October to 1st November 2024, in Cali, Colombia, and was the first nature COP since the adoption of the **Kunming-Montreal Global Biodiversity Framework**⁹⁵. *COP16 had an ambitious agenda, covering a wide range of critical topics to halt and reverse biodiversity loss by 2030.*

The Protected Planet Report 2024⁹⁶ is the first report to fully assess the global status of protected and conserved areas in the context of Target 3⁹⁷ of the Kunming-Montreal Global Biodiversity Framework.

Fragmented Environmental legislation. Unlike structured Contract Law, (such as FIDIC⁹⁸), the ever-evolving environmental international law legislation regulations remain unconsolidated and lacking any structured framework. The approach to a structured framework of integrated Environmental Laws must lead the way, through a new specialised World Body Environmental Court, and must be exempt from the influences of present religious and cultural ideals.

Innovative Ideas / Methods for Longterm Sustainability Projects.

Global Long-term Sustainability Project (embracing environmental mechanisms):

At last, Man has the knowledge to develop new innovative methodologies required to harness earth's natural energy resources⁹⁹. Vast kinetic energy reserves are available in the high seas, which cover over 70% of the surface of earth.

An early example of Man's **Innovative ideas**, was recorded in the late 60s, following research work into 'fluid mechanics' relating to 'thick liquids' for municipal sewage sludges.

Research studies¹⁰⁰ were successfully carried out on site¹⁰¹ to ascertain the effective range of 'kinematic viscosity' of 'thick liquid' municipal sludges, embracing the importance of '**boundary conditions**', and '**shear stress mechanisms**' within a fluid (Table 1). The kinematic viscosity of water was recorded at 0.000012 ft²/sec. See Table 1.

A research paper¹⁰² was presented to the UK, Institution of Civil Engineers in 1971 and awarded recognition in July 1972. The results were adopted in the Leicester City Corporation's Sludge Disposal Project design works, to replace temporary facilities with a permanent structure, adjacent to their Compost Plant, and was successfully completed in 1970.

% solids	Calculated Kinematic Viscosity	Required pipe size	Time for 1,000 galls to flow to reservoir
2.39	.0007 ft ² /sec	Transitional	Zone
2.67	.001 ft ² /sec	-	-
4.27	.00552 ft ² /sec	6" dia	22.85 mins.
4.27	.00552 ft ² /sec	8" dia	7.12 mins.
4.27	.00552 ft ² /sec	12" dia	1.44 mins.
4.27	.00552 ft ² /sec	15" dia	.585 mins.
4.45	.011 ft ² /sec	6" dia	46.00 mins.
4.45	.011 ft ² /sec	8" dia	14.32 mins.
4.45	.011 ft ² /sec	12" dia	2.88 mins.
4.45	.011 ft ² /sec	15" dia	1.175 mins.

Table 1 Range of Kinematic Viscosity values for Municipal Sludge – Wanlip STW Sludge Project, 1971 (*Imperial Units*)

Following ratification of the '**Biodiversity Before National Jurisdiction**' (BBNJ)¹⁰³ Agreement, important amendments to legislation are now required to additional methodologies for harnessing the natural kinetic energy storage in the **Regional High Seas**.

New legislation must include the **regional areas of the High Seas** for coastal nations, and to be linked to UNCLOS 'high seas sections'¹⁰⁴, to embrace the methodologies for harnessing natural kinetic energy storage zones, using environmental mechanisms related to elastic fluid mechanics

Advanced Project Management Services Solutions (APMS)¹⁰⁵

[APMS] Proven projects are those which have been completed to satisfactory performance levels both in the UK, and Internationally, and carried out under Contract Law procedures, with the use of 'advanced project management services' solutions (APMS), in line with and supported by fiscal government policy, which may be defined as:

"Advanced Project Management Solutions (APMS) are an integrated set of project management tools, which have been used in an integrated and co-ordinated way and proven on several major Projects to achieve good performance standards over several years. See Appendix 10.

Summary: The Way Forward¹⁰⁶:

A Global Environmental Structure Plan must now be set out and established for our common future, to enable near future anthropological Total Renewable Energy Projects to be built, as the bridge for future generations, to achieve successful long-term sustainability.

A structured framework of integrated Environmental Laws must lead the way to meet the challenge of 'climate change' and all other adverse conditions harmful to our environment. The approach to be

through a new specialised World Body Environmental Court, to be exempt from the influences of present religious and cultural ideals.

A Comprehensive Management Structure system to be set out to co-ordinate and develop all anthropogenic Projects. Integrated Strategic Plans and Programmes to be adopted, together with proven 'advanced project management solutions.

A comprehensive Suite of Handbooks to be developed to manage the strategic 'Environmental Impact Assessment' (EIA) process, to tackle climate change and other adverse harmful effects on the environment.

A lead Tier Global Organization to be set out and developed for the care, maintenance and protection of Earth. To be developed based on five main Continents, for peaceful purposes, without religious / cultural influences.

A new structured 'Coastal Management Master Plan' to be developed for all continents, to tackle pollution, together with embracing the boundary conditions for the vast total green renewable energy supplies available in, on and under the 'High Seas' and Oceans. 'Long-term sustainability' to be the principal target.

For the UK, as an Island State, a 'Total Renewable Green Energy Plan' to be developed to embrace 'Ocean Energy', include Tidal Energy, and to be included within the present 'British Energy Security Strategy' for long-term Sustainability.

Present Water Pollution policy in the UK needs to address and include for improvement to present Agricultural Legislation Control procedures, as present run-off control procedures within the Rivers Basins areas requires major change.

The global atmospheric organizational plan to propose embracing Mans Science's 'Fluid Mechanics' to manage 'elastic fluids' without boundary conditions in Earth's atmosphere. Legislation to be continent based to regulate air pollution between land masses, enabling effective legal processes to be legislated.

List of Appendices

- Appendix 1: Facts Sheet: United Nations Charter
- Appendix 2: Information Sheet: Structured Purpose
- Appendix 3: Atmospheric Prevailing Winds
- Appendix 4: Agricultural Pollution
- Appendix 5: Plastic Pollution
- Appendix 6: History of Climate Change
- Appendix 7: Kunming Declaration
- Appendix 8: Protected Planet Report 2024
- Appendix 9: Full Anthropogenic Environmental Impact Analysis (EIA) process Chart
- Appendix 10: Advanced Project Management Solutions. (APMS)

Addendum

Global Environmental Legislation

- Incompleteness of EIA Regulations (**EIA**).
- United Nations Convention for the Law of the Seas (**UNCLOS**).

- The Agreement under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (**BBNJ**).
- Protocol on Environmental Protection to the Antarctic Treaty.

Appendix No. 1

Facts Sheet: **United Nations Charter¹⁰⁷.**

Purposes and Principles. The Charter of the United Nations is the treaty that established the United Nations, and includes the Purposes and Principles, membership, and organs of the United Nations, among other things. **The Charter has 19 chapters and 111 articles**, in which Articles 7, 8, 97, 98, 100, 101 and 105 relate to human resources.

Since the UN's founding in 1945, the mission and work of the Organization have been guided by the purposes and principles contained in its founding Charter, which has been amended three times in 1963, 1965, and 1973¹⁰⁸.

Article 1 (Ch 1)

The Purposes of the United Nations are:

1. To maintain international peace and security, and to that end: *to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;*
2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace.
3. To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all **without distinction as to race, sex, language, or religion;** and
4. To be a centre for harmonizing the actions of nations in the attainment of these common ends.

Article 2 (Ch 1)

The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles.

1. The Organization is based on the principle of the sovereign equality of all its members.
2. All Members, to ensure to all of them, the rights and benefits resulting from membership, shall fulfil in good faith the obligations assumed by them in accordance with the present Charter.
3. All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.
4. All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.
5. All Members shall give the United Nations every assistance in any action it takes in accordance with the present Charter and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.
6. The Organization shall ensure that states which are not Members of the United Nations act in accordance with these Principles so far as may be necessary for the maintenance of international peace and security.
7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

Article 23: The Council is composed of **15 Members:** Five permanent members: China, France, Russian Federation, the United Kingdom, and the United States, and ten non-permanent members elected for two-year terms by the General Assembly (with end of term year): Bahrain (2027)

Article 27, Voting

Each member has one vote.

Decision of security council – affirmative vote of nine members.

Members to be 'Big 5' : China, France, (Russian Federation), United Kingdom, USA
Council composed of 15 members

Article 55 charges the United Nations to promote respect for and observance of universal human rights for all. Article 56 charges each member nation to help the UN to achieve goals set forth in Article 55.

Article 99 is a rarely used clause in the UN Charter that states that "The Secretary-General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security" (emphasis).13 Feb 2024

Article 100: (Office of Legal Affairs)¹⁰⁹

Each Member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary-General and the staff and not to seek to influence them in the discharge of their responsibilities.

1. In the performance of their duties the Secretary-General and the staff shall not seek or receive instructions from any government or from any other authority external to the Organization. They shall refrain from any action which might reflect on their position as international officials responsible only to the Organization.

2. Each Member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary-General and the staff and not to seek to influence them in the discharge of their responsibilities.

UNITED NATIONS STRUCTURE

The secretary-general, appointed by the General Assembly's 193 member states, serves as the chief administrative officer of the United Nations. Common responsibilities include making appointments to UN posts, overseeing peacekeeping missions, mediating conflict, and coordinating UN responses to global emergencies.

The permanent members of the United Nations Security Council (known as the Permanent Five, Big Five, or P5) are five sovereign states to whom the UN Charter of 1945 grants a permanent seat on the UN Security Council: China, France, Russia, United Kingdom, and United States.

Countries who presently are not in the UN. The United Nations has 193 members among the 197 states it recognizes. While the **Vatican and the Palestinian State** are 'only' observers, the **Cook Islands and Niue** (embraced by New Zealand.).

The work of the United Nations covers five main areas:

- Maintain International Peace and Security.
- Protect Human Rights.
- Deliver Humanitarian Aid.
- Support Sustainable Development and Climate Action.
- Uphold International Law.

To be read in conjunction with the Statute of the International Court of Justice¹¹⁰

Main Bodies of the United Nations¹¹¹

Appendix 2.

Information Sheet: Structured Purpose

Purpose:

The Need for a Unified Global Protocol

There is an urgent necessity to establish a 'Protocol for a Global Organization', one designed to supplant the current fragmented and evolving legal systems. At present, these systems are characterised by a complex amalgamation of various cultures and religious extremes, resulting in a disjointed framework marked by divisive national boundaries. Such fragmentation impedes

collective progress and hinders the development of truly global solutions to pressing challenges.

Key Global Priorities

To address these systemic issues, the protocol must prioritise major planetary concerns. Chief among these are climate change, population growth, and the pressing need for a universal 'Framework of Environmental Principles and Laws' that applies to the planet and all its species. Establishing such a framework is essential to enable responsible anthropogenic projects—initiatives that are appropriately tailored to the care, maintenance, and management of all life forms on Earth¹¹².

Establishment of a World Governing Body

A pivotal step forward involves founding a first-tier World Body. This body would stand above the United Nations, drawing upon the principles found in international agreements for the protection of endangered species. Its foundation should mirror the successful elements of the Protocol on Environmental Protection to the Antarctic Treaty, ensuring robust governance and effective implementation.

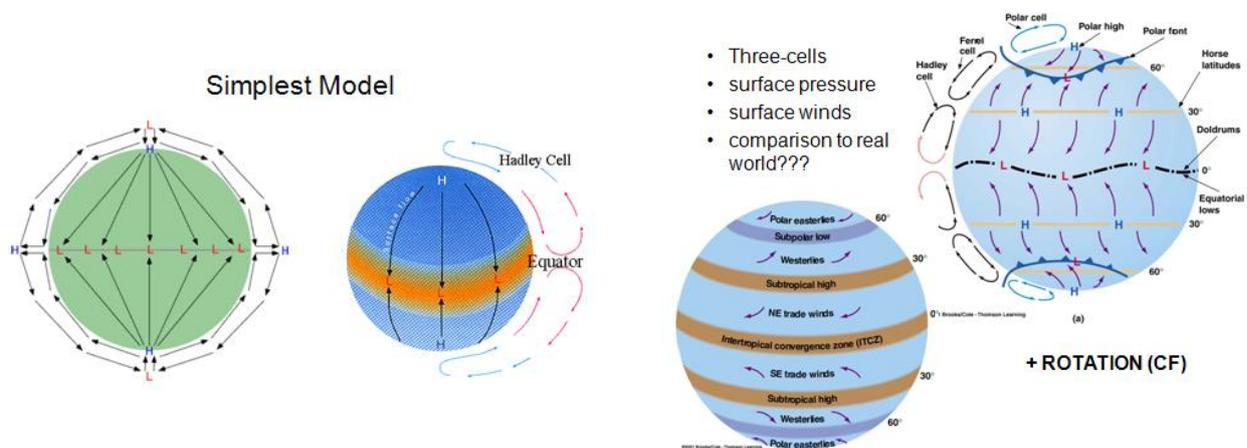
Monitoring and Control Mechanisms for the Planet.

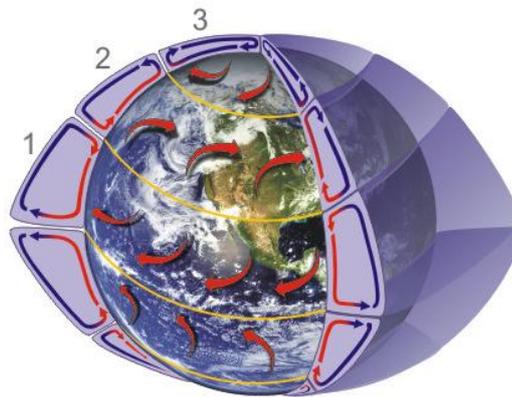
Central to the effectiveness of this World Body is the adoption of a structured suite of Environmental Impact Assessment (EIA) handbooks. These handbooks would serve as comprehensive tools, providing systematic procedures for the complete monitoring and control of global environmental services. Through these mechanisms, the World Body would ensure the integrity and sustainability of environmental initiatives worldwide.

Addressing Shortcomings and Future Planning.

Crucially, this organisation must confront and remedy the shortcomings and outstanding responsibilities presently unmet by the United Nations. Achieving this will require the formulation of a comprehensive, structured Renewable Energy Master Plan for the planet. Such a plan will equip humanity with the means to manage the stewardship, care, and maintenance of our unique world, safeguarding its future for all species.

Appendix 3.). Atmospheric Prevailing Winds¹¹³





Appendix 4 - UK Agricultural legislation controls reference chart

Protecting our Water, Soil and Air, A Code of Good Agricultural Practice (DEFRA, 2009), Chapter 4 (Replaces 3 Codes - Water / Air / Soil)

Manure Management Plan: a step-by-step guide for farmers (DERA, 2003)

Water (Prevention of Pollution) (Code of Good Agricultural Practice) Order 2009, SI No.46

Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (SI 2010 No.639)

Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) (Amendment) Regulations 2010 (SI 2010 No.1091)

Explanatory Memorandum (the SSAFO Regs)

protection of waters against pollution caused by nitrates from agricultural sources. (91 /676/EEC).

Implementation of the Nitrates Directive in England

7th Report 2007-8

From Council Directive 91/676/EEC (OJ L375, 31.12.1991, P1)

The Nitrate Pollution Prevention Regulations 2008 No. 2349

Explanatory Memorandum

The Protection of Waters against Pollution from Agriculture - Consultation on Implementation of the Nitrates Directive of 2013 - 2016 (December 2011)

Fulfils Defra's obligations under the Directives to carry out a **review every 4 years** of its designations of Nitrate Vulnerable Zones (**NVZs**)

Guidance on complying with the Rules for Nitrate Vulnerable Zones for 2013 to 2016

Nitrate Pollution Prevention Regulations 2015, (SI 2015 No.668)

Nitrate Pollution Prevention (Amendment) (No.2) Regulations 2016 (SI 2016 No.1254)

Environmental Permitting (England and Wales) Regulations 2010 SI No. 675

Environmental Permitting (England and Wales) Regulations 2016 SI 1154

Regs 12, 38-41, 44 and Schedule 21

Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018 (SI 2018 No 151)

Explanatory Memorandum (enforced by EA)



Floods and Water (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No.558)

Regs 13 & 16 cover and amend SI 2010 No.1091 / NPPR 2015

Reg 4 amends s93 WRA 1991, to ensure it's 'fit for purpose'

review every 4 years begins on 1st January 2011

Appendix 5 - File Note

January 2025

Subject: Plastic Pollution

History:

Plastic was first developed in mid-19th Century = replacement for natural materials such as ivory and tortoiseshell.¹¹⁴

1st Synthetic plastic, called celluloid. – created by John Wesley 1869. First produce photographic film, later consumer products: combs, buttons, billiard balls, etc.

Early 20th Century, invention Bakelite. This paved the way for mass production of plastic products.

Plastic packaging became most visible use of plastic in our daily lives. Environmental Impact. Can take hundreds of years to decompose.

Plastic in Food and Beverage Industry. -keep food fresh and prevent spoilage.

Ocean Plastics.

Nearly half plastic sinks because of low buoyancy.

Other half floats – majority does not go far out to sea. 80% beach on coastline within month. HDPE likely to travel long distances.

Plastic accumulates in huge subtropical oceanic areas called gyres. -massive circular currents that trap floating debris for decades.

5 gyres in our oceans. Great Pacific Garbe Patch(GPGP) , in North Pacific, between Hawaii & California. (Estimated twice size of Texas.)

Around 100 million kilograms of plastic estimated in (GPGP)- 1.8 trillion pieces larger than 0.5 mm. About 8% of the mass is microplastics.

Definition: Microplastics are plastic pieces that measure less than five millimetres across. (Some microplastics have formed by breaking away from larger plastics that have fragmented over time. Others have been made small intentionally, for example cosmetic microbeads used in facial scrubs.)

Reference: Conventions & Assemblies:

United Nations Environment Assembly of the United Nations Environment Programme
UNEP/EA.5/Res.14

Distr.: General 7 March 2022

'Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment'

1 December 2024

CHAIR'S TEXT1

Plastics. In the Ocean:

<https://noc.ac.uk/under-the-surface/ocean-plastics>

Appendix 6 - Chart – History of Climate Change

The United Nations 1st Earth Summit in Stockholm

Conference on the Human Environment on 16th June 1972

Including the Stockholm Declaration and Action Plan for the Human Environment embracing 26 Principles, placing environmental issues at forefront of international concerns.

United Nations Environmental Programme (UNEP)

is responsible for coordinating responses to environmental issues within the United Nations system. established after UNIP in Stockholm in June 1972.



Brundtland Report

United Nations published 1987

Gro Harlem Brundtland, former Norwegian Prime Minister, Chair of World Commission on Environment and Development (WCED)

Sustainable development three fundamental pillars: **social, economic and environmental**



The Montreal Protocol

Agreement signed 1987 – entered into force 1989.

On Substances that Deplete the Ozone Layer

Global agreement to protect the Earth's ozone layer by phasing out the chemicals that Deplete it.

Includes both production and consumption of ozone-depleting substances.



The United Nations Framework Convention on Climate Change. (UNFCCC)

Signed in some 153 Countries at the 2nd Earth Summit in Rio de Janeiro, Brazil in 1992, - 27 Principles.

Signed **Convention on Climate Change (CCC)** Articles 27 - (CBDR)], & **Convention on Biological Diversity (CBD)**, endorsed Rio Declaration & Forest Principles, & adopted **Agenda 21**, for sustainable development.

Countries submit plans for climate action, **nationally determined contributions (NDCs)** - Paris Agreement (Article 4).

The **Commission on Sustainable Development (CSD)** to monitor and report on implementation of the

CBD has two supplementary agreements: Cartagena Protocol & Nagoya Protocol (Biosafety – LMOs: governing movement of 'Living Modified Organisms').

The UNFCCC was formed in 1994.

To stabilise the greenhouse gas emissions and to protect the Earth from the threat of Climate Change.

Conference of the Parties (COP)

On Climate Change / Environmental Topics

Apex decision-making body of the UNFCCC

The first conference (COP 1) was held in 1995 in Berlin.



The Kyoto Protocol was adopted on 11 December 1997

Operationalises the UNFCCC

By committing industrial Countries and economies in transition to limit and reduce gases (GHG) emissions.

In accordance with agreed individual targets.

28 Articles / Annex A – CO₂/CH₄/N₂O/HFCs/PFCs/SF₆ & Sectors & Source Categories / Annex B – Quantified emission limitation or reduction commitment.

Article 12 - Allows CERs (**Certified Emission reductions**) [equivalent: 1 tonne CO₂]



The Paris Agreement (2015)

Legally binding international treaty on climate change.

Adopted by 196 Countries at COP 21 in Paris, on 12th December 2015

Works on a 5-year cycle of increasingly ambitious climate action carried out by the Countries.
Adopted at COP21 to control 'green house gases' to 1.5°C by 2030.

Appendix 7

Kunming Declaration¹¹⁵

Declaration from the High-Level Segment of the UN Biodiversity Conference 2020 (Part 1) under the theme:

"Ecological Civilization: Building a Shared Future for All Life on Earth" (Final Draft)

The final draft includes 16 Principal points (PP), embracing Target 3¹¹⁶: "*That biodiversity, and the ecosystem functions and services it provides, support all forms of life on Earth and underpin our human and planetary health and well-being, economic growth and sustainable development,*" to *Conserve 30% of land, Water and Seas.*

*The Declaration is 'Concerned' that the ongoing loss of biodiversity jeopardizes achievement of the Sustainable Development Goals and other international goals and targets, and is **Acknowledging** with grave concern that the unprecedented and interrelated crises of biodiversity loss, climate change, land degradation and desertification, ocean degradation, and pollution, and increasing risks to human health and food security, pose an existential threat to our society, our culture, our prosperity and our planet,*

The Ministers and other heads of declarations, duly declare that putting biodiversity on a path to recovery is a defining challenge of this decade, in the context of the UN Decade of Action for Sustainable Development, and Commit to 17 declarations of performance.

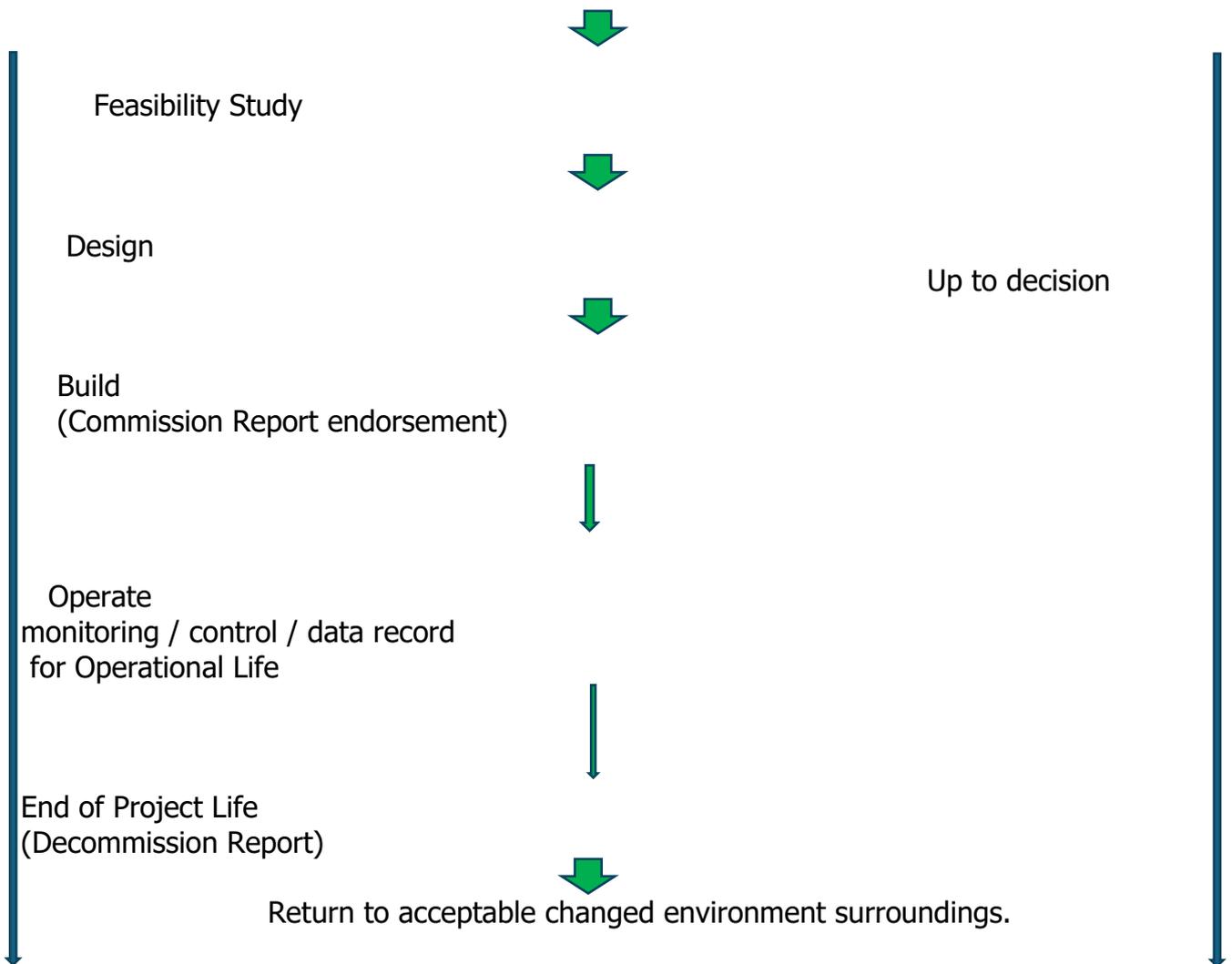
Conserve 30% of Land, Waters and Seas¹¹⁷ to ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

End Note: this Declaration is integrally linked to and embraces the fifteenth meeting of the Conference of the Parties, the tenth meeting of the **Conference of the Parties** serving as the meeting of the **Cartagena Protocol** on Biosafety, and the fourth meeting of the **Nagoya Protocol** on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization.

Appendix 8 – Protected Planet Report 2024.

The Protected Planet Report 2024¹¹⁸ is the first report to fully assess the global status of protected and conserved areas in the context of Target 3 of the Kunming-Montreal Global Biodiversity Framework. The report brings together the latest official data reported by governments and other stakeholders to the Protected Planet Initiative.

Terms of Reference (ToR)
(For a project for International Funding Institutions (IFI))



Appendix 10 - Advanced Project Management Solutions

Typical Definition: Advanced Project Management Services are proven services, utilising integrated management services tools, as instruments, to achieve consistent satisfactory project performance, to timescale and budget, covering identification, planning, organization, control and communication techniques, and where necessary, embracing transboundary borders to satisfy cultural requirements for global projects.

Classification: Proven success of a few significant size projects.

(Levels: for example ... Performance achievement at least 3 significant size projects)

[Domestic and global / various disciplines / various recognised contract suites]

Management services tools / Instruments: Utilization of a few individual management services tools, combined to create satisfactory instruments to supervise / manage the progress throughout the duration of the project up to satisfactory completion / performance standard.

Communication: Creation of a satisfactory working relation between Parties to the Contract, to ensure correct communication, where necessary embracing cultural requirements, in compliance with the Employer's regulations and guidelines.

Example 1: **UK Project Government Funding through Department of Environment (DoE) + EU + others Salford Quays Project¹²⁴**: adopted '*advanced project management services*' based upon strategic structured planning and skeleton co-ordinate programme for development throughout the (5 year) project period.

The unpublished Paper "A Study into Project Management Services at Salford Quays" (submitted to the Institution of Civil Engineers in 1989) describes in detail the foundation principles adopted towards advancing the necessary plans and programmes for a proper strategic and structured approach for management of the Project¹²⁵.

The Paper is structured under five main headings: **Identification / Communication / Planning / Organization / Controls.**

Identification: Problem areas covering risk assessments likely to result in Developers / Contractors Claims

Communication: Forging the correct relationship between the various Parties involved in the Project, including Government / City Council / Developers / Contractors / Leading Officers representing the various Parties.

Example 2: **International Funded Institution (IFI): French Soft Loan.**

Islamabad Wastewater Project¹²⁶, 2005-2007: Adopted (APMS) services to achieve timely completion and budget in 2007, despite major Earthquake in 2005, civil unrest in 2007 (Lal Masjid Mosque Islamabad) and Employer (CDA) programme slippage of trunk sewer Contract. Project Co-ordinate Programme / 'Tests on Completion Structure Plan' / 'Approach to Completion Structure Plan', were 3 main tools used to deliver programme).

Example 3 Wadi Arab and Wadi Hassan Double Project¹²⁷. **(IFI) German funding (KfW) Project.**

APMS adopted in November 1997 to recover the heavily delayed Wadi Arab Project. Employer: Water Authority of Jordan (WAJ), Amman, Jordan. Engineer: JV of German Environmental Consultants (DAR) GmbH/ Rhein Ruhr International (RRI) GmbH / Sigma

Example 4: **(IFI) German funding (KfW) Project.**

Fethiye Wastewater Project¹²⁸. APMS services were adopted to meet Client's requirement for early commercial operation prior to the Turkish National elections in February 2004. *[Reference to archived Project Completion Reports]*

Example 5: (IFI) **World Bank funding Project**¹²⁹. *[Reference to archived Project Completion Report, 7 No. Volumest]*

1st National WS & S Project Azerbaijan (4Rayons) Project¹³⁰. Protracted 8-year duration under 2 Consultants. – APM July 2016: APMS tool, 'Approach towards Project Completion Structure Plan' Model, 6 months. Achieved satisfactory project closure.

Global Environmental Legislation Addendum 1

Subject: Incompleteness of EIA Regulations (EIA)

Reference: The UK Town and Country Planning (Environmental Impact Assessment) Regulations 2017¹³¹, came into force on 16 May 2017

The path inherited for the EIA process starts at its conception and is analysed in defined steps through to the completion of the **decision process** for the anthropogenic project¹³². The construction period, its operational life, the important decommissioning process, its closure and a **return to an acceptable environmental footprint**, remain at present incomplete parts of the regulations¹³³.

Changes will require a new Amendment for EIAR 2017 / 2018 to be triggered under EA 2021 containing aspects of new environmental law²⁵³ through the Office for Environmental Protection, and to involve the relevant Minister²⁵⁴ (EA 2021 s40). The restructure to require a sequential order for all Parts and to embrace provisions under CCA 2008, with additions as¹³⁴:

Records and procedures during construction Works and Operational Life:

- Duty to record commencement date of construction works.
- Monitoring and reporting during the construction period
- Periodic reporting and submission of carbon emissions through construction period¹³⁵
- Duty to keep records of all tests on completion.
- Availability of record drawings
- Carry out commissioning where appropriate.
- Submission to local authority of project completion report
- Duty to issue set of Operation and maintenance Manuals where appropriate.
- Duty to issue Hand-Over Report for commencement of commercial operation
- Duty to set out annual timetable for preparation for all records covering maintenance procedures and carbon equivalent emissions.
- Duty to submit regular carbon equivalent emissions to appropriate authority body.

Procedures for Decommissioning and End of Project Life

- Duty to prepare and carry out Decommissioning of project when and as required.

- Duty to carry out, prepare and submit carbon emissions¹³⁶ for 'operational' life records.
- Submittal of Project records to appropriate authorities.
- Preparation of 'end of life' Brownfield Site Land Report to local authority.

Procedures for climate change requirements.

- Duty to be in compliance with the requirements of CCA 2008¹³⁷
- Duty to prepare proposals for meeting the carbon targets.
- Duty to reach set carbon target and carry out carbon budgeting¹³⁸
- Duty to submit to the appropriate authority amount of greenhouse gases emitted, expressed as CO₂e.

Schedule 5: Decommissioning, 'end of project life and return to environmental footprint'.

**Addendum - 2
Global Environmental Legislation**

Subject: United Nations Convention for the Law of the Seas (UNCLOS)

<p>UNCLOS Structure Preamble, Introduction, Parts I – XVII, Articles 1 – 320, Annex I - IX</p>

To recognise "the desirability of establishing through this Convention, with due regard for the sovereignty of all States, a legal order for the seas and oceans which will facilitate international communication, and will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment."

Article 1.1 (1) "Area" means the **seabed and ocean floor and subsoil** thereof, beyond the limits of national jurisdiction.

Article 1.1 (2) "Authority" means the **International Seabed Authority**.

Article 1.4 "**pollution of the marine environment**" means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries,

Part II – Territorial Sea and Contiguous Zone

Territorial Sea: Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention.

Contiguous Zone: - "extending up to 24 nautical miles from a coastal baseline when combined with the 12-nautical-mile territorial sea."

Part V – Exclusive Economic Zone

Part VI – Continental Shelf

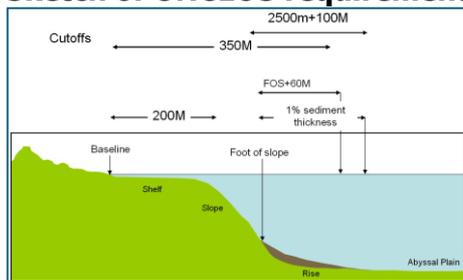
Part VII covers **High Seas, Articles 86 – 120.**

Part XIII – Marine Scientific Research

Part XIV – Development and transfer of Marine Technology

Part XVII – Final Provisions.

Sketch of UNCLOS requirements



UNCLOS, Article 76 Definition: Continental Margin defined as Continental Shelf / Continental Slope / Continental Rise 200 nautical miles up to 350 nm limits.

Footnote¹³⁹: Energy / Near future Energy Projects are outside the scope of this paper.

It is relevant to mention that new legislation will be required for '**Regional High Seas**', under UNCLOS Part VII Articles:

"Section 1: Article 87 -- Freedom of the High Seas. / Article 88 – Reservation of the High Seas for peaceful purposes. /Article 112 – Right to lay submarine cables and pipelines / and
Section 2 -Conservation and Management of the living Resources of the High Seas -Article 118 – Cooperation of the States in the conservation and management of living resources."

Addendum 3 Global Environmental Legislation

Subject: Agreement under UNCLOS - conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ)¹⁴⁰

BBNJ Structure
Preamble, Parts I – XII, Articles 1 – 65, Annex I - II

The BBNJ Agreement¹⁴¹ is an important agreement for biodiversity and will play a key role supporting the delivery of the *Kunming-Montreal Global Biodiversity Framework*, including helping to achieve *Target 3* to effectively conserve and manage at least 30% of the ocean by 2030. The Agreement includes:

- a. a mechanism to establish **Area Based Management Tools (ABMTs), including Marine Protected Areas (MPAs),**
- b. new obligations to share the benefits of research into and utilisation of **Marine Genetic Resources (MGRs),**
- c. provisions building upon provisions in UNCLOS on **Environmental Impact Assessments (EIAs)** for new activities in areas beyond national jurisdiction, and
- d. provisions strengthening capacity-building for developing States Parties, along with broader technology transfer.

The High Seas Agreement was successfully ratified on 17 September 2025, registering 145 signatories and 61 Parties on 19 September 2025. The latest list of signatories may be checked on the BBNJ Tracker¹⁴².

PART I GENERAL PROVISIONS .

PART II MARINE GENETIC RESOURCES, INCLUDING QUESTIONS ON THE SHARING OF BENEFITS

PART III MEASURES SUCH AS AREA-BASED MANAGEMENT TOOLS, INCLUDING MARINE PROTECTED AREAS ..

PART IV ENVIRONMENTAL IMPACT ASSESSMENTS

PART V CAPACITY-BUILDING AND TRANSFER OF MARINE TECHNOLOGY

PART VI INSTITUTIONAL ARRANGEMENTS

PART VII FINANCIAL RESOURCES AND MECHANISM

PART VIII IMPLEMENTATION AND COMPLIANCE

PART IX SETTLEMENT OF DISPUTES

PART IX SETTLEMENT OF DISPUTES

PART XI GOOD FAITH AND ABUSE OF RIGHTS

PART XII FINAL PROVISIONS [Articles 64 – 76]

ANNEX I Indicative criteria for identification of areas
ANNEX II Types of capacity-building and of the transfer of marine technology

Addendum - 4

Global Environmental Legislation

Subject: Protocol on Environmental Protection to the Antarctic Treaty.

Protocol Structure

Preamble,	Articles 1 - 27,	Schedule to the Protocol - Arbitration
Annex III (Waste Disposal,	Annex I (EIA)	Annex II (Fauna and Flora,
Annex IV (Marine Disposal)		

ARTICLE 1 DEFINITIONS

ARTICLE 2 OBJECTIVE AND DESIGNATION

"The Parties commit themselves to the comprehensive protection of the Antarctic environment and dependent and associated ecosystems and hereby designate Antarctica as a natural reserve, devoted to peace and science."

ARTICLE 3 ENVIRONMENTAL PRINCIPLES

ARTICLE 4 RELATIONSHIP WITH THE OTHER COMPONENTS OF THE ANTARCTIC TREATY SYSTEM

ARTICLE 5 CONSISTENCY WITH THE OTHER COMPONENTS OF THE ANTARCTIC TREATY SYSTEM

ARTICLE 6 CO-OPERATION

ARTICLE 7 PROHIBITION OF MINERAL RESOURCE ACTIVITIES

ARTICLE 8 ENVIRONMENTAL IMPACT ASSESSMENT

ARTICLE 9 ANNEXES

ARTICLE 10 ANTARCTIC TREATY CONSULTATIVE MEETINGS

ARTICLE 11 COMMITTEE FOR ENVIRONMENTAL PROTECTION

ARTICLE 12 FUNCTIONS OF THE COMMITTEE

ARTICLE 13 COMPLIANCE WITH THIS PROTOCOL

ARTICLE 14 INSPECTION

ARTICLE 15 EMERGENCY RESPONSE ACTION

ARTICLE 16 LIABILITY

ARTICLE 17 ANNUAL REPORT BY PARTIES

ARTICLE 18 DISPUTE SETTLEMENT

ARTICLE 19 CHOICE OF DISPUTE SETTLEMENT PROCEDURE

ARTICLE 20 DISPUTE SETTLEMENT PROCEDURE

ARTICLE 21 SIGNATURE

ARTICLE 22 RATIFICATION, ACCEPTANCE, APPROVAL OR ACCESSION

ARTICLE 23 ENTRY INTO FORCE

ARTICLE 24 RESERVATIONS

ARTICLE 25 MODIFICATION OR AMENDMENT

ARTICLE 26 NOTIFICATIONS BY THE DEPOSITARY

ARTICLE 27 AUTHENTIC TEXTS AND REGISTRATION WITH THE UNITED NATIONS

SCHEDULE TO THE PROTOCOL. ARBITRATION, Articles 1-13

Bibliography:

Table of Legislation / Conventions:

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- ⁹⁹ "A Concept of Energy, Embracing Earth's Environmental Mechanisms", Prime Open Access, Journal of Rehabilitation Research Current Updated, 18 August 2025 / OPAST, World Journal of Forest Research-ISSN: 2994-5569, 11 August 2025 / GLINT Open Access, Journal of Environmental Dynamics and Geo-Sciences ISSN: 3069-8340, 9 February 2026 / SSRN, 30 July 2025
- ¹⁰⁰ *At that time literature and knowledge available was somewhat limited to movement of 'thick liquids' through circular pipes. Flow charts were readily available to the student or engineer, giving a variety of curves for flow through pipes of various roughness, age, and material.*
- ¹⁰¹ Leicester City Corporation, Engineers Dept, Greyfriars, Leicester.
- ¹⁰² Title: "Flow Conditions in Pipes due to Thick Liquids", 1971. Paper presented at the North-West Institution of Civil Engineers Student and Graduate Meetings in March 1971. It received ICE Miller Prize Award recognition in July 1972
- ¹⁰³ Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable use of Marine Biological Diversity of Areas Beyond National Jurisdiction, New York September 2023 [In force 17 September 2025]
- ¹⁰⁴ UN Convention on the Law of the Sea of 10 December 1982, *proposed Amendment as Part VII, High Seas, Sections 3 with linked reference to additional Annex XI.*
- ¹⁰⁵ "Approach towards a Total UK Environmental Master Plan for Clean Renewable Energy, Reviewing the Incompleteness of the British Energy Security Strategy after Brexit, and embracing Tidal Waters and other Innovative Sources, page 7, Next Generation Methodology Approaches, 2nd paragraph, GLINT Open Access, Journal of Environmental Dynamics and Geo-Sciences, Research Article, 2nd December 2025 / Appendix 2, Explanatory Note: Advanced Project Management Services Solutions. [APMS].
- ¹⁰⁶ World Journal of Forest Research(WJFR), ISSN: 2994-5569 | DOI: 10.33140/WJFR, Research Article - (2025) Volume 4, Issue 1 Approach to 'Climate Change' Sustainability Project, for 'Our Common Future'.
- ¹⁰⁷ Welcome to the United Nations, (full text) <https://www.un.org/en/about-us/un-charter/full-text>
- ¹⁰⁸ Welcome to the United Nations, UN Charter- United Nations, <https://www.un.org/en/about-us/un-charter>

¹⁰⁹ https://legal.un.org/english/rep_supp3_vol4_art100

¹¹⁰ Charter of the United Nations, and Statute of the International Court of Justice, San Francisco – 1945. UN Charter

¹¹¹ [University of Pennsylvania https://guides.library.upenn.edu/c.php](https://guides.library.upenn.edu/c.php)

¹¹² Earthborn - Ecological Dominance Orientation (EDO), <https://www.sciencedirect.com/science/article/pii/S0272494422000287>, “The roots of ecological dominance orientation: Assessing individual preferences for an anthropocentric and hierarchically organized world.”, Journal of Environmental Psychology, Elsevier, June 2022, 101783

¹¹³ https://www.weather.gov/source/zhu/ZHU_Training_Page/winds/Wx_Terms/Flight_Environment.htm

¹¹⁴ orders@plasticonline.com.au

¹¹⁵ Met in Kunming Yunnan Province, People’s Republic of China, in person, and remotely, on 12 and 13 October 2021, on the occasion of the UN Biodiversity Conference, at the invitation of the Government of the People’s Republic of China.

¹¹⁶ Convention on Biological Diversity, embracing Biodiversity Convention / Cartagena Protocol / Nagoya Protocol / Countries / Programmes

¹¹⁷ <https://www.cbd.int/gbf/targets/3#:~:text=Ensure%20and%20enable%20that%20by,representative%2C%20well%2Dconnected%20and%20equitably>

¹¹⁸ Protected Planet Report 2024, Executive Summary, <https://digitalreport.protectedplanet.net/>

¹¹⁹ Ibid, Executive Summary, paragraph 2.

¹²⁰ UNEP – UN Environmental Programme, <https://www.unep.org/news-and-stories/press-release/world-must-act-faster-protect-30-planet-2030>

¹²¹ Ibid

¹²² A main finding of Protected Planet Report.

¹²³ Protected Planet Report 2024, Chapter 10 – Integration and Sustainable use

¹²⁴ Reference: The Institution of Civil Engineers Proceedings, Part 1, Design and Construction, December 1989, pages 1067-1087, Paper: “Salford Docks urban renewal: design, construction and management of civil engineering works”, B.R. Hindle, D.T. Johnson, R.C. Kempton, J.H. Morgan

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¹³⁷ Carbon Management in Infrastructure, PAS 2080: 2016, Construction Leadership Council, The Green Construction Board, British Standard Institute, (bsi)

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