

*The Project: PaaS powered by mobile services, information and community engagement and care*



environment  
4 c h a n g e

*The Purpose: Aggregating the Goodwill of the World - To save the Planet*



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Fashion For Good. <https://fashionforgood.com/>  
Rapanui. <https://rapanui clothing.com/about/>  
Global Alliance for The Rights Of Nature. <http://therightsofnature.org/>  
Post Land Fill Network (PLAN). <https://www.postlandfill.org/>  
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## Executive Summary

**“We are living in the age of consequence. With billions of pounds of plastic ending up in the ocean each year, and nature’s global habitat’s being destroyed daily, there is no longer an option to do nothing!”**

The man-made destruction of our Planet is the defining environmental challenge of our time. Everyone who confronts the worsening problem of pollution, habitat degradation, reduction in food quality, environment ruination and actively engages with a cause, or donates time or money to their favorite cause, is worthy of applause. This being so, and in a time of greater awareness we, as shared inhabitants of this one Earth, are losing the battle. In a time of a growing global population, in a reality where damage done is often unrepairable, the health of our planet is worsening, in spite of all the great work being done by individual organisations. What we need is the global community to take ownership of the problem, using scale to defeat the problem.

**What can we do to reverse the negative momentum of ongoing planet subjugation, I hear you ask? Today, no solution exists for environmentalism that offers a scalable solution, an aggregation of intent, resources and funding, towards an organised global treatment of our global environmental threats. environment4change are here to change that.**

### **What is environment4change?**

environment4change is a software platform created to support global environmentalism, built on the premise of transparency and trust. The environment4change team are building a Platform as a Service (PaaS) that will scale to support the global community’s entrance into the theatre of meaningful and ‘change causing’ environmentalism. The PaaS will act as a conduit for educating, innovating, promoting and funding the best global environmental science and projects to drive action and awareness, ensuring a better and healthier planet for the next generation. All this at a global scale, defined and driven by the platform itself!

### **Our Mission**

We are building a PaaS for all entrepreneurship to join with us, in pushing environmental causes forward, encapsulating and inclusive of all who want to participate. Our platform architecture, via a web services interface, collects and unites local communities around local and global environmental issues of concern. With a deep understanding of the power of the social network, the PaaS will aggregate the many around a set of digital tools of action and participation, where all innovation and action leads towards a cleaner, clearer and cooler Planet. Great strength and momentum arises’ from a service suite that crosses geographical, political, religious and language barriers, and does so with transparency, equity and fairness.

### **Our project, its purpose, its urgency!**

Our ‘project and purpose’, are now urgent, and urgent for a number of reasons. This year, for the first time in the history of the UN’s climate change summit, the global community, were represented at the premier environmental conference by the establishment of the ‘people seat.’ The ‘people’s seat’ is an initiative to collect the comments and concerns of people from around the globe, to a problem we all share in together, mankind’s treatment of our shared Planet.

The environment4change PaaS executes upon this recognition and realisation that the global 'ALL' have a voice and a real part to play in the treatment and reversing the degradation suffered by our Mother Earth. So significant will be the collective potential and opportunity for change be, that we believe only via an aggregating, collecting and inclusive PaaS, that real and lasting positive change is possible, as it is inclusive of action, education, innovation, intent, participation, funding, community and science.

We imagine within time 100,000 or even 1,000,000 concurrent community-based clean-up projects on our digital platform is possible. THAT IS AMAZING and will make a difference to the planet we all live on. This is our medium-term goal. Traditional environmental organisations in their siloed ivory towers have never thought to democratise environmentalism for us all. environment4change does this!

### **What is the scope of our project and its purpose?**

Via our PaaS we will provide a single point of action, engagement, participation, operation, organisation and comment and a voice for everyone around the World. We can all participate in environmentalism, there are now no barriers to entry, participation and belonging. There is no longer a single descriptor for environmental action. Software developers, project managers, educators and all other members of our community can participate and add value to our platform and environmentalism, uniquely by their own skill set. Platform architecture is inclusive of all and will find a mechanism of participation for all.

Our PaaS will unite, collect, and aggregate the global ALL, and is arguably the only solution offering the scalability to win this war on waste, pollution and plastics.

1. Proliferation of plastic in our waterways and oceans leading to the proliferation of nurdles, plastic pellet typically under 5mm in diameter in oceans, contaminating food chains and destroying life.
2. Collecting and cleaning the great global oceans of garbage patches the size of Texas.
3. Industrial waste dumping around the world, destroying ecosystems and land loss of native global wetlands.
4. Loss of fauna and flora biodiversity and contamination of land and water resources.
5. Continual loss of trees and carbon absorbing vegetation.
6. Burning of hazardous materials causing toxic smog.
7. Overuse and dependence on chemical fertilizers. Chemicals of assorted danger finding their way into the human food chain.

So serious is our shared problem, governments from around the world are set to focus even a greater proportion of their GDP's to instigate positive change for the benefit of the planet. This will be facilitated and executed by the issue of government money to environmental initiatives. environment4change will enable an inexpensive and hassle-free entry point and means to participate in environmentalism for everyone around the world. This will be done via a digital tool set of inclusion, participation and reach.

environment4change are building a funding marketplace where individuals and organisation wanting to participate or donate towards environmental action will now have a platform where a dollar donated means a dollar spent 'on the ground' at the cause or project they support.

### **Our Minimum Value Proposition (MVP)**

Our goal at environment4change is to minimise mankind's ecological footprint, while correcting and cleaning the damage of the past! Our response and plan must be achievable and measurable. It is essential to attract support from community and business leaders around the world, as our offering is a community-based project, for the benefit of our entire global village.

The environment4change value proposition sees the convergence of a group of technologies and processes, never previously brought together and engineered to act in concert and synergy, for the benefit of offering a solution that scales, for global environmental good-will and action!

- environment4change allows for the scaling of environmentalism. Only the scaling of environmental action and good-will can address the rubbishing of our home planet.
- environment4change allows for the undilute distribution of environmental funds directly to the environmental project regardless of where that project is based.
- environment4change allows new models of information management to discover and develop new mechanisms to value environmental work seeing a more transparent transfer of knowledge to all stakeholders and community members.
- environment4change allows for the democratisation of environmentalism by giving every person on our shared earth a voice in projects that are undertaken and when?

### **What we are going to do!**

environment4change are building a PaaS encapsulating all environmental work under the banner of a services account.

Through converged speciated technology, and our own innovative development, our PaaS will enable the creation of circular economies, powered by algorithms, web services, mobile services, and open data, helping individuals and companies make positive sustainable choices. The environment4change community will be able to donate to a cause, participate in a project, vote on where platform funds should be spent, and other community activity.

Our PaaS will assist all environmental action and activities, in concert with our innovative global partners, by:

- Funding for new technologies, companies and individuals in support of planet saving initiatives.
- Enabling transparency of donations and behaviour
- Enabling of circular economies
- Enabling access to digital tools to record and monitor carbon and plastic footprint and unsustainable practices
- Encourage recycling by providing rewards to improve waste management
- Track and evaluate efficiency of recycling programs
- Recognise, manage and increase network efficiencies via collaboration and sharing.
- Tracking of the real impact and compliance of environmental treaties,
- Substantially reduce fraud and manipulation
- Reduce inefficiency and bureaucracy in charities
- Calculate carbon and plastic footprint services for individuals to enable offsetting donations.

The environment4change PaaS will therefore sit in the middle of many global and local environmental activities. Money will be made using traditional and digital



business models however many more opportunities exist for revenue with innovation set to explode as the boundaries of environmentalism are opened for the first time.

The PaaS development must come first, opportunities, substantial revenues and cashflows will follow.

This worthy cause needs support. It will repay you times over in a huge return in social capital not to mention the traditional and new revenue streams, allowing you to grow and support your own environmentalism.

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## PART 1 – The Why?

### Introduction

Before the age of man, Earth was the cradle of creation, evolution and development for all living things. Life, from the simplest single cell organisms struggled for a foot-hold and a chance to reproduce, mutate and evolve. Our Earth at its best, proved an abundant giver and provider and many species arrived and thrived in a habitat suitable for evolution and change. As the ‘hands of time’ moved forward, this abundant growth of unique biomass of species endured two significant extinction events seeing up to 95% of species, both land and sea dwelling, wiped out, expunged from the almanac record of the living, seeded to the fossil record only.

As proven over the annals of time, every organism and species have certain habitat needs for the conditions in which they will thrive. Some organisms and species are tolerant of wide variations, while others are very specific in their needs. Removal of favourable conditions, or sudden and unexpected change to habitat will cause the organism or species to struggle and depending on other factors may well lead to permanent loss of species from the global biomass. Without argument, mankind has caused significant change to the habitat we share with many other global ‘living things’. Our hunger of selfish ‘wants’ has led to the eradication or endangerment of a number of species. Our inability to arrest the decline of the many habitats of our shared planet endangers many more.

environment4change believe to prevent further lose and reverse some of the damage done, we need a different approach, an approach where collaboration replaces confrontation, where digital tools of aggregation and consolidation are brought together in a platform service architecture, where local environmental activism has the power and persuasiveness of a global ‘call for arms.’ The arms we speak of, are the collective power of a global community. We believe a platform as a service architecture, around an inclusive, empowering enabling and democratizing model, is the conduit needed to unite a global population against apathy, ignorance and rapacious behaviour. The success of environmental efforts, over the next five to ten years, will depend on our success and these years promise to shape life on Earth for centuries to come.

### The five leading causes of environmental degradation

Just how diverse, sometimes opaque but always corrosive, are the threats, existing and new, to human comfort and prosperity, borne of changes to our global environment, habitats and species? Perhaps a great illustrative and widely talked about example is the production and use of plastic. This year reports showed that half the worlds mismanaged plastic waste is generated by just five Asian countries: China, Indonesia, the Philippines, Vietnam, and Sri Lanka (National Geographic, June 2018). This news came with the realisation that even if all of North America and Europe recycled 100% of

their plastic it would have no impact on the global problem. If real and significant change is to be made in this area then we need to enable global communities to contribute to solutions in the worst affected areas regardless of their place of residence.

According to an Internet Blog titled, 'Five of the world's biggest environmental problems' (DW.com, 2016) these include: (i) Air pollution and climate change, (ii) deforestation, (iii) flora, fauna and species extinction, (iv) Soil degradation and (v) population control.

There is not one of the above that we believe can be isolated, separated out and treated individually. We believe a treatment of all of the above, in concert, is the correct way forward and this will be our 'call to action.' Direct action will be taken at different points on the environmental continuum speaking to land, sea and air where the physical domain and man-made damage collide, however this will be considered the field of battle, a place of victory, rather than an area for treatment and retreat.



(Image: CBS Evening News - [https://www.cbs.com/shows/cbs\\_evening\\_news/video/NISf8ajMG9BzywUoquAmFmdd\\_QcSkJf9/environmental-pollution-killing-more-people-than-war-study-says/](https://www.cbs.com/shows/cbs_evening_news/video/NISf8ajMG9BzywUoquAmFmdd_QcSkJf9/environmental-pollution-killing-more-people-than-war-study-says/))

The issues are monumental in scope and breadth and this is why environment4change is bringing a new collaborative model to bear. Small incremental improvements; single steps forward by the masses, can have an everlasting effect to the health of an endangered species and the fight to save and protect endangered habitat. The ability to make a local issue global through a digital interface and toolset, bring new players and new resources to bear, at scale, is part of the recipe for success, over this difficult but enduring challenge that must be won!

## The problem and a need for a new approach

Almost without argument traditional models of environmental activism have failed to achieve large scale change. The cause of the failure is not as important as the failure itself, only to learn we are failing and need a new approach to solve a worsening problem. Traditional models of environmental activism are the antithesis of big business. Big business has been seen as an analogy to greedy consumption at any price. The environment4change team believe it is now time for a change. Enough is now known about our planet, its species and inexcusable damage caused by mankind to charter a new and collaborative approach to repair and healing. Business need not be the enemy and in a race to a 'zero sum game' for the planet. There must be a place for all stakeholders in managing and then correcting the damage done to the only 'Mother Earth' we share. The answer is inclusion, but in favour of a net improvement to our global habitats and ecosystems around the globe.

What Barack Obama said of Climate Change applies equally to the Environment.

***"We are the first generation to feel the effects of climate change and the last generation that can do something about it." Barack Obama, Twitter 23 Sept 2014.***

## The Project

The project sees the development of a Platform as a Service architecture and service bundle in support of typical environmental, and humanitarian endeavour to recognise a reduction of mankind's ecological footprint. Until now there is not a single service that can scale, aggregate, collect, unite and channel intent and goodwill around this 'not for profit' action. Although many great projects already exist in this space, there is nothing that will democratize, enable, empower and entice the global population to action, all under the oversight and curation of the global community, without the weakness, bias and self-interest of a single board, body or group.

The project is the creation, development and building of a white-label, open source offering in support global goodwill. The Team will launch the project as the first environmental Platform as a Service, where it will demonstrate the power of an inclusive architecture enabling the many of the world to participate in environmental action, where previously they did not have a voice, knowledge or understanding. Just as Airbnb aggregated and collected un-used and under-utilized resource around the home/room rental market, environment4change will do likewise for the environmental industry, bringing the global many into the fray, not previously counted and accounted for.

The value in the environment4change approach is defined by the convergence of the domains of: (i) Software as a Service (ii) environmentalism, (iii) platform economics, (iv) and community engagement through game theory where environmentalism is the winner. It is the

merging of knowhow and experience across these domains that offer a different approach to solving, or at least ameliorating, destructive behaviors against our shared Earth. It is the technology, architecture and digital tools, together and in concert, that will deliver new levels of synergy, efficiency, efficacy, transparency, accountability and honesty to all endeavours, inside and outside of the traditional environmental community.

## **The Purpose - Our Mission**

The manmade destruction of our Planet is the defining environmental challenge of our time. It is not lost upon the Team, the monumental task we are facing. Everyone who confronts the worsening problem of pollution, habitat degradation, reduction in food quality, environment ruination and actively engages with a cause, or donates time or money to their favorite cause, is worthy of applause. This being so, and in a time of greater awareness we, as shared inhabitants of this one Earth, are losing a battle. In a time of a growing global population, in a reality where damage done is often unrepairable, the health of our planet is worsening in spite of all the great work being done, by the army of environmental activists.

So, what can we do to reverse the negative momentum of ongoing planet subjugation, I hear you ask? Today, no solution exists that offers an aggregation of intent, resources and funding towards a global enabling and organised treatment of our global environmental threats. We are here to change that.

Our mission, the purpose of this project, is to scale environmentalism. We are building an ecosystem for everyone to work together in pushing environmental causes forward, putting the planet before politics, profit and procrastination! We are creating the “MUST-HAVE” digital toolset, reference access and global directory where business (big and small), individuals, and environmental organisations come together, a beacon of collaboration, exchange, education and empowerment, a place where new ideas are shared, discussed, developed and executed. We are doing this by partnering with the best people, (government organisations, companies and individuals) to embolden all, to take a greater part and stake in the health of the planet.

We must organise, automate, educate and drive the fulfilment of holistic environmental protection for the benefit of all living things but with a focus and urgency around the fauna and flora we are about to lose. Any new approach must bring ‘best in class’ resources and thinking to solve a worsening global problem. Our reach will be global, in reach and scale, our care, commitment and understanding will be local. With an army of locals (activists, enthusiasts, local government, schools and residents) we will enable environmental based activities and be an organisational conduit for environmental collaboration and cooperation.

## **A global reach but local care**

In a very personal and satisfying way our project, and its purpose, facilitates cleaner air to breath, fresher drinking water to drink and a food chain that is as good as it can be, clear of toxins and contaminates. Principle to our

mission is the development of a decentralized, empowering, inclusive, aggregating digital platform where individual environmental endeavour is given a global reach, digital tools and access to a world-wide community ready to help. These digital service tools will enable a local environmental group to fundraise globally, seeks partnerships overseas and seek collaborations and synergies with others around the World facing the same or similar environmental, organisational, operational, social, or funding challenges.

### **Why we must act now!**

Our 2 P's – 'project and purpose', are now urgent and urgent for a number of different reasons. This year, for the time in the history of the UN's climate change summit, the global community, were represented at the premier environmental conference in the World, by the establishment of the 'people seat.'

The 'people's seat' (Guardian, 22 November 2018) is an initiative to collect the comments and concerns of people from around the globe to a problem we all share together. Using the hashtag [#takeyourseat](#) the comments were aggregated and formed the basis of Sir David Attenborough's address to the conference.

The environment4change Platform as a Service explodes this recognition that the global 'ALL' have a voice and a real part to play. So significant will be the collective potential and opportunity for change that we believe only via an aggregating, collecting and inclusive PaaS, that real and lasting positive change is possible, as it is inclusive of action, education, intent, funding, community and science.

What is the scope of our project and its purpose? Via our PaaS we will provide a single point of action, engagement, participation, operation, organisation and comment and a voice for everyone around the World. We will do this and do it all at scale!

We can all participate in environmentalism, there are now no barriers to entry, participation and belonging. There is no longer a single descriptor for environmental action. Software developers, project managers, educators and all other members of our community can participate in activities that add value to the traditional environmental activities of others in ways descriptive of their own unique skill sets. Platform architecture is inclusive of all and will find a mechanism of participation for all.

The list below is not definitive of our shared global environmental crisis but simply a description of just some of the issues we must urgently correct now.

1. Proliferation of plastic in our waterways and oceans leading to the proliferation of nurdles, plastic pellet typically under 5mm in diameter in oceans, poisoning food chains and destroying life.
2. Collecting and cleaning the great global oceans of garbage patches the size of Texas.

3. Industrial waste dumping around the world, destroying ecosystems and land loss of native global wetlands.
4. Loss of fauna and flora biodiversity and contamination of land and water resources. Mismanagement of water resources.
5. Continual loss of trees and carbon absorbing vegetation.
6. Burning of hazardous materials causing toxic smog.
7. Overuse and dependence of chemical fertilisers. Chemicals of assorted danger finding their way into the human food chain.



(Image: <http://www.nationmultimedia.com/detail/breakingnews/3033188>)

## PART 2 – How a ‘Platform as a Service’ can save the Planet

### **The problems are well defined – the model for solving same is not!**

Our planet ‘Earth’ is facing many challenges. A shrinking global ‘nature’ means a shrinking global habitat for many endangered flora and fauna. Along with climate change and its adverse effect on the nutritional value within our food chain, the loss of plant and species habitat and the epidemic plastic pollution effecting water ways and oceans leading to plastics entering our food systems is arguably the most destructive issues facing our planet today and although many are doing great work, for small steps forward, the overall battle is being lost, and lost at a discernible rate.

The problem is defined and well-known! The environmental expertise is here and available! The solutions are well defined and doable! The traditional models for solving the problems have always been based on ‘zero sum game’ thinking. Large environmental organisations are rich but haven’t made a noticeable difference at a local level. Poorer local people lack resources to make a significant progress. This paradigm of groups working apart has not worked in the past and will continue to fail because to fix the damage done historically and to ameliorate development of future ages, we need all moving parts working together in economic, social and environmental harmony, or as close as we can get to this nirvana.

The current ‘status quo’ environmental models are caught in a state of Sisyphus. Sisyphus was a legendary king of Corinth condemned eternally to repeatedly roll a heavy rock up a hill in Hades only to have it roll down again as it nears the top. Sisyphus’s toil was forever in vain! The history of ongoing environmental struggle, although noble, is not pushing environmentalism to the point where net planet health is improving. This position needs to change urgently for our planet cannot endure more of the same for too much longer.

environment4change will converge the power, influence and reach of innovative aggregating business platform architecture and economics with mobile technologies, new business models and models of collaboration over competition to offer a new inclusive and co-operative ways of achieving a greater level of protection for every part of our shared environment. The success of the new model will depend on the great work of committed environmentalist, volunteers and the support of a global community.

Enabling an aggregated digital footprint will capture, embolden and empower a group of new environmental participants in a new look, feel and functioning ecosystem. The new participants include new money, born of digital awareness, collaboration and decentralisation. This group will give and support generously as they are born of an ethos of sharing to divide and solve rather than siloed protectionism devoid of any meaning of collective responsibility. Aggregating will also enable and include the spare un-utilised and under-utilised global resource that until now has not been able to readily participate and co-operate. Aggregating will introduce new economies of scale seeing the environment4change team equipped with a global resource set and reach, while acting with the care and passion of a local team of environmentalist. This is the recipe for a scaling solution!



## Building an Environmental platform of scale

The greatest gift we can give to the Planet, as entrepreneurs, is to engineer a digital platform of inclusion, scale, empowerment, participation, trust and transparency geared towards collecting, aggregating and scaling all the goodwill environment effort, digitising the ecosystem, empowering the data and equipping all who participate with the digital tools and access to resources needed to act with local care but with a global remit. The environment4change global platform will be accessible to everyone, speak to everyone in many different languages, but with a single message of unity, co-operation, collaboration and empowerment to affect the change.

Arguably, the greatest benefit of platform architecture is in its ability to scale and aggregate the many 'unorganised' and 'dispossessed' to a shared purpose, function and achievement. The platform takes highly fragmented effort, individual, business, industry and sector and aggregates into a single domain creating amazing scale, access, utility and potential collaborative efficiencies where none previously existed.

## Empowering Environmentalism with digital tools

The environment4change platform architecture will contain a set of growing digital tools, delivered in modules. These tools will enable capabilities and empower the environmental industry to scale, just as a platform architecture enables a business concept to scale, offering new and expanded scope of access, opportunity and inclusivity. New innovative environmental based programs can be spun up quickly and reach a global audience of collaborators, supporters and community quickly, all from within a web interface. Ecosystem participants and community will clearly see what projects are underway and how local action and global funding support can help the success of a project in another area/country/region of the World.



(Image: <https://www.environmentalscience.org/data-science-big-data>)

New models of information, access and participation will be born giving the environmental sciences new levels of data support on which they can critique and grow their collective knowledge-base of what treatment works and when. Transparency is enabled by new data structures, hybrid

information technology and algorithms and this will empower a richer democratised ownership of the World's environmental troubles putting innovative solution into our global shared 'hands.'

### **New models of information creation, collection and mining to enhance and support environmentalism**

Old battles such as our shared but losing fight against global rubbishing and the destruction of global native habitat, flora and fauna, is never won by will alone. There is always something new, brought to bear, in the traditional fight that pushes the pendulum of victory one way or another. The environment4change team are bringing a number of innovative technologies, never previously used together in service of the environment, to bring the pendulum of environmental victory in to the hands of us all.

Imagine a world where all environmental activity, large and small, is logged, searched, categorised, evaluated, and understood. With a strong focus on data, information, knowledge and experience, the platform as a service functions as a learning entity where previous environmental activity is learned from, to understand value and approach and how we (planet earth) can make better decisions, going forward.

With the building of a global platform for environmental good, comes a unique opportunity to support new models of data creation, collection and mining and information retrieval on new levels of creativity. This means supporting environmentalism with an information engine, via a mash-up of hybrid technologies, seeing this industry transferred to become learning and instinctive. This will be transformational for the environmental industry as everything that comes after this is more informed and better critiqued, more transparent and trusted. This system will be open for the benefit of all environmental work, endeavour, project or plan. Planet earth will be the sole beneficiary seeing a better decision-making process, learned and grown, in respect of what projects to support and how to get your best bang for investment/funding/donation buck!

### **Defining the environment4change Global Platform and Ecosystem**

The adage, 'service globally but act locally' best describes our recipe for growing our platform and ecosystem in support of our goals, vision and mission! The following are some examples of how a 'platform as a service' (PaaS) together with web services for ease of use, will support the ecosystem, businesses and community, as we set about to create a force for change, in the environmental sector thus redefining, 'what environmental success looks like' for the planet, as a whole.

#### **1. Collaborate with established Environmental Agencies.**

The environment4change Platform will be open to support and collaborate with all other Environmental Agencies, Charities and organisations in their endeavours to save the planet. All 3rd party organisations who access the platform will have the benefit of the global footprint of a number of digital services ensuring their audience grows from local to global. The

environment4change platform will act as an aggregator of unconnected resource, bringing the intent and energy of all unconnected endeavours into a community for the realisation of synergies of scope, footprint, resource, access and utility. This is scale! Our platform will act as an undiluted network of environmental action, seeing 100% of any donation reach its intended cause.

## 2. Enable everyone to become an environmentalist.

Through the environment4change platform we envisage, within a short time after launch of service, many thousands of concurrent projects to be spun up and running within our platform. These projects can be supported by anyone with an environment4change account and sees an opportunity for local businesses to support local environmental activities at a very low-cost point. Running the platform in many languages we believe is easy to see how web services, PaaS architecture and community care can soon revolutionise the world of local and global environmental effort. Competitions, prizes and other mechanisms will be used to make environmentalism the new 'cool' behaviour for everyone.

## 3. Build Global Schools program

The environment4change team sees the value in educating our young today so our planet stands a better chance, tomorrow. With that thought in mind and knowing the kids today understand the latest technology and have a whole lot of great energy and a real sense of 'what is right', the Team will be launching a global facing, programme for Schools.

All Schools, around the World, in supported languages, will be invited to join the environment4change Schools program with a chance to have their project promoted globally as a demonstration of the will, determination and knowhow of kids in respect of the type of Planet they want to live in and share with their neighbours. Schools will create project outlines, the environment4change network will provide expert advice, if needed, and promote the project, where appropriate. Completing the local project is up to the School and kids with community help if required. Our kids will learn the value of participation, setting goals to obtain results and project management with the benefit being derived by local communities for the betterment of our globes habitats, ecosystems and environment.

## 4. Create an Investment Fund to buy Land / Businesses to save endangered Fauna and Flora and remove pollution from the environment

It is the future goal of the environment4change team to create a global innovation fund of action where our global resource reach will be used to purchase critically important parcels of land to ensure the longevity of endangered fauna and flora. We will partner with the world's best universities, environmental agencies and organisation to identify and purchase critical parts of the planet for safe-keeping and the betterment of global nature generally.

We see a future where environment4change members contribute to a fund in order to purchase habitat rich land. The platform's innovation fund will also consider investments into businesses serving to clean up the planet by removing plastics and other pollutants from the environment. This will be in instances where plant, equipment and other infrastructure does not exist and where governments are not willing to make the investment necessary to enable this community and global service.

#### 5. Create Affiliate channels and extend the reach of your message

The environment4change team recognise there are passionate environmentalists around the globe that, if equipped, will strive locally for the protection of fauna and flora in areas local to them. We believe a global tapestry of locals, if large enough, can be representative of our planet and that is exactly what we want to achieve.

The environment4change team is building an affiliate channel where local, State and Country environmental issues can move past their geographical boundaries to create interest, intent and action, elsewhere. The environment4change Team will be seeking to grow their global footprint and team to all destinations, around the World. Equipped with digital tools, social networking, a global resource, and access to new funding models we will make a difference, which will benefit future generations.

#### 6. Become a specialised e-commerce portal offering stylish in-demand specialised value adds

The environment4change team realise plastic, and other waste, is destroying many wildlife species and seeping into the human food chain. Latest research makes this an undisputed fact. All alternatives for recycling, while value adding our shared community, must be considered and if appropriate and non-threatening, be supported. A number of highly fashionable and in demand brands and companies are already engaged in this endeavour and producing amazing clothing apparel. The environment4change team endeavour to support such entrepreneurship by collection of the raw material and donation of recycling station processes, enabling the transfer of raw waste pollutant into the ingredients necessary for supported brand user case.

#### 7. Social platform

The environment4change team is aware of the power and influence a social network can bring and possess in respect of positive environmental activism, message and success. By the nature of what social media can do today, its ability to empower, portray and share a message or cause, it can cause a dynamic shift in attitude from, "I can't help the problem, it is too big", to "environmentalism is working and I also want to play a part, for the sake of my own family and community." We are building a digital platform for doers, helping find shared solutions to shared problems. We are insuring a strong social network presence in our platform architecture to ensure our

collaborating partners can make sound use of social media, networking and gateways to announce their environmental projects to a waiting global audience of ready participants.

#### 8. Directory programme

Our Directory Programme is focused on matching organisations, at the dawn of their own environmental journey, with an environmental organisation or cause which they believe is synonymous with their own organisational ethos and beliefs. The organisation, via the platform architecture will be enabled to commence their own environmental journey at the pace and on the projects they wish. All new contributing organisations will soon understand they can play an active role in improving the planet for the benefit of the next generation of all living things. This participation can start small, offsetting their own commercial caused greenhouse emissions but is enabled to grow at the will and desire of the organisation itself. It also means an undiluted path of new contribution to the organisation just expanding its own environmental awareness.

#### 9. Emission footprint programme

The team at environment4change are building a digital service where households and businesses alike can check their greenhouse emissions footprint and offset this number with a donation of time, effort or money towards an Environmental cause, making a real and definable difference, as it affects the nullification of their own damaging greenhouse emissions behaviour.

#### 10. Weekend warrior program

The weekend warrior program will be a call-out to all environmentally aware citizens to come together for the betterment of the environment, local native habitats and ecosystems. Based on sense of ownership, community, contribution, social networking and fun, our local community organisers will set the weekend's goal, meeting place and meet-up afterwards where each week our local communities can become friendlier places for local fauna and flora.

#### 11. Unique programs of participation yet to be defined

The team at environment4change envision many unique programs to be spun up from within the platform leading to co-operation of transferable skill sets, expertise and effort. This cross pollination will be both globally and locally based and will span many realms of endeavour.

The above forms the blue print of our services offer to the wider environmental / charity sector. Much of the above will be enabled by partnership, working with known and trusted actors, within the industry via open API's. Function and service development, when required, will be

completed with a non-ownership, collaborative, open source, services orientation. All development will be undertaken to encapsulate the global population, to encourage ownership of our environmental issues and to empower action, participation and inclusion in finding the set of solutions needed to ensure net-global damage ceases today and commences its roll back tomorrow!

### **Inclusion and collaboration – why important?**

Old models of aggregation disintermediate the customer from the cause. In the old models, the direct customer relationship is wrestled away from the service provider to reside with the aggregator. The aggregator does not provide a service other than the process of aggregation. Although environment4change offer aggregation as a part of our PaaS function set, it is aggregation with a purpose of goodwill for Planet Earth and not aggregation for profit and control. Further we believe much of what the PaaS will deliver is not available today, in any form whatsoever, and will form the basis of growing economies of scale around global goodwill.

The team at environment4change believe the convergence of Platform as a Service, and web services architecture can interest and capture many new, silent, undeclared, and non-active 'environmental warriors' yet to nominate and participate in environmentalism. Together with the many well-established environmental movements that traditionally have failed to reach the local level of environmentalism, the environment4change team are addressing this by building and organising a global movement, a directory and collaborative service suite of new digital, aggregating, web facing services, to unite us all in a global effort to repair the many local environmental issues, globally. This combined and united push will be with the resources, reach and funding of a well-supported global organisation with global stakeholders who now understand the importance of a healthy Mother Earth. These new digital services will take many different forms, held-back only by imagination and the need to serve our shared planet, first and foremost.

We understand that many may have looked at environmental issues previously and while supporting the intent of the respective movements may not contributed time nor money, as they were unsure how money was being spent and how much of their hard-earned donation was actually reaching the cause where it counted, locally on the ground. Our use of technology will transparently describe to all how all funds raised will be spent in the service of our goals. Further, donations of time and other equipment will be accounted for and the inherent value in the use of resource will be detailed within the platform. All value interactions will be recorded on the distributed data structure for all to see. The cloak of secrecy around the spending of donation money will be a thing of the past.

The team at environment4change are building a digital new matrix of participation, contribution and collaboration where new models of entrepreneurship will be born in the service of the Planet. The old adage 'someone else will take care of it,' can no longer be tolerated. Together, with a growing global awareness and appreciation of the result, if interceding action is not brought to bear urgently, we will actively seek popular,

commercial, legislative, local, and government support in our endeavours, digitally and globally. There will be no place to hide.

### **Environmental 'PaaS' to enable sharing of the problem**

The team at environment4change understand the task before us all. We must collaborate, co-operate and come together, for the single, shared purpose of acting in concert, to save our shared planet. The word 'platform' itself connotes a purpose of shared functions, embodying a convergence of ideas, openness, sharing, collaboration, and contribution for a creative outcome where typical models of control are ameliorated for the purpose of greater development insight and creative outcome. Development outcomes add to the 'economies of scale' of the platform, as they collect the underutilised global resource as well as aggregating the many towards a single purpose. Inherent in the word 'Platform' and its meaning, appears a genuine value proposition where inclusion and participation are celebrated and feelings of community togetherness and inherent value 'wells-up' in the souls of participants as they witness successfully executed environmental projects on the platform.

The environment4change platform will be the digital landscape where all come together to manifest, build and deliver their individual desires for the betterment of the planet. Value interaction within the Platform will come in many different forms. It is these interactions, in their many forms, which will drive the commerce of the platform towards 'profitable for the planet' outcomes. Environmental projects and activities around the globe can be quickly spun up, within the platform, giving each project a local feel, care and insight, but with a global reach, audience and resource. Collaborative synergies will know no bounds but those placed upon ourselves. The platform will be a place of collaboration; universities will collaborate with local councils; schools will collaborate with old people's homes and large organisations will collaborate with environmental agencies. This will be offered without fee or charge, without expectation or criticism, as the time of dispute and disagreement is over!

The environment4change platform will be open, seeking input from all who care for the planet and wanting to develop initiatives, projects, software tools and awareness that will enable "you," to make a bigger difference to the liveability of this shared planet. This push towards greater contribution and collaboration will be managed via listed projects but the imagination and passion you bring to each of our future 'help save the planet' projects will be a matter for you all, as contributing, giving, individual participates acting with a single purpose. The environment4change Platform will provide the machinery and imputes to collect, manage, unite and define the power of a digital approach to solving the environmental 'hard questions' that until today remain unchallengeable.

### **Why the environmental industry needs a 'PaaS'?**

There have been many recent examples of industries, considered progressive, mature and sophisticated, being completely revolutionised by the introduction of a Platform as a Service (PaaS) architecture, seeing the PaaS soon define as new looking industries and supporting ecosystems. PaaS architecture has the proven ability to morph an industry into something

unimaginable in size and scope, when previously this seemed impossible. What is it about the introduction of a Platform as a Service architecture that can be so 'change-worthy' to an industry? The simple answer may be defined by a few well-chosen words that have a special meaning in respect of disruption and new economies of scale. These words include but are not limited to: scale, inclusion, aggregation and participation? The below will set out briefly why the environmental industry is in need of a PaaS solution, to morph into something worthy of battling and defeating our shared global environmental problems.

1. Platforms scale - Many traditional industries are supported by traditional gatekeepers. Gatekeepers serve to keep the status quo. They are often in control of what the industry sees, content and context, how the industry behaves, the prevailing opinion of the industry and strategy, prescription and treatment of industry threats, and opportunities. Gatekeepers view change with suspicion. They ensured all entrenched industry participants prosper, so why change what is not broken? The structure is centralised, closed and siloed. Traditional journalism (printing) is a good example of a gatekeeper industry. The printing industry enjoyed an oligopoly where the industry gatekeepers were defined by traditional and long entrenched reputation and 'printing infrastructure cost' barriers to entry. This industry has been largely disrupted by the internet and many citizen reporters and journalist bloggers.
2. Platforms are inclusive – this is defined by an architecture seeing an open model where all are invited to participate for the success of environmentalism. This includes all non-traditional environmental behaviour and endeavours (software development, project management etc) as the platform will attract this resource and direct, through incentive and participation models, the work in favour of a community favoured outcome. This has the outcome of attracting all un-utilised and underutilised global resource to the cause of environmentalism. This potential is transformational and is exactly what environmentalism is calling for!

The environmental industry sees the traditional gatekeepers lobbying government for large government grants and access to resources. Although participation may be invited, it is structured with centralised control.

3. Platforms aggregate. Part of the typical function of a platform is that it collects and brings together operators in an industry, under a single purpose utility (often web facing) for the benefit of the customer. Aggregation in other industries, travel being an example, sees the platform aggregator dis-intermediate the service provider from the customer. Our PaaS service will not dis-intermediate a customer from an environmental organisation that joins with us. We do not operate in service of profit. We will provide a set of digital services every environmental industry can benefit from. We are building a new



economy of scale and seek to own and control nothing other than the fuller participation and contribution to the planet saving endeavour.

4. Platforms enable participation. This is done by enabling, via software as a service, a functionality that encourages, empowers and promotes new methods and ways of participation. Via web services, everyone who wishes to commence an environmental project will be able to do so. A project spun-up in this fashion, will be able to be promoted and partners / affiliates / collaborators sort, locally and globally. Project requirements can be shared and interest sort in respect of satisfaction of same. Social and media networking functions around the project will be available as well as other promotional activates. The success of any project will be defined by a community vote rather than a centralised monopolistic view of a small number of traditional industry gatekeepers. This ability of enabling and empowering inclusion, goes to the essence of the creation of a new economy of scale, around environmental action, which we are all, as global citizens, more aware of and prepared to become involved in. All of this, under the umbrella of an architecture who cares nothing of control but rather looks to expand its footprint of relevance in the real world, around a decentralised and democratising model of participation.

#### **The power of an Account for collaborating environmental endeavours**

The account, as a defining usability feature, now reigns supreme as the identifier of choice, within the domain of many connected devices and services. With some imagination, and a little funding, the environment4change team are looking to build an ecosystem of collaboration, conservation, and collection. Coming from a background of mobile services and software as a service, the team understand the power of the ubiquitous mobile device. Much of what we will do, in respect of identifying, monitoring, reporting and clarifying and collaborating with, will be abstracted through the mobile device and the environment4change application within in.

Mobile abstraction, will allow for unprecedented and unimaginable environmental innovation at the services boundary, something we have seen nothing much of, to-date. It is envisaged many, if not all global charities, within environmentalism and outside, will be hugely advantaged by the adjunct of Function as a Service, within environment4change's service's suite of network, connectivity, inclusivity, and participation seeing exponential growth in customer / collaboration / community base, over time.

The interceding of the two domains (Account and Transaction) will be speciated seamlessly and without notice to the end user ensuring privacy, security and immutability of transaction and interaction.

#### **A technical overview of development design, framework and architecture**

Because we are a not-for-profit business, it does not mean are not concerned with costs, nor using the latest cost saving technology to ensure best value outcome is realised. Actually, the opposite is true as anything that distracts the team from spending every available dollar on the Environment, is a concern to us. Choices in respect of technology, architecture and

framework are critically important as we realise the right decision today can mean better outcomes for us all for tomorrow.

Our technology choices are driven by the need to move fast, enable innovation and reduce cost, in both a dollar sense and a waste sense. We also recognise and value global collaboration, as a means to achieve consistently better results. It is with this ethos the environment4change development Team have chosen 'serverless' as their development and framework architecture of choice.

serverless (17 December 2018) says of serverless:

*Serverless abstracts away the most menial parts of building an application, leaving developers free to actually spend their days coding.*

*What this means is that developers can single-handedly build apps that handle production-ready traffic. They don't have to actively manage scaling for their applications. They don't have to provision servers, or pay for resources that go unused. They can just get projects off the ground with small, agile teams.*

*Thousands of developers are already proving that serverless can enable them to launch applications at record speed and cost. Adoption has been fast, with companies like Coca-Cola, Nordstrom, EA, and Expedia touting their number of serverless services in production. Ultimately, serverless is about focusing your efforts on what provides value to users. Upgrading your Linux distro does not provide value to users. Managing your RabbitMQ servers does not provide value to users. Shipping product provides value to users.*

*That is the serverless maxim: focus on business logic, not servers. Serverless has become a movement about faster development and creative empowerment.*

### **Why we choose Serverless?**

As our offer to the planet is based on a Platform as a Service architecture it should not surprise anyone that we recognise and support functions as a Service as a mechanism to leverage services by utilising a model of engagement pay only. This mechanism, by Lambda, makes this technology particularly exciting to us as this enables a process to run, when needed and then wait until it is called again. If computing architecture was defined as in terms of its emissions footprint, we would suggest this would qualify as the 'green alternative,' and certainly is our best alternative to development whilst understanding and acknowledging our own global emission footprint in the process.

The choice of 'serverless' architecture ensures our focus is on our service, offering new and innovative ways to encourage, enable and embolden us all to do more for Mother Earth, and not the administration of back end servers. The architecture allows the running of backend web services to be called as functions on a clouded server. This is both resource conservative, dollar smart, and focus specific as it allows and delivers the service functionality on time and when needed.

### **A note from our developers!**

At environment4change we celebrate delivering green, secure, stable, sustainable technical solutions. We are a cloud-native initiative and use only minimum required resources. This translates to optimum energy usage and a reduced carbon footprint. Cloud computing guarantees round-the-clock security for data, privacy and cyber-attacks. Our systems run in multiple available data centres to ensuring continuous service in case of disruption or disaster.

We embrace infrastructure as code methodology, via Terraform and AWSpec. The use of this architecture helps with the further removing of errors and security risks, whilst enabling faster execution, cost reductions and proven stable software. We are leveraging serverless technology which gives us a unique opportunity to scale our software automatically and seamlessly without disruption of service for our community, partners, collaborators, customers and business.

The environment4change infrastructure is constantly monitored via CloudWatch. The environment4change 'applications set' securely log relevant operational data using ELK stack. Any potential or actual issues are immediately reported to our team via advanced alerting systems. In addition, anonymised monitoring and application log data is processed and analysed by our engineers to improve our service. The environment4change team are ensuring technology and care for the planet is no longer a dichotomy nor do they need to be antagonists!

## PART 3 – Investing locally with a global footprint

### The ‘Bigger Picture’

Our project is to build an inclusive, empowering and innovative Platform as a Service (PaaS), to capture the goodwill of the planet, to save the planet. That is our project! Our PaaS development is ‘architected’ to unite environmental effort and to attract and enable everyone to take a positive role in environmentalism, as part of a global community. We will attract new participants to the environmental causes of our partners, through our PaaS programme. The environment4change team is building a platform and supporting ecosystem offering a suite of services and functionality, transparent, fast and fair to unite all environmental endeavours, globally.

The bigger picture is, of course, our purpose. Via our PaaS we will inspire and connect the kind of solutions that lead to improving the health of the planet with lasting changes to manufacturing, consumption and disposal. That is our purpose! Our PaaS will call, cooperate and collaborate with all environmental entrepreneurship to join us, in pushing environmental causes forward, putting the planet before politics, profit and procrastination! Work has commenced in respect of the building a PaaS worthy of collection and aggregation of best environmental intent and innovation, and development of a digital toolset to represent the very best of attraction, encapsulation and inclusion around environmentalism.

Our ‘bigger picture’ strategy is to engage the world to clean up their local environment. Where there is no local infrastructure, work with local businesses and derive new business models that will interest businesses to collect, recycle and reuse rubbish. The platform will also facilitate the educating of people around correct behaviours as it relates to pollution of sea, land and air. We will also serve to encourage, empower and promote biodiversity and the protection of habitat and appreciation of natural resources. We will invest in new technology and process, to protect our planet and work towards repairing the damage already done.

This strategy will be responsible for reversing the degradation and destruction of our Mother Earth and all the unique habitats it nurtures. The following speaks to how the environment4change PaaS will drive, support and be instrumental in affording the environmental industry new innovative services, new economies of scale and new level of interest and participation, an outcome the team looks forward to delivering.

### Our ‘Investment for the Planet’ strategy

Fiscal economic theory describes spending money as a stimulus to economic growth. Spending money to realise later economic gain and growth is used by governments around the World to stimulate demand, spending and further investment. What happens when the later benefit or gain, from the initial investment, is not seen in your local area or not noticed by you directly? Who invests when the gain is not fiscal but rather something else, something shared by many but out of sight and mind mostly, the benefit to you harder to define? Who invests in process, education, plant and machinery in those global hot spots of polluting behaviour, ruination and

degradation when profit, in a dollar sense, is not achievable? Who initiates the investment where return on investment is measured in healthier waterways, clearer, cleaner habitats, and not measured by the dollar value of return on investment, to those who invest?

In many cases, it is an example that bests illustrates a point, laboured verbatim, please let me share an example of this here:

*A coastal city slum in South Asia has been identified as being amongst the World's greatest polluters of land, sea and air. The environment4change Team liaise with local experts and environmental advocates and identify an immature local rubbish sorting infrastructure and a non-existent plastics recycling capability. Plastic pollution is identified as a serious issue of concern as residences of the city are burning plastic to promote the start of fire and discarding plastics in waterways and on city streets.*



(Image: <http://fahistoryblog.com/east-asian-affairs/2018/04/26/the-faults-of-indonesias-urbanization/>)

The exemplified urban slum is heavily populated and a majority of locals are poor, earning less than 1 USD per day. Work is often defined by scrounging around for what work is available on a daily basis, collecting paper and metal for resale, and plastics for burning. Their lives are day to day. Their eating habits are also day to day, with food packaging matching the lifestyle (small sachets of plastic packaging). There is no organised refuse collection service and no plastic recycling system or services available. Although the local government have recognised a need for a refuse collection and some plastics recycling ability, locally at the population centre, the cost for such an investment is prohibitive as return on investment, in a dollar sense, is not possible. No one within the urban slum has the ability or will to pay a levy for the collection and recycling of the waste.

Tonnes of plastics make their way into the Indian Ocean daily. Tonnes of plastics are also used as a fire accelerant within the urban slum to assist the

starting of daily cooking. Although the treatment needed to correct this global polluting phenomenon is local, the pollution of air, land and water has a detrimental effect globally. As the profit motive does not exist in this case, there needs to be a different type of funding model looking at other indices of interest.

environment4change provides such a model and this is exactly the type of project we look forward to supporting. In this instance and for this example the environment4change business steps in and buys/licenses the best plastic recycling technology available. The plant (technology) is shipped, land purchased/leased or granted by Government and the business is established. As a 'not for profit' business, the environment4change team initially pays greater than market value to collect the plastic from the streets and waterways and teaches the local garbage collector's new behaviours. Education is also introduced to the community, through local partnerships, to teach the poorer within the city, the dangers of using plastic as a fire accelerant.

Although the profit motive does not drive the initial decision to invest, in time the recycling plant and associated business becomes profitable, seeing the recycled plastic being exported around the World to businesses supporting the circular economy.

## **PaaS - bringing together the two - to build a better one**

Although the environmental spirit has existed long before mobile services and platform economics were more widely known, it is these two architectures and technologies that can transform how environmentalism is treated more generally with respect to access, participation and inclusion. Dr Robert Bullard an American professor of urban planning and environmental policy at Texas Southern University in Houston (Nexus Media) (20 Oct 2018) says,

*"The environmental movement is divided into two. Large, well-funded, green groups mostly led by white men, lead national campaigns and lobby Congress, while small, poorly funded environmental justice groups, largely staffed by people of colour, work for change at the local level. Observers have written at length about this divide, arguing that it has hampered efforts to deal with climate change. Critics say that as long as these organizations operate in two separate spheres, big green groups will struggle to organize locally, and environmental justice groups will struggle to secure resources they need to thrive."*

With the inception of the environment4change platform as a service, the great divide, as described above, will have a set of shared digital tools offering a shared solution for their unique struggle. For the large well-funded group, they will have access to local committed environmentalists ready to support a good cause. For the second group, the poor funded, well organised group, they will have access to funding and partners willing to collaborate and participate in great environmental projects and causes. This is the power of PaaS architecture. Our unique platform service has been designed with collaboration, co-operation and democratisation, in mind. Together, we own all the polluting and habitat destroying issues around the



globe. Our only chance of success is collaboration. Democratizing the environmental industry is the impetus we need to throw the old models of treatment out, for new models of inclusion, participation and co-operation.

### Issues and actions of global concern

At the risk of sounding old fashioned, making lists just does not excite us. We understand they are critical in some user cases but for critically important stuff like, cleaning the planet, changing polluting user habits (education) from careless to caring, a list will no doubt forget to mention something important and thus it is lessened in its message to the reviewing public. Although this is exactly the case, we don't like listing "to-do's" for, it is for the purpose of understanding, openness, transparency and to give you a sense of where we are as a team, we list below the environment4change focus, a starting point to ensuring a cleaner earth ensuring we have an immediate effect in cleaning the planet and secondly, prove up the features, functionality, usability, utility and fit of our digital toolset and PaaS architecture. Our collective focus will include:

- Cleaning the global coastal hotspots around South and East Asia in respect of polluting waterways resulting in plastics and other man-made contaminants entering our waterways.

Earth.com New (Kay Vandette, N.D) – "It's been estimated that around eight million metric tons of plastic ends up in the world's oceans each year, and now a new study shows that 90 percent of that can be traced back to ten major rivers in Asia and Africa."

- Educating around the global coastal hotspots around South and East Asia in respect of polluting waterways resulting in plastics and other man-made contaminants entering our waterways.
- Providing critical infrastructure, plant and equipment to those areas defined as heavy global polluters without blame.



(Image: <https://www.earth.com/news/ocean-plastic-waste-asia-africa/>)

- Derive solutions for developed economies use to shipping their garbage and pollution to under developed countries for them to deal with the developed world's rubbish.
- Work with Universities and private enterprise on the best solutions for recycling of "the black plastics".
- Run local clean up campaigns across the global of all loose rubbish and plastics.

### Supporting the United Nations Sustainable Development Goals

Environmental success, seeing our shared planet cleaned, cleansed and rejuvenated, will not occur in isolation but in concert with other gigantic feats including, the reduction of global poverty for all and the removal of gender and race inequalities, just to name, two. The environment4change Team support and adhere to the United Nations Sustainable Development Goals as a blue print for a better, fairer and more sustainable World and Planet.

So, what are the United Nations Sustainable Development Goals and why are they important to a Platform as a Service provider wanting to aggregate and unite much of the world's current environmental action and all of the World's future Environmental action. The United Nations Development Programme says on its Sustainable Development Website (2018):

*"The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another."*



(Image: <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>)

Although our focus is directed to the environment, we appreciate and take pride in knowing a cleaner planet goes someway to reducing inequalities for the poor as they often are at 'the coal-face' of behaviours injurious to their health. A single UN Goal, in isolation, cannot provide a more sustainable



environment and habitat for mankind, not to mention the vast species of flora and fauna sharing and coexisting with mankind. It will take a steely determination on the 17 above global globes, in concert and we look forward to contributing what we can and help other likeminded people and organisation to ensure our kids enjoy a healthier and thus wealthier planet and a better promise of sustainability for their children going forward.

### **Man defining the future of the planet - the Anthropocene epoch**

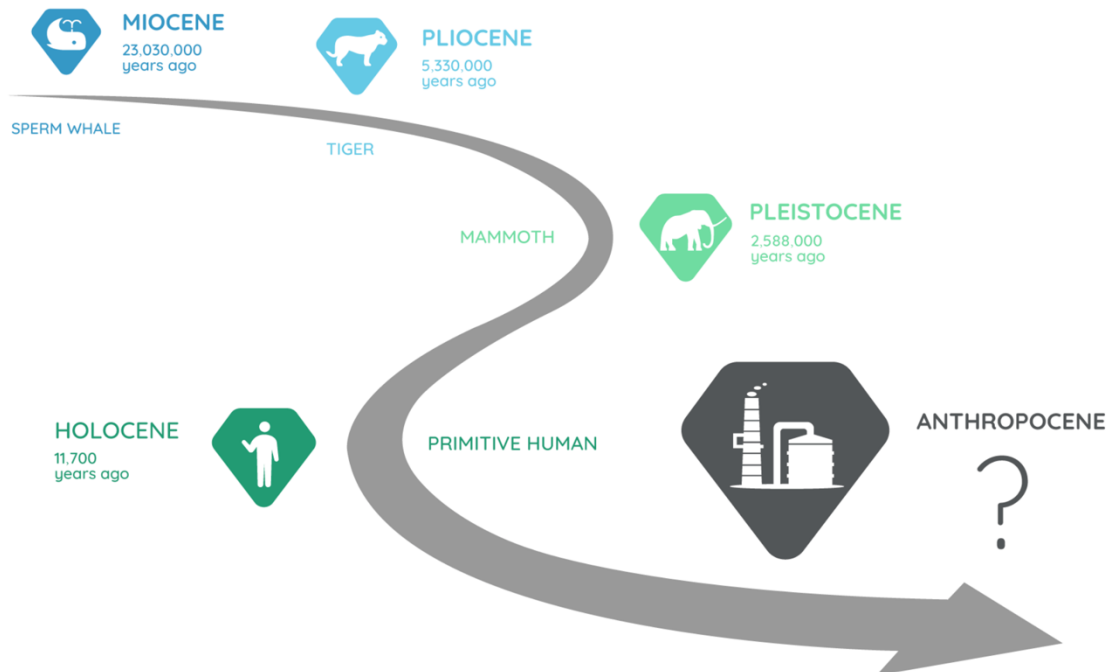
Has the influence and domination of mankind over land, sea and air herald a new epoch, an epoch defined by the behaviour and effect of mankind towards planet Earth? Does the footprint of mankind warrant a new epoch, the Anthropocene epoch? What does the word mean? The Day, New to open minds (2014) says:

*“Anthropocene is made up of the Greek word ‘anthropos’ for human, and ‘cene’ meaning new or recent. The term was popularised by Paul Crutzen, a Dutch chemist and Nobel Prize winner, in 2000.”*

There are two undisputable truths in respect of mankind’s past and possible future. The first undeniable truth: Economic growth has brought with it many issues including pollution and destruction of natural habitats, both sea and land. The second undeniable truth: mankind, as a collective species, must act together and in concert to enable a change in polluting, rubbishing and destructive behaviour. Only mankind can define its future as our technological and economic growth continues on the ‘feedbag’ of Mother Earth.

Our shared planet is the succulent of mankind and all other species. All past prosperity was enabled by the abundant yet scare resources of our shared planet. The idea that our globe can continue to be rubbished and polluted, seeing species of flora and fauna vanish from the living record is absurd. What is also clear, is mankind must work together, with the view of sustainable development without a wanton disregard for our shared resources, even if these resources are not defined by the property of a single geographical area and political authority. It is because of the old global government models of ownership and not shared global responsibility that new collaborative and co-operative approaches offer the best way forward, seeing and recognising a change in humanities will to fix and heal our bruised planet.

## THE LAST 23 MILLION YEARS IN FIVE EPOCHS



Johan Rockström, Jørgen Randers, and Per Espen Stoknes (Eco-Business, 22 October 2018) identified a number of critical issues requiring 'transformational change' in an effort to ensure sustainable human wellbeing into the future and in time to make a meaningful and timely difference. The five areas the authors defined such change is particularly important are:

- In line with the IPCC's recent report, exponential growth in renewable energy is needed to enable the world to halve total emissions every decade from 2020.
- Sustainable food production must be boosted substantially. Feeding almost 10 billion people by 2050 will require a radical overhaul of existing food systems, with an additional 1 per cent in sustainable intensification each year.
- Developing countries need new development models, following examples like China, Costa Rica, Ethiopia, and South Korea, with a strong emphasis on sustainability.
- The world must drastically reduce inequality, ensuring that the richest 10 per cent capture no more than 40 per cent of total income.
- Finally, we must stabilise the global population by making huge investments in universal education, gender equality, health care, and family planning.

The environment4change Team are building a digital platform of collaboration and co-operation around an enlarged opportunity and access model of participation and global community. Our digital toolset will enable and empower new models of environmental participation in all its new forms, yet undefined. Our global network will support and grow local opportunities around the world. Our global fund will ignore traditional geographical and

political boundaries for the betterment of the planet as a whole. We have seen and recognised the need and impetus for change. We offer new models of participation and collaboration offering and building new economies of scale that will affect the change required to clean our planet and its waterways, as we can all, as a global community, be involved.

Does man's influence over the planet and all within, on and on top of, warrant the definition of a new epoch, the epoch of man? We will leave that debate for the experts needless to say, man's footprint and be errored with time or man's own benevolent work to fix what he has broken.

### **Why recycling is an important part of our strategy**

Eco-Business (Thomson Reuters Foundation, 24 October 2018) reports,

*The huge appetite for metals, sand, coal and other natural materials will see consumption of natural resources rise to 167 gigatonnes in 2060 from 90 gigatonnes today.*

*In the 20th century, the world mined 34 times more construction materials than ever before,[sic]*

*Erik Solheim, (head UNEP), "We are using the planet's resources at a faster rate than they can be replenished, while polluting our seas, air and countryside with the waste from our consumption habits,"[sic]*

As a species mankind has been gifted a single planet, Earth. Our shared planet has a definable set of scarce resources, but mankind arguably has an undefined ability to be creative, innovative and resourceful. As demand for raw resources continue to increase over time with an increasing demand, production processes reliant on the raw materials MUST consider every avenue, other than our rare and scarce virgin natural resources as the inputs to production. Recycled production inputs must make up an increasing and growing percentage of raw material requirements towards production.

This circular economy model is widely considered the best solution for what needs to be done today, to manage better the demand of tomorrow. environment4change is committed to the recycling and the circular economic models as these offer a reachable and attainable solution now offering notable reductions in building stockpiles of single use supplied goods.



([https://www.recycledplasticbuildingmaterials.co.uk/working\\_with\\_recycled\\_mixed\\_plastic\\_lumber\\_hanit.html](https://www.recycledplasticbuildingmaterials.co.uk/working_with_recycled_mixed_plastic_lumber_hanit.html))

The opportunity around use of recyclable products appear limited only by the imagination of the entrepreneur. environment4change will support purchase, partnership and collaboration with organisations offering use and sale of recycled plastics and other goods as part of a sustainable circular economy and provide the impetus for new markets to be started in global hotspots where planet saving opportunity cries out, to be heard.

### Step up to pick-up, collect and recycle

*“If the top five plastic-polluting countries – China, Indonesia, the Philippines, Vietnam and Sri Lanka – managed to achieve a 50% improvement in their waste management — for example by investing in waste management infrastructure, the total global amount of mismanaged waste would be reduced by around a quarter.”*  
IFLSCIENCE!(n.a)(n.d).

There appears a global need for someone to step-up for the benefit of planet. Step up where local, regional and national governments have not, cannot or refuse to. Step up to pick-up, collect and recycle. In instances like this, around the World and specifically in areas of China, Indonesia, the Philippines, Vietnam and Sri Lanka, the environment4change footprint will land, either alone or in partnership and establish the critical infrastructure and services needed to keep plastics and refuse out of waterways and other points of insidious contact with fish, animals and human beings.

An example of the type of partnership and collaboration the environment4change team believes illustrates the commencement of good will and changing attitudes of some of the globes largest corporates comes from a handful of the World’s biggest consumer goods and chemical companies. A ninety (90) Million USD fund to find solutions to plastic pollution in South and Southeast Asia has been established to find solutions to plastic pollution in South and Southeast Asia. It has been promised more will come when a solution is found.

A point made by Katharina Stenholm, chief of cycles and procurement officer at Danone (Eco-Business, 26 October 2018) was:

*“While we are working hard to ensure our packaging is designed to be circular, the reality is that it cannot be reused, recycled or composted without effective waste management systems in place.”*

Seeing waste keep out of waterways, oceans and landfills is the first step towards making our world a cleaner place for us all. In some areas around the world, government has not intervened as there is an absence of profit in supporting such services in the areas most needy.

There has been a missing part of the environmental solutions ‘jig-saw’ puzzle. This part has been absent from the working environmental models until now, to a large extent, as the information and effect of polluting behaviours was not well known nor considered serious enough to matter. That was yesterday! Today, the globe is waking up to the importance of all-natural resources being managed in a sustainable fashion. A recent focus on cause and effect has the big end of town listening. The environment4change team believe large corporates can help if given the right mechanism and partner to become environmentally active. We are committed to helping large organisations’ and corporations’ practice generous and ongoing environmental largess.

“The question is not whether a world without plastic pollution is possible, but what we will do together to make it happen.” Ellen MacArthur. 29 October 2018.



BY 2050 THERE WILL BE MORE  
PLASTIC THAN FISH IN THE OCEAN.  
YET THE PROBLEM WITH PLASTIC  
STARTS LONG BEFORE IT REACHES  
OUR OCEANS AND BEACHES, AND  
SO MUST THE SOLUTIONS.

#LINEINTHESAND  
29.10.18

The environment4change team is ready to make a difference by providing infrastructure, plant and equipment, for the benefit of local and global inhabitants, in locations of heavy polluting where others have ignored the problem for an easy solution. Every tonne of plastics kept out of our shared oceans is a blessing for us all.

## Plastic's and our shared oceans

Our comment here is not an almanac of published research on the gross polluting of our shared oceans, by our collective over-reliance on plastic products. The history of plastic, its mainstream adoption, is well known and described in many 'authoritative texts'. The current day concern is the ongoing use of plastics, particularly in developing countries, due to plastics' versatility and low cost to production.

Just how much of a serious problem is plastics in our waterways and oceans? The Conversation (13.2.2015) says it is order of Eight (8) Million tonnes a year, and growing.

*"You might have heard the oceans are full of plastic, but how full exactly? Around 8 million metric tonnes go into the oceans each year, according to the first rigorous global estimate published in Science today.*

*That's equivalent to 16 shopping bags full of plastic for every metre of coastline (excluding Antarctica). By 2025 we will be putting enough plastic in the ocean (on our most conservative estimates) to cover 5% of the earth's entire surface in cling film each year.*



(Image: <https://www.iflscience.com/environment/eight-million-tonnes-plastic-are-going-ocean-each-year/>)

The conversation goes on to say if the worse polluting countries made a 50% improvement in their waste management via investment in infrastructure, plant, equipment and knowhow, the total globe polluting waste would reduce by up to 25%.

So, what is the solution? The best solution will offer a matrix of inputs towards a single final purpose or outcome. Investing in waste management infrastructure is an important first step towards reducing the amount of plastic and other waste, left idle. Education is another important mechanism to precipitate a change in user behaviour as well as empowering every

global citizen to make a small change locally to effect a greater change, globally.

### **Growing government and non-government awareness and initiatives**

At the time of writing this Whitepaper, a number of EU initiatives were announced looking to legislate for a cleaner, greener, plastic rubbish free environment. environment4change applaud all action giving the greater European community momentum in the right direction. As awareness grows, as the consequences of mankind's past careless and reckless behaviours, manifested in changes in weather and other overt ways, we expect more legislation, as governments move to support the growing will and knowledge of the people of the importance of the health of our single shared Earth. These pieces of legislation will provide some amazing opportunities for new services, initiatives and projects in support of our collective push for a healthier planet.

Being the provider of a digital platform as a service, we with our partners and collaborators, are able to spin-up projects quickly and at scale, develop new services within weeks, and quickly reply to new legislation and opportunities. New not for profit business partnerships are likely to be born of the opportunity new legislation, in support of the Planet, will give. Platform architecture has a pedigree of responding to industry opportunity faster than any traditional business, and it is just the way the environment4change team insist it should be.

### **Software, business and platform development for Mother Nature.**

We hope all would agree, this is a software development project of difference. The difference is born-out by the fact we are developing a digital platform and ecosystem for the sole purpose to clean, re-generate and save the planet. We are building a Platform as a Service to aggregate, fund, promote, scale and support the great work of many environmental groups and individuals, existing today, while also offering the digital PaaS, allowing for new environmental initiatives to be spun up quickly with the inbuilt support of social, media and affiliate channels provided from within the platform. architecture will ensure trust and transparency in respect of all contributions, whether from donation of any kind, and also offer full transparency of where cost meets environment.

So why have we decided to launch this initiative now? As the global population grows toward 9.7 billion by 2050, with plastic production set to triple within the next 30 years, we passionately believe if we have not addressed the rubbishing and polluting of our planet now with the impacts of climate change, starting now, no amount of money, clever technology or new innovative process and speciation will make a discernible difference.

The environment4change team sees, at the release of the PaaS, part of the service offer, going forward, will be the funding of planet valuing environmental endeavours. Although these projects will be made without a profit motive, we will strive to make good funding decisions for the planet first, and a growing cash flow consideration for the benefit of the environment4change ecosystem, second; if not mutually exclusive. Money / wealth / lifestyle, will meaning nothing if we are collectively swimming in a



sea of micro plastics contaminates, dinning on hormone mimicking estrogen rich sea food and breathing air unfit for life, for a growing proportion of our collective brothers and sisters.

### **Structuring our UK company for the benefit of all**

It is the belief of the environment4change team that if more is not done to roll back the damage, educate around new behaviours, and intervene and clean, on behalf of Mother Earth, then everything else we do, as collective inhabitants of this shared planet will mean little. It is not just the damage and behaviour of past decades that we must account for now, but as populations grow, we must clean and correct going forward, while installing new technologies, businesses and behaviours in favour of Mother Earth.

Our PaaS development is critical as the only mechanism to engage, encourage and encapsulate the entire globe in the environmental action needed, going forward. As a result of our commitment to act first for the benefit of Mother Earth, we will purchase or lease technology, businesses and infrastructure, when the profit motive is absent for others to do so, to enable the clearing, cleaning, and cleansing of waterway, land and air, at the global hotspots of air, sea and land polluting and dumping.

The environment4change Foundation hopes to operate for the collective good of the Planet, in perpetuity. It is the desire of the environment4change Foundation to mature, at the completion of the initial PaaS development stage, into a registered UK charity. Having the organisation structured in this way is our greatest chance of aggregating the goodwill of the World, to save the planet. This all underpinned by a software platform service and function suite, offering the critically important social, media, marketing, business, reporting and operational support. These are functions and services all environmental endeavours require. Being open, transparent and inclusive of all, without exception will mean a greater ability and intensity, over time, to intervene on behalf of the planet.

In the United Kingdom and European Union, there appears many grants and offers of funding, to do environmental work, that our platform as a service could easily organise, enable and empower. We are confident of a vibrant ecosystem following the platform development. It would be a great result if we can buy back our planet and ensure sustainable and circular models are the only ones engaged with, in future economic development, regardless of geographical location, political preference or level of economic development.

environment4change has commenced a dialogue with the British Charity Commission for requirements to register as a Charity. environment4change has done this knowing this structure best serves our desire to put the planet before profit, where our focus is to protect the economic invisibility of nature. As society does not measure the income that nature gives us, we therefore do not account for what cost society pays when nature is lost.

**“We use nature because she is valuable  
We loose nature because it is free” – Pavan Sukhdev**

We look forward to your support.



## PART 4 Democratisation – its value to environmentalism!

### Decentralisation means sharing and co-operation

Much has been written on the pros and cons of centralised models of actions and execution vis-à-vis decentralised models. The environment4change team are generally committed to a decentralised focus of action and execution of environmentalism, as we believe it will represent a fairer approach to access and opportunity to sharing our mission with the greater global community and thus giving environmental action the gift of scale. We also see the decentralised model as delivering the greatest chance of large-scale mass adoption, in the quickest possible time frame, completely consistent with the serious state our planet is in. As a management team, we are committed but pragmatic to the challenges of releasing a community wide, aggregating model to challenge the polluting and rubbishing of our shared planet. We acknowledge the work done is for the benefit of all.

We are embarking on this journey with an understanding that the technology we have today will mature, widen in scope and access. This is exciting as we believe technology can democratise, enable the dispossessed and empower the weak, those without a voice. We will however ameliorate our preference for decentralised control for and only in the event the opposing model is better for Mother Earth.

environment4change will quickly become a decentralised Platform as a Service offering a peer to peer service connecting the funding source directly with the local environmental activists. There will be no centralised entity controlling the allocation of funds. Our information systems, collective intelligence models and other information collection and maturation tools, together with the Community will come together to determine what clean-up projects are undertaken. Trust becomes a protocol of the peer to peer relationship between all participants on the environment4change PaaS, where innovation occurs at the service edges and flows up.

The rubbishing of our global village is a global community problem thus the future of this ecosystem must be controlled and managed by all who participate in its success. We see initially the management team making some early investment and project decisions however these important processes must be passed to our global community for voting and curation as critical mass gathers pace and as this is a critical part of our platform architecture and the only way our vision becomes truly global. Remember all, decentralisation is the reward for participation and co-operation!

### The only model that makes sense for the benefit of the planet

Organisations that may wish to join the environment4change platform family may wonder generally about decentralisation and wonder how joining / co-operating / collaborating with an organisation committed to decentralisation will affect them? There are many benefits to running a decentralised decision-making process and architecture. Benefits include a better, fairer, more transparent decision-making outcomes. This is true as decision makers are committed to long-term health of unit outcome and platform longevity.

Empowerment of community will drive a growing participation rate and feeling of inclusion. Empowerment and relinquishing what you can to others enables a freedom from lesser decision-making processes with a view to better support the bigger picture.

When you look at the leading environmental groups, they share a number of business models and attributes in common. Access to an audience and the sharing of their content and message is predominant at initial glance. As a PaaS provider the environment4change team is able to abstract into digital services, all of what an aspiring, environmental project will need to make a start. As an aggregator of content and intent, our PaaS will collect and share all that is the best in the environmental industry, not for profit, but for the betterment of our planet. As an enabler of community participation, our PaaS will put you in contract with other environmental warriors ready to act for environmental good and against environmental apathy and indolence.

What a dedicated PaaS architecture brings to the environmental table is a mechanism to remove, reduce or ameliorate centralised power, control and cost of middlemen (middle-services) in servicing the intended action or transaction.

In respect of our partnering and collaborating organisations, we offer you a suite of progressive and innovative digital tools, a great and growing social and media network footprint, and a community of like-minded members who understand collaboration trumps competition every time, in pursuit of a better shared world for us all. Our PaaS offers everyone a voice in the growing global chorus of concern that is environmentalism today. Come and join – you have absolutely nothing to loss but plenty to give, share and gain.

### **Mobile connectivity, information and applications services to grow the platform economy.**

Almost without argument the mobile device is the digital appendage ‘MUST-HAVE’ in respect to our social groups, interests and habits, shopping preferences, and indication of future behaviour. An individual’s connectivity surpasses a single device and now spans multiple devices using many applications services in an individual matrix of choice, preference and purpose. Mobility has become essential as technologies and services strive for a great partner of a shrinking divide between work and play. The team at environment4change understand digital connected mobility, new models of information and application access to services, are a critical part of the revolutionary strategy, going forward.

The environment4change mobile application will form the basis of our mobile access to our Platform as a Service offering. A unique account, via a connected device, will signal and identify all user interactions with the platform. Accounts will vary in type and purpose, depending on requirement and role within the Platform. Interactions of value at the internal / external service border, organic and inorganic, will be quantified, described, recorded, and reported on. Growth in community participation, platform use and service support will be described and manifested through the platform’s intelligent information layer and transparent data structure.

### **Data and information to play a greater role in environmental protection**

The invasion of data into and over our personal lives is complete. From here on in, data is set to intermediate all interactions, human to human or human to machine, in respect to all aspects and facets, at a growing rate. With the growing use and understanding of data, and insight to what it can speak to, many old problems have been solved with the collaboration of new sciences and better and new analytic uses of data. Data used in this way, in a corroborative environment of advanced algorithms, artificial intelligence, and machine learning, becomes a beacon of new learned knowledge, a new graphic user interface of environmental information and pedagogical tool of all, that when harnessed with an environmental focus can be used to make the right decisions, at the right time, at the right degree and force, for the benefit of the best outcome for our shared Planet.

Our strategy for the growing use, insight and value of data goes 'hand in hand' with our plans to see the development and implementation of the first, sensibly considered and applied, aspirational, 'decentralised autonomous organisation.' This is a huge endeavour and definitive of future not-for-profit organisations where community ownership and participation are sought and valued as the only solution to truly, global problems of scale.

The environment4change team have identified our partner organisation of choice, who will design and develop the environment4change information layer where community contribution, data science and web and mobile data is ameliorated, extrapolated and enhanced to bring new levels of knowledge and understanding to an industry forgotten and left behind, until now that is!

This development by itself brings a significant value addition to the environmental industry. Until now single siloes of environmental action, against centralised environmental endeavour function without the benefit of comparison, curation and cross-examination against other projects of a like nature and purpose. By introducing new informational tools and processes, the information as a service layer will provide greater transparency and accountability inducing, we believe, a greater commitment for everyone to become involved within the science and care of environmental action, proven most beneficial.

The team at environment4change are building a Platform as a Service where new levels and data capture and harvesting will be included to further enhance the decision-making processes, so our Mother Earth gets the best treatment possible and our resources are utilised seeing investment made at the right time to ensure greater chances of intervention success.

### **The best environmental entrepreneurship from around the globe**

Entrepreneurial endeavour, creativity and passion, will be collected from around the globe and allowed to scale. Amazing ideas for the benefit of our shared planet will be nurtured, nourished, grown and supported. The Team at environment4change believe a well designed and built application service will see an increase in mobile application take-up and thus local participation through local engagement and an inclusive community. This increased interest in use and participation, via the mobile application, causes other

flow-on ecosystem economic activity. We are keenly interested in building this momentum as we want the healthiest economy possible, as this will deliver the greatest 'bang for environmental buck' for the benefit of all projects and collaboration we engage in, going forward. This promises to be an exciting part of our growth strategy and one we will share with our community as plans mature.

### **Curation, community and consensus**

Data curation, the curation of data, is an important part of all progressive endeavours but an integral part of any environmental, not for profit, wanting and committed to make the best decisions for the planet on the basis of community consensus, empirical fact and best scientific evidence rather than passionate and sometimes misguided emotion.

Data curation plays a critical role in accessing and reporting on the activities and projects of the environment4change community. It is the action of 'value adding' curation that will allow the platform to accept a project has been completed successfully, and thus rewarded appropriately. Data curation is also important as it represents a signpost to community feelings, knowledge, acceptance, agreement and mood. It is also an important aspect to the sharing of knowledge which plays out in the way others of the community space approach their activities within the domain.

Data curation, and its inherent processes, will be responsible for a maturation and learning from within the PaaS. The act of curation will touch, instruct and correct lower level data structures as well as guide, update and teach, upper level web and mobile services through mobile applications including learning and reporting tools and services.

Data curation has a positive effect in respect of the data value chain continuum; taking data as a raw input and via technology and assessment, building readable sign-posts to how value can be widened or lengthen. Curation is also critical where aggregation is present. Our PaaS will aggregate the World's good will in service of environmentalism. Data curation is an important strategy in ensuring the aggregated data is descriptive, unambiguous and accessible and available to learn from, gleaned industry-based understanding and knowledge, for everyone's benefit.

The environment4change team acknowledge the ongoing value of data. We are committed to using data for the benefit of the planet and making the best decisions possible with the resource allocated to us. Our strategy here is consistent with our ethos being, we collaborate, co-operate and partner with likeminded organisations, our community and universities in the pursuit of this goal and the greater goal of service excellence.

### **Rewarding our community**

As a foot needs a sock and a shoe, a platform using a strategy of curation, needs a mechanism to reward, to give back to the community who is continually improving it, via feedback, testimonials and social networking posts and critiques.

As the environment4change team value community participation over almost everything else, it is envisaged competitions for reward will be held each month on the platform. Individual community members can spin up their own project, for environmental good, and seek the team at environment4change to support with participation and competition rewards. This functionality will represent a single module of the PaaS architecture, servicing the entire environment4change ecosystem.

It is envisaged future rewards will be redeemable against a number of supported e-commerce partnerships or social events. It is also envisaged project control of an environmental action of choice will be a price worthy of winning, with the funding support of the environment4change funding team. Rewarding our community members is a core undertaking of this not for profit company as we realise without the support of our community, Mother Earth is not going to receive the attention and care she deserves.

### **The Value of Abstraction to Environmentalism**

The word abstraction is used a lot in software development, networking and IT architecture. Although the words' use is common, little understanding is assigned to its purpose, its power, and thus the reason for our interest in how it can develop the environmental industry to become more influential, more successful, and greater than the sum of its individual disjointed parts, more than it is today.

Today, no service exists for all global environmental causes where abstraction, inside a Platform as a Service empowers, enables and builds a uniting, aggregating, scaling and inclusive set of environmentalism digital MUST-HAVES. Where all before us build a single purpose, single cause utility defined with a narrow scope of engagement, we build a multi-purpose, multi-cause web facing architecture and we do so through the principles of abstraction.

It is time the environment gets the best of what digital architecture and Software/Platform as a Service can offer, and environment4change are delivering it. Enabling a global platform, as environment4change PaaS is, enables everyone to become active in the environmental cause. There are no longer any excuses – we all now have a role to play, a voice to use, and a platform to support us!

### **Giving Everyone a Voice**

Although it may seem strange, until very recently, (November 2018) all of us, as the global community, were unrepresented at the premier environmental conference in the World, the UN's climate change summit. The 'people's seat' (Guardian, 22 November 2018) is an initiative to collect the comments and concerns of people from around the globe to a problem we all share together, being environmental ruination of our shared planet. Using the hashtag [#takeyourseat](#) the comments were aggregated and formed the basis of Sir David Attenborough's address to the conference. Without argument a great gesture but seemingly weak on substance and effect, but a step in the right direction, no less.

environment4change support all initiatives that democratises “the all over the few,” and empower the collective people for issues such as this. This is, in fact, only a small step forward for the UN. The environment4change Platform as a Service will provide a single point of action, engagement, participation, comment and a voice for everyone around the World. Perhaps environment4change can assist the UN in its obligation to share, empower, include and embolden the ALL in the flight to save our shared planet. We will certainly be reaching out!

## PART 5 – Our roadmap to success



### Ecosystem collaboration – matching funds with great projects

A global awareness around the plight, struggle and condition of our shared planet, is growing. The team at environment4change believe all global industries that ignore the growing momentum of awareness and anger, do so at their own peril for risk of community action and customer backlash. All industries should have an environmental awareness plan; a position from where environmental growth and awareness can occur for the benefit of the

planet. Having a global directory and database of trust is part of our plan to attract all those who have not yet heard the deafening sound of environmental participation.

Taking this first step towards doing better for our shared planet does not need to be a daunting task. environment4change and our Platform as a Service, will be a business / industry 'first step' towards a more environmentally positive outcome for a sustainable future. environment4change are committed to the development of a PaaS offering a scalable solution for environmentalism, where everybody has a voice and your voice can be found and heard. No such service exists today. If ever a cause needed a solution with scalability inherent in its DNA, it is environmentalism, the global fight to save the planet by everyone's involvement and participation and the matching of funds with projects in a non-dilutionary matter.

### **Our Minimum Value Proposition (MVP)**

We all get excited by great technology but the experienced amongst us know the technology by itself means very little without the technology enabling a service that solves, or significantly contributes to solving a real-world problem and the bigger the problem the better for the technology.

Environmental damage, past and present, to our shared earth is estimated to exceed \$28 trillion USD by 2050. To right the wrongs of the past and correct the behaviour of the present, we need to clean up the mess and educate around new behaviour of waste reduction and creating circular economies of scale. With population growth and no change in packaging habits, the rubbishing of Mother Earth and thus the destruction of natural habitats, will continue to worsen.

Our goal at environment4change is to minimise mankind's ecological footprint, while correcting and cleaning the damage of the past! Our response and plan must be achievable and measurable. It is essential to attract support from community and business leaders around the world, as our offering is a community-based project, for the benefit of our entire global village.

The environment4change value proposition sees the convergence of a group of technologies and processes, never previously brought together and engineered to act in concert and synergy, for the benefit of offering a solution that scales, for global environmental good-will and action!

- environment4change allows for the scaling of environmentalism. Only the scaling of environmental action and good-will can address the rubbishing of our home planet.
- environment4change allows for the undilute distribution of environmental funds directly to the environmental project regardless of where that project is based.
- environment4change allows new models of information management to discover and develop new mechanisms to value environmental



- work seeing a more transparent transfer of knowledge to all stakeholders and community members.
- environment4change allows for the democratisation of environmentalism by giving every person on our shared earth a voice in projects that are undertaken and when?

## Collaborating with technology partners of excellence

The magic will reside within environment4change's Platform-as-a-Service. It will be the engine that allows all future innovation and entrepreneurship by others in the advancement of projects of social and environmental good. Although the PaaS will drive scale and growth it does not reside alone in respect of amazing technology and innovative approaches to solving old problems.

The environment4change technology team have identified a number of premier software and platform solutions that we will engage with. These collaborations will see further world winning software development and innovation brought to the realm of environmentalism, seeing a world defining holistic platform offering which understands the value of upcoming environmental action, before it occurs.

How does a platform understand the value of a project before it is launched, I hear you ask? This new understanding is born-out by a mash-up of new data collection technologies and access points, hybrid intelligence and technology and speciated data science insight, innovation, and entrepreneurship. We are building a new global environmental data set where environmental intention, action and execution, large and small, is objectively critiqued for its inherent value to planet earth. This not only includes environmental activity but can extend to normal business activities, with a progressive and planet sensitive ethos for reducing and minimising the measurable incidents of the footprint of mankind. We foresee a future where the most environmentally sensitive and caring projects and business activities are supported through our global community of informed supporters.

Such an architecture seems to guarantee planet earth's best chance of success and seeing best 'bang for buck', in respect of environmental consequence. We make no apologies for mentioning money and environmentalism in the same sentence. We suggest a sharper focus will be brought to bear against environmentalism going forward. Projects will be judged on results, minimising the ecological footprint of man in their execution and counting back in years the health of planet earth. Until now data, in all its many forms, has not been collected and examined with environmental specific questions in mind.

Imagine a world where all environmental activity, large and small, is logged, searched, categorised, evaluated, and understood. With a strong focus on data, information, knowledge and experience, the Platform as a Service functions as a learning entity where previous environmental activity is

learned from, to understand value and approach and how we (Planet Earth) can make better decisions, going forward. environment4change, through its Platform as a Service and social media presence promote the best projects and educate around building better competencies within all platform projects. The best projects receive platform, business or angel funding, as the platform becomes a definitive model of honest, non-dilutive and transparent environmental funding.

This is a monumental task and one for our chosen technology partner in partnership with us. You will be please to know our technology partner has today, all the pieces in place to make this contribution to the efficaciousness of the environment4change Platform as a Service. Our perspective technology provider is at the forefront of delimiting the ever-expanding value of new data, without focusing on its limitations. We privately believe our future technology partner will be more than happy to support us in our support of the global community and its right to become actively involved in all facets of environmentalism, through and via access to information and the story it promises to tell.

### **Enabling a circular economy**

There is a new focus in town. The focus is, circular economy, and when executed by organisations and individuals correctly, it promises much for sustainability and reduction of waste without loss of product choice or increased cost of production.

The Ellen MacArthur Foundation (as quoted in UK Green Building Council) (n.d) define a circular economy as:

*“A circular economy is one that is restorative and regenerative by design, and which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles”*

The environment4change team believes many more organisations want to do the right thing, would engage in the discussions and plans around re-engineering of processes and composite choices if help was available. The help needed is in respect of overcoming some of the ‘barriers’ to becoming a circular closed economy. Education and knowledge of alternatives are parts of the solution that will be addressed via a strategy of co-operation and collaboration and this is enabled via the environment4change platform, in partnership with our technology partners and collaborators.

Enabling others to become circular is an important part of our global environmental strategy. Part of enabling this circularity to exist, in the neediest global hotspots, is the determination to invest in processes, plant and equipment to enable and complete this critical circular architecture. Creating a global directory of partners, reforming polluters and environmental organisations, will participate in a change in attitude, away from a blame game, to one where a global shared opportunity and responsibility is both recognised and acted upon.

### **Our available revenue models?**

We believe all agree, the offering of a Platform as a Service, for the scaling, aggregation, collection, and uniting of environmental action, awareness, learning and building of new models of participation is a service of difference. A successfully executed platform architecture has the ability to scale beyond any other business architecture or model. Revenue as a function of platform scale will introduce new economies of scale, presently unknown to the environmental industry. For an industry worth over 28 Trillion USD over the next two decades, this is a considerably 'big number' and one tied to an issue of growing global awareness and importance to all.

Traditionally PaaS income models have included transaction fee models, referral commissions, advertising revenues, and subscription services. Although all of these are available to the environment4change team and will be pursued at the relevant time, our principle revenue stream will flow from the many thousands of available grants from Government and Philanthropic Foundations, having an environmental focus and thousands of donations directly from concerned citizens that see the benefit of environment4change's openness, transparency, reputation and work and track record, driven by a robust and innovative content creation model showing "the proof of the pudding is in the eating". General platform use for community members will be free to embolden new environmental action, from a large part of today's unrepresented global community, concerned by the state of our shared planet and as of today, without a voice.

Further, it is envisaged environment4change will incorporate other entities in other countries in order to participate in the available funding for environmental protection efforts. For an understanding of the importance the European Union places on the environment, for year 2019, €425 Million was available for environmental projects of integrity.

Our PaaS will be the only environmental organisation, by design, architecture, intent and execution truly representative of our global community and as such will become definitive of future environmental action, co-operation and collaboration. New models of information generation, collection and harvesting will see a greater understanding brought to environmental action. We will know what works and why. Future global environmental work will be transparently operated and reported on, seeing the only winner in the environmental equations going forward, is our share planet.

The environment4change team have examined the questions of revenue, scalability, growth and 'ongoingness' generally and believe no other business focused on cleaning up Mother Earth offers such strong prospects of growth, acceptance, participation and early market traction and fit. This, in selfless service of the Mother Nature, makes us, very proud indeed.

### **Making our platform development open source to share with the World**

Consistent with the environment4change team's desire to share and giveaway all that we create, for the benefit of Mother Earth, it is our desire to share our Platform as a Service architecture and code base for the use by other organisations interested and committed to making the world a better

place. Most of the environment4change PaaS development will be readily transferable to other PaaS where participation, social media, information, content, scale and aggregation can make a difference to great causes. Our PaaS service will provide a helping hand to any organisation looking to aggregate the fragmented industry effort and collect a new type, tranche and number in support of their great cause.

As we develop our PaaS, we will ensure its development is flexible enough to support many other charitable causes. Many of the ingredients (services and functionality) to make an enticing Platform as a Service offer for the environmental industry are homogenous to other humanitarian endeavours. Our gift, via shared open source PaaS source code, will be enabling for all perspective humanitarian projects. The PaaS source code will represent a mechanism to unite, collect and aggregate the good-will of global mankind in support of fixing a wrong, correcting an injustice, or ensuring equal and fair distribution of access to opportunity, knowledge and ability to participate. These goals are the characteristics of decentralisation, which our platform will embrace. It means sharing a problem with a global population and audience and enabling the global economies of scale, to support its solution and remedy.

### **Why we must succeed?**

We are building a platform focused on environmental care, habitat loss and reduction and general care for our planet and all species of flora and fauna. There is huge interest and general acceptance of man-made climate change and what this means to the planet. Governments are not doing enough. Private enterprise needs to be engaged and participate more. Along with this growing understanding and fear is a growing awareness and acceptance of other causes of man-made damage. Environmental issues and damage to the planet is subject matter that binds us together, as a global community.

Today, no solution exists that offers an aggregation of intent, resources and funding towards an 'organised treatment' of our global environmental threats from a bottom up and top down approach. Platform architecture can collect and unite the 'ALL' into a planned push forward towards a cleaner, clearer and cooler Planet. A PaaS service crosses geographical, political and language boundaries and does so with transparency, equity and fairness.

The potential scale and scope of environmental 'cause and effect' with the use of a Platform as a Service architecture, supported by new and evolving data structures, information and curation models are impossible to predict. Innovative endeavour and thinking outside the box, for the benefit of our shared planet, is almost guaranteed as the entrepreneurial spirit is opened to the entire World or anyone who has a great idea and joins the environment4change community. Everyone from software developers, labourers, school kids and the elderly are invited to join and participate in the projects, add content to our social media sites, or develop something new for the benefit of Mother Earth and our community.

## PART 6 - Marketing Goals and Strategy

### **Raising awareness and driving a call to action**

With the societal shift to “doing good”, sustainable activities and a tremendous growth in our desire for action, environment4change is an intelligent business of today and tomorrow. The market does not currently offer a consumer facing platform for environmental activity and our opportunity through marketing is to bring together the growing interest in this sector. It is no surprise the word of the year in 2018 was “single use plastic”, reflecting the increased awareness within society along with desire to change behaviour to save our planet! We are launching at the right time in history to leverage momentum of a global movement.

We are building a new type of business model on a decentralised network empowering ordinary people, environmentalists and companies to connect and create projects for action. environment4change is a contribution economy where users will be rewarded for a variety of contributions to the network including generating high quality content, referring new users and maintaining an active channel along-side setting up projects and collaborating with people around the world to create successful campaigns and action to save the planet. With this in mind we need to attract a large and active audience of companies, brands and people - our platform relies on continued and maintained retention on the platform.

Our marketing goal is to build momentum and gather a critical mass of people and companies to create authentic, digital and physical environmental projects, attract the right people with know-how and provide them with tools to educate and take action. We believe, as the environment4change story is heard and understood, the convergence of the environmentalism industry with PaaS architecture is the best chance of uniting the effort and good-will of the world.

The message must be inclusive and respectful to our environmentalist and technology enthusiasts, whilst extending to intrigue and capture a new digitally aware and empowered environmental citizen, perhaps someone who believed the environmental message had nothing for them, but now sees participation as a responsibility and via a digital platform of inclusion and participation, now has a voice.

The marketing of environment4change will begin using traditional social media such as Instagram and Facebook along with an editorial press campaign, with the intention of educating and inspiring people and companies to join the community of global environmental activism by taking part in the people’s platform, environment4change.

environment4change recognise the “invisibility of nature” and the danger that entails. The convergence of Platform as a Service, mobile access and web-services incentivise us as a not for profit Company and together as part of society to build more zero-margin public utility networks. This allows for innovation and change in business models and represent a key difference

and competitive advantage over how environmentalism has traditionally been done.

Another key competitive advantage are the skills and network of the core team. Having built successful real-world products in both technology and social media, the team is a blend of strategists, technologists, creatives and marketers. Our team is well placed to build the biggest environmental network in the world.

## **Strategy**

A marketing strategy of bought, earned and owned media activities will be applied to grow our brand awareness. Following is a brief overview of the type of activities, people and companies we are aiming to work with and implement:

### **Bought Media**

We will be producing in house campaigns of creative digital and print advertising to raise interest and awareness in our story and quest, these will be placed in partnership with key environmental outlets. Titles such as National Geographic and New Scientists appeal to our story telling and audience.

### **Earned Media**

A key part to our success will be editorial press coverage, engaging titles, journalists and bloggers to write stories and communicate our goals. As well as written stories in publications such as Wired, New York Times and Eco-Business.com. These publications will also be encouraged to join environment4change as content contributing, to support environmental projects and content on our platform.

All of our partnerships and affiliate program initiatives such as the collaboration with Mission Blue will also be avenues for communications to new audiences as well as opportunities to create activity on our platform. Partnerships are a key strategic element to our marketing strategy.

We will be working to engage with a number of leading global universities for the promotion of Earth Sciences and computer science as it relates to aiding our shared planet. Much of the great new science will come from these places of learning and we look to share, promote and potentially fund from seed idea to funded project. Universities coupled with partnerships will feed into our team attending events, talks and at public speaking events.

Along-side the above earned media, we will also be engaging influential people and bloggers who are using social media to highlight their environmental journey. Through social media, blogs, interviews, written Medium posts and podcast we plan to interact and leverage an influencer strategy with such environment figures. Featuring their work and progress, environment4change will align to influencers with a love for Mother Earth and the recovery of our planet. We will engage leading storytellers and the like to champion our vision helping share our quest for saving the planet. We intend to work with thought leaders across the globe, opening a window onto stories about wildlife, climate change, pollution, food, water,

deforestation, activism, and more. Being on the ground, and experts in their field they deepen and enrich our coverage, rather than replacing our traditional journalism.

Here are a few of the people we'd hope to stimulate and motivate to join our quest. Each influencer will be rewarded with their own profile page, content curation, development of their philanthropic interest and the building of their communities.

### Key influential people within the space

#### Moms Clean Airforce

<https://www.momscleanairforce.org/>

Facebook: 338,947

Instagram: 4,700

Twitter: 22,900

Website subscribers: 1.2m

#### Grist

<https://grist.org/>

Facebook: 283,225

Instagram: 8,810

Twitter: 223,000

#### The Seeker

<https://www.seeker.com/earth>

Facebook: 8,817,547

Instagram: 217,000

Twitter: 400,000

#### The Zero Waste Chef

<https://zerowastechef.com/>

Facebook: 23,942

Instagram: 74,600

Twitter: 5,982

#### Inhabitat Design:

<https://inhabitat.com/environment/>

Facebook: 1,259,186

Instagram: 47,400

Twitter: 171,000

#### Mother Nature Network

<https://www.mnn.com/>

Facebook: 906,316

Instagram: 17,500

Twitter: 198,000

#### Clean Technica

<https://cleantechnica.com/>

Facebook: 41,981

Instagram: -

Twitter: 75,700

Green Living Guy

<https://greenlivingguy.com/about-green-living-guy/>

Facebook: 25,200

Instagram: 25,100

Twitter: 70,800

Moral Fibres

<http://moralfibres.co.uk/>

Facebook: 3,312

Instagram: 7,311

Twitter: 7,828

Sustainably Chic

<https://www.sustainably-chic.com/>

Facebook: 3,563

Instagram: 85,600

Twitter: 6,229

Hello Glow

<https://helloglow.co/>

Facebook: 35,525

Instagram: 62,400

Twitter: 9,909

Eco Warrior Princess

<https://ecowarriorprincess.net/>

Facebook: 7,514

Instagram: 32,200

Twitter: 7,219

Eco Cult

<https://ecocult.com/>

Facebook: 4,608

Instagram: 33,600

Twitter: 5,532

Creative Green Living

<http://www.creativegreenliving.com/>

Facebook: -

Instagram: 11,300

Twitter: 3,605

Milkwood

<https://www.milkwood.net/>

Facebook: 96,248

Instagram: 133, 000

Twitter: 6,496

Mind Body Green

<https://www.mindbodygreen.com/>

Facebook: 3,231,036

Instagram: 671,000



Twitter: 305,000

Sustainability Instyle

<https://sustainabilityinstyle.com/>

Facebook: -

Instagram: 20,800

Sierra Club

<https://www.sierraclub.org/home>

Facebook: 1,038,370

Instagram: 199,000

Twitter: 341,000

The Water Brothers

<http://thewaterbrothers.ca/>

Facebook: 4,093

Instagram: 1,440

Twitter: 3,481

Take 3 For the Sea / Founder Tim Silverwood

<https://www.take3.org/>

Take 3 for the sea:

Facebook: 131,090

Instagram: 81,400

Tim Silverwood:

Instagram: 9,378

Plastic Free Tuesday

<http://plasticfreetuesday.com/>

Facebook: 1,939

Instagram: 27,600

Twitter: 5,303

Grown and Gathered

<http://www.grownandgathered.com.au/>

Facebook: 8,252

Instagram: 58,900

Twitter: -

The Girl Gone Green

<http://www.thegirlgonegreen.com/>

Facebook: -

Instagram: 24,100

Eco Cult

<https://ecocult.com/>

Facebook: 4,608

Instagram: 33,600

Twitter: 5,532

Lonely Whale

<https://www.instagram.com/LonelyWhale/>

Facebook: -

Instagram: 147,000

## Owned Media

Our owned media strategy is where we can best communicate our objectives and goals for environment4change now and in the future. The intention of our owned media channels is to make the provided information interesting and informative, giving consumers a fun and meaningful way to interact with the global community of environmentalists. These platforms will be regularly updated and utilised to connect to the varying audience that will be interested in environment4change. As our outreach needs to connect both environmentalist and companies alike, along with creating interest and commitment from the technology 'PaaS' and data science world we will be running channels such as Instagram, Facebook, Telegram, Reddit, Steemit, Medium and Twitter with the aim of reaching a more varied array of people, all of whom have their own interest in saving the planet. Hosting our own events such as collaborative talks will be an integral way to express the depth of our product and connect our intrigued audiences to brands, people and our team at a local level. We plan to activate events globally post launch.

Our website will be our portal of all information related to our brand, both visuals and written word will convey complex messages around our marketplace and economy and the plight of the planet. This will be our strongest asset and one we are developing with the highest attention. Most importantly our website will host details of the specific way's users can get involved showing examples from our prelaunch partners. Social media will be our main interaction with our audience, these platforms are vital in today's society for expressing values and driving awareness. Over time through these channels we will grow our following and brand recognition working towards our goal of become synonymous with trust in environmental endeavours. Notwithstanding our audience our content will be created to educate and enable users and potential participants on the value of our PaaS and the vast benefits it can deliver to Mother Earth with participation and collaboration of us all.

All channels will share relevant articles and news, engage the followers and be used as a place to answer questions. Driving constant conversation and engagement around the topic and way to use our platform will be an ongoing message. For example, around Earth Day we would drive our content strategy to tap into the conversation and drive interest in joining our platform. We also optimise on daily content and commenting by tapping into trending topics of conversation occurring on social networks and converting that into brand awareness. Ensuring our content is interesting and topically relevant will encourage our messages to be passed on and shared by our followers creating a network effect. As interest grows and our email database expands, we can engage in email marketing to share longer read content or regionally specific content.

## Current landscape of companies and potential collaborators

World Wildlife Fund (WWF):

For nearly 60 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by more than one million members in the United States and close to five million globally.

<https://www.worldwildlife.org/>

Twitter: 1.45m UK plus rest of world (ROW) 3.94m

Facebook: 2,793,802

Instagram: 2.1m

#### Mission Blue:

Mission Blue inspires action to explore and protect the ocean. Led by legendary oceanographer Dr. Sylvia Earle, Mission Blue is uniting a global coalition to inspire an upwelling of public awareness, access and support for a worldwide network of marine protected areas – Hope Spots. (mission-blue.org/about)

<https://mission-blue.org/>

Twitter: 112,000

Facebook: 305,590

Instagram: 231,000

#### Friends of the Earth:

Friends of the Earth International has 73 member groups and 2 associate member groups. All of the groups together have a total of over 2 million members and supporters around the world.

<https://friendsoftheearth.uk/>

Twitter: 183,000

Facebook: 231,140

Instagram: 35,500

#### The Nature Conservancy:

The Nature Conservancy is a charitable environmental organization, headquartered in Arlington, Virginia, United States. Its mission is to "conserve the lands and waters on which all life depends." (Wikipedia)

<https://www.nature.org/en-us/>

Twitter: 923,000

Facebook: 1,358,584

Instagram: 584,000

#### Greenpeace:

Greenpeace is a non-governmental environmental organization with offices in over 39 countries and with an international coordinating body in Amsterdam, the Netherlands. Greenpeace was founded by Irving Stowe and Dorothy Stowe, Canadian and US ex-pat environmental activists in 1971. (Wikipedia)

<https://www.greenpeace.org.uk/>

Twitter: 1.72m

Facebook: 2,961,907

Instagram: 1.1m

#### Oceana:

Oceana is an ocean conservation and advocacy organization. (Wikipedia)

<https://oceana.org/>

Twitter: 322,000

Facebook: 924,180

Instagram: 878,000

The Ocean Clean Up:

The Ocean Cleanup is non-government engineering environmental organization based in Netherlands, that develops technology to extract plastic pollution from the oceans. The organization was founded in 2013 by Boyan Slat, a Dutch-born inventor-entrepreneur of Croatian origin who serves as its CEO. (Wikipedia).

<https://www.theoceancleanup.com/>

Twitter 94,700

Facebook: 402,662

Instagram: 201,000

Ellen MacArthur Foundation:

The Ellen MacArthur Foundation is a charity registered in the UK which aims to inspire a generation to re-think, re-design & build a positive future through the framework of a circular economy. (Wikipedia)

<https://www.ellenmacarthurfoundation.org/>

Twitter: 45,400

Facebook: 23,040

Instagram: 16,600

Leonardo DiCaprio Foundation

Dedicated to the long-term health and wellbeing of all Earth and all inhabitants.

<https://www.leonardodicaprio.org/>

Twitter: 50,300

Facebook: 81,126

Instagram: 480,000

Climatecoin:

The Climatecoin CO2 token is a unique crypto-asset based in Ethereum technology that allows any citizen in the world to participate in the fight against Climate Change. (Climatecoin)

<https://climatecoin.io/>

Twitter: 3,750

Facebook: 412

Plasticbank:

With a [sic] mission to stop Ocean Plastic by gathering a billion people together to monetize waste while improving lives. (plasticbank)

<https://www.plasticbank.com/>

Twitter: 173,000

Facebook: 1,053,551

Instagram: 8,589

Facebook:

In respect of global monthly numbers, as of the third quarter of 2018, Facebook had 2.27 billion monthly active users. In the third quarter of 2012, the number of active Facebook users had surpassed one billion, making it the first social network ever to do so. Active users are those which have logged in to Facebook during the last 30 days.

<https://www.facebook.com/>

<https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>

Twitter:

Twitter is a social networking and microblogging service, enabling registered users to read and post short messages, so-called tweets. Twitter messages are limited to 280 characters and users are also able to upload photos or short videos.

In respect of global monthly active users, as of the third quarter of 2018, Twitter had 328 million monthly active users.

<https://twitter.com/>

<https://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/>

**environment4change owned media channels for communications**

Our Team will develop an environment4change page/accounts where information concerning the environment4change business will be promoted and shared as per our previously mention owned media strategies:

Facebook:

@Env4change

<https://www.facebook.com/Env4change/>

Twitter:

@Environment4Ch1

<https://twitter.com/Environment4Ch1>

Instagram:

@env4change

<https://www.instagram.com/env4change/>

Reddit

u/Env4Change

Medium:

@environment4change

<https://medium.com/@environment4change>

## PART 7 - The Team



### Andrew Reid (Founder & CEO)

An entrepreneur and qualified Chartered Accountant with strong technical, analytical, Corporate Secretarial and business skills, who enjoys working as part of a closely tiered team but is equally comfortable working solo in a Start-up. Experience gained in the automotive, health sciences, technology and robotics areas within Private Equity and in mobile, web and telecommunication having founded, run and sold a global Over-The-Top Communications Company to an US listed Mobile Network Enabler. Passionate about ensuring future generations experience the same Mother Earth that welcomed him, he wants to see real progress on returning the planet back to a balance by eliminating pollutants and causes of pollution.

Andrew see changes to operational paradigms resulting from new technologies enabling start-ups to disrupt well-entrenched large Companies, as having direct implication with lots of benefits within environmentalism having experienced it first-hand within telecoms. Excited by environment4change to make a real difference to humanity into the future. Passionate about the outdoors!

LinkedIn: <https://www.linkedin.com/in/andrewreidmorodo/>



### Peter Reid (Founder & COO)

A father and concerned parent as to the 'ongoingness' of our shared earth, motivation to leave the planet a little stronger from the inclusive, co-operative and participative nature of a PaaS dedicated to environmentalism. A blockchain evangelist understanding economics of scale convergence

opportunity of Platform as a Services, with a vendor offering blockchain technology as part of a decentralised operating system of community access and participation.

An experienced Senior Manager, Innovator and SaaS Entrepreneur having co-founded a start-up in voice and messaging communications in 2006. Built up and managed software development 'Centres of Excellence' in China, Serbia and Spain in support of a Global Brand supporting four hundred thousand customers. A visionary with expertise in the domains of mobile platforms, mobile application development, web development, both front and back end, in the service of a customer centric suite of services. Peter will work with the team responsible for development of the environment4change PaaS. Also, a keen sports person with an appreciation of everything nature has to offer.

**LinkedIn:** <https://www.linkedin.com/in/peter-reid-03503012/>

### **Chief Technical Officer (CTO)**

This special member of the team will lead the development push towards a feature rich and functioning PaaS. environment4change under non-disclosure.



### **Khaled Abdou (Technical Advisor - Marine environment, Fisheries, Marine aquaculture; Carbon and Modelling)**

Khaled has a PhD in Marine Biology. He is a Research Fellow in Life Cycle Assessment of approaches to greenhouse gas removal from the atmosphere at the Centre for Environment and Agricultural Informatics at Cranfield University. The Post-doctoral research is focused on harmonising and upgrading greenhouse gas removal (GGR) consequential Life Cycle Assessment (UP-green-LCA) and working on the socio-economic aspects of greenhouse gases removal technologies.

Khaled is currently engaged with environment4change on a summary of the relevant studies, leading, progressive and eminent research papers, in order to give you, the reader of our WhitePaper, an idea of the value our decentralised, Platform as a Service will return to society over the following

decades. We are very pleased Khaled has joined our team and we look forward to his council and wisdom in how to best tackle the great many problems we face together.

LinkedIn: <https://www.linkedin.com/in/abdou-khaled-b0171378/>



### **Lyman Lee (Graphic Artist)**

As one of the earliest designers in China who engaged with the Internet, Lyman has rich working experience in product design illustrated by his engagement with and working in the creation of many famous brands, of many famous companies. Lyman has experienced and actively participated in the early Web 1.0 era, working on design and advertising concepts for the service provider 'Popup.'

In 2006, Lyman worked for Cognosense, a Swiss High-Tech service provider and was involved in their Brand design and customer service experience and expectation management of their entrance into the realm of Artificial Intelligence. In 2008, Lyman joined the team at Morodo Ltd, and worked as a leader in the project team of the VoIP Client. During the three years from 2010 to 2013, Lyman worked for Yahoo (CHINA), joining the event management team, where he advised around various technical content at seminars ran or attended by Yahoo (CHINA).

Lyman is a keen environmentalist although he has not manifested this underlying care through much action, until now that is! Lyman is donating his time, and considerable skill and experience, to this project and we are extremely happy and fortunate to have him as part of our Team!

LinkedIn: <https://www.linkedin.com/in/lyman-lee-66836829/>

### **Backend Developer 1**

(environment4change under non-disclosure)

### **Backend Developer 2**

(environment4change under non-disclosure)



## PART 8 - Experts and Advisors

### **Sorab Patel (Charity Director).**

Saurabh Patel (K/N Sorab Patel) is a Chartered Certified Accountant and Chartered Tax Advisor with over 30 years' experience in finance and tax. After several years of working in medium sized City & West End firms of Chartered Accountants, he set up his own practice in 2002. He deals with small and medium sized businesses, professional practices, high network individuals and a number of charities. He is advising the environment4change team in respect of setting up a charitable trust and ensuring compliance for organisations, as a member or volunteer.

**linkedIn:** <https://www.linkedin.com/in/sorab-patel-420a1a16/>

### **Hossein Rahnema (Technical Innovation)**

Hossein Rahnema is a recognized figure in ubiquitous and pervasive computing. His research explores artificial intelligence, mobile human-computer interaction, and the effective design of contextual services. In 2017, Hossein was recognized as one of Canada's Top 40, Under 40. In 2012, he was recognized by the MIT Technology Review as one of the world's top innovators under the age of 35 for his research in context-aware computing. The Smithsonian named Hossein as one of the top six innovators to watch. Hossein has 30 publications and 10 patents in ubiquitous computing, is serving on the board of Canadian Science Publishing, and was a Council Member of the National Sciences and Engineering Research Council (NSERC). Hossein is also a visiting scholar at the Human Dynamics group at MIT Media Lab in Cambridge, MA. He has a PhD in Computer Science from Ryerson University.

Hossein is the Founder and CEO of Flybits, "a context-as-a-service company that enables enterprises to unify disparate sources of data and create highly personalized customer experiences." [1] Hossein is also an assistant professor at the RTA School of Media, and the Co-Founder/Director of Research at the Ryerson Centre for Cloud and Context Aware Computing (RC4) in Toronto, Canada.

Hossein is also very concerned about the health of the planet. He is looking forward to contributing by coming up with new business models capable from the combination of blockchain technology and a PaaS for the environment.

**linkedIn:** <https://www.linkedin.com/in/hosseinrahnema/>

### **Meng Li (International Business leader and technologist)**

Meng Li is a versatile business leader in international business. He has been holding senior management positions in fortunate 500 companies and as well as technology start-ups in TMT industry. In the past ten years, he has successfully led companies on Go-to-market strategies and scaling the business globally. Meng lived and educated in China, Germany and the UK, he receives his Master's degree at Brunel University and EMBA from Cass Business school, London.

Meng now lives in China and he is well connected with the local experts and evangelists in emerging technologies and environment protection. He is the father of an eight-year-old boy and he is concerned that the environment change would have big impact on our next generation's daily life. He would contribute as much as he can on supporting environment4change's concept of unifying people and technology to change our planet.

**LinkedIn:** <https://www.linkedin.com/in/mengli7/>

#### **Dr Terence Foley (Senior Scientist)**

Dr Terence Foley (Terry) is a seasoned, tested and experienced scientist. He has the following Qualifications and Awards:

Ph.D University of Aberdeen, M.Sc University of London, B.Sc (Hons) Chemistry, University of Aberdeen, Companion I.Chem.E, Member American I.Chem.E.,

Association Prize, London and Southern Gas Association Silver Medal, Society of British Gas Industries.

Terry is a Technologist with a proven track record for identifying new near-term energy technologies that are market ready and, for preparing appropriate due-diligence reports to a range of stakeholders, including developers, sponsors, government departments and investors. He is an expert in respect of all the parts of a product development lifecycle and how a verging technology can reach a mass adoption event over a number of industries.

He is experienced in a wide range of technologies ranging from medical / biomedical through to water conservation / desalination, energy sources, both classical and renewable, and technologies associated with the aforementioned. He has been widely published on various aspects of the above-mentioned technologies, and technology development in general.

Terry is an environmentalist at heart. We look forward to our continuing relationship with Terry as he guides our group through some of the tougher question of science with respect to our planned investment in plant, equipment, infrastructure and technology.

#### **Amir Yazdanpanah (MENA Regional Liaison)**

Amir is an entrepreneurial IT executive with extensive experience in software product development, C-Level solution sales, product marketing, operational and financial management. In his 20+ years career he has held CEO / COO / CIO positions in US, UK and UAE. Amir started his career at large corporations and subsequently founded a telecom software company,

Telarix, in 1996. He raised \$9M in venture capital and grew the business internationally. He successfully exited the business in 2010 in a sale to private equity firm. After moving to Dubai in 2011, Amir founded a technology education company focusing on providing Technology and STEM education to K-12. Amir is currently focused on the use of EdTech and AI to innovate teaching and learning.

Amir is a father of 2 boys and wants to leave planet earth in a better condition so future generations can enjoy what has been available to him.

**LinkedIn:** <https://www.linkedin.com/in/amiryazdanpanah/>

## Part 9 – Organisational partners and collaborators





5gyres  
<https://www.5gyres.org/>

5gyres consult for United Nations Economic and Social Council as a Research Institute focused on the state and health of the world's oceans.

We are keen to partner with them on education programs as well as research projects to inform specific initiatives in 2020 and beyond.



#### EarthShare

<https://www.earthshare.org/about-earthshare/>

Is a nationwide network dedicated to protecting our Planet! environment4change has signed up and pledged to support Earth Share's initiatives through our community and platform.



#### Mission Blue

<https://mission-blue.org/>

Mission Blue vision is to protect 30% of the oceans by the year 2030. environment4change is an affiliate partner with Mission Blue, promoting projects, companies and initiatives to contribute towards their 2030 goal. Via the environment4change PaaS and toolset of services, we will encourage our community to create local clean-up projects to help Mission Blue meet it's important 2030 goal and for the benefit of Planet Earth.



#### The International Ecotourism Society

<http://www.ecotourism.org/>

A nonprofit organization dedicated to promoting ecotourism. environment4change will create eco travel holidays in partnership with International Ecotourism Society for our community members.



### Fashion For Good

<https://fashionforgood.com/>

The mission at Fashion for Good is to bring together the entire fashion ecosystem through their Innovation platform which promotes circular economies and use of only recyclable plastics and as a conveyor for change within this fashion / clothing and accessories industry.

We plan to provide Fashion For Good with recyclable materials from our global clean-up projects. This 'waste' will become material for fashion brands to create sustainable products for sale.



### Rapanui

<https://rapanui clothing.com/about/>

An eco-textiles company creating sustainable fashion products.

We love what Rapanui are doing so much that we had our T-Shirts made by them. We plan to have a line of recycled and sustainable products produced with Rapanui, available for purchase through our partners.



### Global Alliance for The Rights Of Nature

<http://therightsofnature.org/>

A nonprofit network of organizations and individuals committed to the universal adoption and implementation of legal systems that recognize, respect and enforce "Rights of Nature".

environment4change will integrate (as much as possible) the legal approach of The Rights of Nature into our projects, allowing our community to raise awareness of acts against nature. We have proudly featured GARN in a Blog post of 31 March 2019.



### Post Land Fill Network (PLAN)

<https://www.postlandfill.org/>

The Post-Landfill Action Network cultivates, educates, and inspires the student-led zero waste movement.

environment4change will implement the PLAN education schedule with communities and villages in the worst affected areas for plastic pollution, taking the much-needed recycling and lifestyle choices education to a wider global audience.

## SOLARIMPULSE FOUNDATION

### Solar Impulse

<https://solarimpulse.com/>

Varying solar technologies to provide a way to prove that solving climate change is a fantastic market opportunity.

environment4change will create projects around the implementation of solar technologies for recycling purposes in the worst affected areas where our project require power such as Indonesia and Sri Lanka.



### Solar World Cinema

<http://www.solarcinema.org/>

Solar World Cinema is an international network of solar powered mobile cinemas that work to bring unseen films to unusual places. They create and produce films about a vast array of topics, but have a focus on educating around sustainability and environmental protection around the world.

environment4change will partner on producing education content/films as well as showing any environment4change content at events in remote places.



REGENVILLAGES

### **ReGen Villages**

<http://www.regenvillages.com/>

ReGen is building desirable off-grid capable neighbourhoods. environment4change will help connect ReGen with technology companies from within our network to contribute to the sustainable building work they are undertaking.



## Part 10 – We Support the following initiatives ...



environment4change support the Alliance to End Plastic Waste. They are a not-for-profit organization, partnering with the finance community, government and civil society, including environmental and economic development NGOs. They have a strong team composed of the world's top minds from across the entire plastics value chain — chemical and plastic manufacturers, consumer goods companies, retailers, converters, and waste management companies.



The Earth Charter is an international declaration of fundamental values and principles considered useful by its supporters for building a just, sustainable, and peaceful global society in the 21st century. Created by a global consultation process, and endorsed by organizations representing millions of people, the Charter "seeks to inspire in all peoples a sense of global interdependence and shared responsibility for the well-being of the human family, the greater community of life, and future generations. (Reference: Wikipedia).

environment4change are proud to support The Earth Charter as it represents exactly the values everyone involved subscribes to.



Currently worth one third of the EU budget, the EU's cohesion policy reduces regional disparities, creates jobs, opens new business opportunities and addresses major global issues such as climate change and migration.

The #CohesionAlliance is a coalition of those who believe that EU cohesion policy must continue to be a pillar of the EU's future. The Alliance was created through cooperation between the leading European associations of cities and regions and the European Committee of the Regions. It demands that the EU budget after 2020 makes cohesion policy stronger, more effective, visible and available for every region in the European Union.

environment4change looks forward to sharing all of its original content of our partners and our activities in cleaning up our shared planet with all in Europe.



Sustainable Development Goals (SDGs) is a collection of 17 global goals set by the United Nations General Assembly in 2015. The SDGs are part of Resolution 70/1 of the United Nations General Assembly: "Transforming our World: the 2030 Agenda for Sustainable Development."

The goals are broad and interdependent, yet each has a separate list of targets to achieve. Achieving all 169 targets would signal accomplishing all 17 goals. The SDGs cover social and economic development issues including poverty, hunger, health, education, global warming, gender equality, water, sanitation, energy, urbanization, environment and social justice. Reference: Wikipedia

environment4change share these goals empathically. We look forward to supporting the SDGs in everything we do.



Earth Day is an annual event celebrated on April 22. Worldwide, various events are held to demonstrate support for environmental protection. First celebrated in 1970, Earth Day now includes events in more than 193 countries, which are now coordinated globally by the Earth Day Network.

environment4change look forward to supporting this day. We will actively participate and keep all members apprised of how they can also participate.



CIRCULAR ECONOMY  
C L U B



**Circular Change**

A Circular Economy is an alternative way a country manages their resources, where instead of using products in the traditional linear make, use, dispose method, resources are used for their maximum utility throughout its life cycle and regenerated in a cyclical pattern minimizing waste.

environment4change fully support the Circular Economy. We will place the reuse of all materials at the centre of everything we do at the earliest

planning phases. What a Circular Economy is and how we can all do our part will be an education message that we will passionately espouse.



Environmental Defence Fund or EDF is a United States-based non-profit environmental advocacy group. The group is known for its work on issues including global warming, ecosystem restoration, oceans, and human health, and advocates using sound science, economics and law to find environmental solutions that work. Wikipedia

Our team are members and we proudly support Environmental Defence Fund. They are tackling head on some of the biggest issues in pollution and preserving the lungs of our planet.



Forest Trends works to conserve forests and other ecosystems through the creation and wide adoption of a range of environmental finance, market, and other payment and incentive mechanisms.

Natural resources need to be valued in our economic systems. For example, traditional capital markets and financial systems do not place any monetary value on standing forests and their services (cleaning area, places of recreation), but only consider the value of chopping them down. Same applies to air we breathe and water to sustain humanity.

environment4change also recognise the economic invisibility of nature and support and will work alongside Forest Trends in bringing this awareness to society.

*"We use nature because she is valuable  
We loose nature because it is free" – Pavan Sukhdev*



## WORLD RAINFOREST MOVEMENT

The World Rainforest Movement (WRM) is an international NGO and Indigenous Peoples' Groups network involved in efforts to defend the world's tropical forests against the forces that destroy them.

Environment4change supports this NGO as it understands they are protecting the lungs of Mother Earth.



The Global Alliance for the Rights of Nature (the “Alliance”) is a network of organizations and individuals committed to the universal adoption and implementation of legal systems that recognize, respect and enforce “Rights of Nature” and to making the idea of Rights of Nature an idea whose time has come.

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