Major Transformation of the World is Underway: Essence of the Green Revolution

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Introduction

This study takes stock of the efforts being made to turn the earth 'green' mitigating the effects of climate change which if left unattended could turn disastrous. A serious 'joint venture' is going on worldwide. This paper is of a compilation nature citing original sources selected by their relevance and authoritative nature.

Biggest problems facing the world

 $\label{eq:https://www.msn.com/en-us/news/world/the-10-most-critical-problems-in-the-world-according-to-millennials/ss-BBJD846?li=BBnb7Kz\#image=1$

Global shapers survey: http://shaperssurvey2017.org/static/data/WEF_GSC_Annual_Survey_2017.pdf

World Economic Forum surveys people every year about the biggest problems facing the world.

Climate change is the millennial generation's top concern for the third year in a row. Millennials are also concerned about large scale conflict, wars, and inequality.

For the third year in a row, millennials who participated in the <u>World Economic Forum's Global</u> <u>Shapers Survey 2017</u> believe climate change is the most serious issue affecting the world today.

Nearly half (48.8%) of the survey participants chose climate change as their top concern, and 78.1% said they would be willing to change their lifestyle to protect the environment.

Survey respondents were also in near unequivocal agreement over the cause of climate change. Over 91% of respondents answered "agree" and "strongly agree" with the statement "science has proven that humans are responsible for climate change."

Despite the dire state of the world today - and the stereotype that millennials' are selfish and apathetic - the generation aged 18 to 35 cares deeply about global issues, and they're determined to tackle them.

High level meeting at the UN March 2019

https://sdg.iisd.org/events/high-level-meeting-climate-protection-for-all/

This meeting is organized following a mandate from the UN General Assembly (resolution 72/219) on the protection of the global climate for present and future generations, in the context of the economic, social and environmental dimensions of the 2030 Agenda for Sustainable Development.

The meeting is titled, 'Climate Protection for All: High-Level Meeting on the Protection of the Global Climate for Present & Future Generations of Humankind in the Context of the Economic, Social and Environmental Dimensions of the 2030 Agenda for Sustainable Development'. The meeting is intended to "provide a bridge" between:

- the Katowice Climate Change Conference (UNFCCC COP 24) in December 2018;
- the in-depth review of SDG 13 (climate action) taking place as part of the July 2019 session of the UN High-level Political Forum on Sustainable Development (HLPF); and
- the UN 'Climate Action Summit' being convened by the UN Secretary-General and the HLPF session taking place under the UN General Assembly's auspices in September 2019.

According to the updated concept note circulated on 6 March, the High-level meeting will include panels on: Synergies between climate and the SDGs; and Means of implementation. A series of 12 leaders' luncheons will address 12 themes, in support of the coalitions of the UN Climate Action Summit.

UN Summit September 2019

UN Secretary-General Antonio Guterres is convening a summit in September 2019 to mobilize political and economic energy at the highest levels to advance climate action that will enable implementation of many of the goals of the 2030 Agenda for Sustainable Development.

The UN 2019 Climate Summit will convene on the theme 'A Race We Can Win. A Race We Must Win,' and seek to challenge states, regions, cities, companies, investors and citizens to step up action in six areas: energy transition, climate finance and carbon pricing, industry transition, nature-based solutions, cities and local action, and resilience.

The Summit will build on the outcomes of the Global Climate Action Summit (GCAS), the 73rd session of the UN General Assembly (UNGA 73) and the 24th session of the Conference of the Parties (COP 24) to the UNFCCC, among others.

This Climate Summit will take place in parallel to the 2019 High-level Dialogue on Financing for Development (FfD). These events events on 23 September are taking place the day before the first HLPF meeting under UNGA auspices opens.

To receive all SDG Knowledge Hub updates on preparations for this and other SDGrelated events, sign up for our SDG Update newsletter.

date: 23 September 2019 location: New York City, US www: http://www.un.org/climatechange/index.shtml

http://sdg.iisd.org/events/un-2019-climate-summit/

Climate change is the defining issue of our time and now is the defining moment to do something about it. There is still time to tackle climate change, but it will require an unprecedented effort from all sectors of society. To boost ambition and accelerate actions to implement the Paris Agreement on Climate Change, UN Secretary-General António Guterres will host the 2019 Climate Action Summit on 23 September to meet the climate challenge. The Summit will showcase a leap in collective national political ambition and it will demonstrate massive movements in the real economy in support of the agenda. Together, these developments will send strong market and political signals and inject momentum in the "race to the top" among countries, companies, cities and civil society that is needed to achieve the objectives of the Paris Agreement and the Sustainable Development Goals.

UN Climate Action Summit 2019

The impacts of climate change are being felt everywhere and are having very real consequences on people's lives. Climate change is disrupting national economies, costing us dearly today and even more tomorrow. But there is a growing recognition that affordable, scalable solutions are available now that will enable us all to leapfrog to cleaner, more resilient economies.

The Paris Agreement adopted in 2015, was an essential step to address climate change. It has the central goal of keeping global average temperature rise this century to well below 2 degrees Celsius above pre-industrial levels and to as close as possible to 1.5 degrees Celsius.

The 2015 Paris Agreement marked a historic turning point. World leaders from across the globe clinched a new, universal agreement under the umbrella of the UN Framework Convention on Climate Change.

Last December at the UN Climate Change Conference COP24 in Poland, governments set to agree the implementation guidelines of the Paris Agreement, thereby unleashing its full potential.

As of November 2018, 184 states and the European Union have joined the Agreement, which entered into force with record speed.

https://www.un.org/en/climatechange/

The road to the September 2019 Summit

2019 is a critical year, the "last chance" for the international community to take effective action on climate change, General Assembly President Maria Espinosa said on Thursday, during a briefing to announce the UN's roadmap to the Climate Summit in September.

Ms. Espinosa was speaking alongside the Special Envoy of the Secretary-General on the Climate Summit, Ambassador Luis Alfonso de Alba of Mexico, at UN Headquarters in New York.

Ms. Espinosa said that, with the deadline for achieving the first targets of the 2030 Agenda for Sustainable Development fast approaching, described by Secretary-General António Guterres as "the UN's blueprint for peace, justice and prosperity on a healthy planet", the world stood at a crossroads.

Two-thirds of these targets, she said, depend on climate and environment goals, and a five-fold increase in commitments from their current levels is needed in order to meet the targets set at the landmark 2015 Paris Agreement on dealing with greenhouse gas emissions mitigation, adaptation and finance, due to come into force in 2020.

The General Assembly President walked the representatives of Member States through some of the key events of 2019, leading up to, and following, the Climate Summit. All of the events, she said, share two goals: a doubling of commitments and ambition at a national level, and ensuring the inclusion of diverse groups in the process of climate action.

March will see the General Assembly High-Level Meeting on Climate and Sustainable Development for All, which is intended to build on the success of COP24, the 2018 climate conference in Katowice, Poland, which led to the establishment of a "rulebook" for the reporting of emissions and the progress made in cutting them, every year from 2024.

The March meeting will welcome representatives of the private sector, civil society and young people, and look to harness the enthusiasm of the latter group, who, said Ms. Espinosa, will be most affected by a warming world.

On the 30th of June, in the build up to the Climate Summit, a "stocktaking" event will take place in Abu Dhabi, followed by a High Level Political Forum under the auspices of the Economic and Social Council in July, which will see a review of the progress made in achieving Sustainable Development Goal 13 ("urgent action to combat climate change and its impacts").

The Climate Summit will be followed by the first-ever High Level Political Forum on Climate Action, sponsored by the General Assembly on September 24. The year will be rounded off by the 2019 Climate Conference COP25, which will take place in Chile.

Multilateralism, said Ms. Espinosa, is the only effective to combat climate change, which is one of the main challenges facing the world and can only be overcome with constructive input from all. She concluded with a proverb: "If you want to go quickly, go alone. If you wish to go far, go together.' Let's travel this road together."

Ambassador de Alba, following Ms. Espinosa, confirmed that the world is falling well behind targets for combating climate change, with only around a third of the necessary work currently completed. He reminded delegates that there are only between 10 and 12 years left to achieve the goals, and called for a ramping up of ambition.

The Special Envoy added that, despite the challenges, an optimistic signal must be given: that it is possible to counter climate change, enjoy economic growth and eradicate poverty. "We can also meet social needs, healthcare needs and human rights needs," he said, and bring about a "win-win situation to answer the doubters."

2019 needs to see action, continued Ambassador de Alba, including partnerships with the private sector and civil society, and a huge mobilization of resources (a target of 1 trillion dollars per year to support developing countries has been set), to invest "in our future, for jobs in a green future."

https://news.un.org/en/story/2019/02/1032801

Background

The Treaty of Paris on Climate Change adopted by over 190 countries of the world in December 2015 may be having a major impact through its soft side. Usually international treaties are binding on the parties concerned and in this case this is done rather loosely, leaving the action to all the parties concerned; again international treaties are usually binding upon the governments of the countries involved and in the case under consideration all the stake holders may be and are in fact involved, ranging from business companies to nongovernmental entities and even individuals; this is the largest such undertaking so far and if it works out, which it will, it could be a formula to solve the world's major problems. The implementation efforts have triggered a so-called green revolution worldwide. One of the major transformations is about the automobile industry, which has gone from traditional fuel-centered technology to hybrid and now electrical technologies and even hydrogen fuel cell is in the implementation mode. Also, many countries are going from traditional electricity, i.e. thermal, hydro and nuclear to solar and wind and more; MIT talks of sustainable energy albeit those which are renewable. This paper will look at the efforts of the automobile industry, other green businesses, governments, nongovernmental organizations and of individuals. ASUA from Japan has been working with car manufacturing companies to educate drivers about eco-drive helping drivers of traditional vehicles become more energy efficient and those using newer technologies to become 'smart' drivers. At the country level, it will take a few years to go from traditional to newer technologies although significant efforts are under way. ASUA is planning to work with the automobile manufacturers to work in cooperation with governments to mitigate traditional technologies while facilitating the use of newer technologies. Further, countries themselves are benefiting from new approaches developed by the World Bank and the IMF not only to be energy savvy but also to foster economic growth via green technologies. A survey will be made of these developments. Besides, it should be noted that efforts are under way to go from the use of traditional plastic to bio degradable material. A survey will also be undertaken of the work being done by the UN in this area, in particular through the millennium development goals, the UNFCCC, UNEP, UNU and UNDP. The UN Framework Convention for Climate Change Secretariat was established in 1992 when countries adopted the United Nations Framework Convention on Climate Change. With the subsequent adoption of the Kyoto Protocol in 1997 and the Paris Agreement in 2015, Parties to these three agreements have progressively reaffirmed the secretariat's role as the United Nations entity tasked with supporting the global response to the threat of climate change. The

UN Climate Change Summit in 2019 is a corner stone in this context http://www.un.org/en/climatechange/

http://www.un.org/en/climatechange/un-climate-summit-2019.shtml

To support efforts to implement the Paris Agreement and to increase ambition and climate action, UN Secretary-General António Guterres will bring world leaders, from government, finance, business, and civil society to the Climate Summit on 23 September 2019. He has asked these leaders to bring bold announcements and actions to the Summit that will reduce emissions, strengthen climate resilience, and mobilize political will for ambitious and meaningful efforts to implement the Paris agreement of December 2015.

1. Paris Climate Change Agreement adopted in December 2015 through efforts fostered by the United Nations with many entities helping to push the wheel forward inc WAFUNIF and ASUA

The essential elements:

- 1. The world as a whole agreed on a path forward. 196 nations signed the Paris Agreement, the first time since climate change rocketed to the top of the list of global issues that the world has agreed on a path forward.
- 2. The Paris Agreement is a turning point. The agreement "signals the turning point in the road to a low-carbon economy, a road paved by continued innovation in the technology, energy, finance, and conservation sectors."
- 3. The Paris Agreement was years in the making. When negotiations to address climate change failed in 2009, countries walked away with a better sense of how to make an agreement work. Using past failures as a guide helped launch a "bottoms up" approach in which each country set its own goals, enabling the Paris agreement to work for everyone the best way to ensure change.
- 4. The deal asks any nation signing it, of which there were 196, to reduce greenhouse gas emissions and to regularly increase their ambitions. The agreement requires that ratifying nations "peak" their greenhouse gas emissions as soon as possible and pursue the highest possible ambition that each country can achieve.
- 5. Countries will aim to keep warming well below 2 degrees Celsius, and for the first time to pursue efforts to limit temperature increases to 1.5 degrees C. The nations involved in COP 21 agreed upon and required that they would all work towards making sure the Earth's temperature doesn't rise above 2 degrees Celsius; this degree change is usually agreed upon as being the tipping point to preventing massive effects of climate change. (However, it should be noted that more recent science indicates a change of even 1 degree Celsius could cause major threats and impacts to coastal communities and developing nations.)
- 6. **Ratifying countries can independently decide on how to lower their emissions.** This is a big deal: previous attempts at a climate deal required that similar measures be

adopted by all signing parties. However, because economies, cultures, and nations differ so greatly, a common denominator was hard to determine and, therefore, achieve. Allowing ratifying countries to determine the best way forward for them, individually, galvanized support for the agreement.

- 7. The Paris Agreement has aspects that are binding, and aspects that are not. Some elements of the agreement such as requirements to report on progress towards lowering emissions are binding. However, some elements are non-binding, such as the setting of emission-reduction targets. See #6.
- 8. The Paris Agreement calls out the power of nature specifically forests to reduce climate change. "The agreement affirms the important role that ecosystems, biodiversity, and land use can play in reducing greenhouse gas emissions and helping communities and countries reduce risks and adapt to climate change impacts. It also promotes sustainable management of land, which can range from conserving and restoring forests to improving agriculture," said Duncan Marsh, the Conservancy's director of international climate policy.
- 9. **Investing in nature is clearly a smart way forward for combatting climate change.** The Conservancy is well positioned to create major strides in how healthy ecosystems can protect people from the effects of climate change. In fact, our science-based methods have been informing this work for decades.
- 10. **Not just governments.** What the world did by ratifying the Paris Agreement was truly inspiring, it opened the framework so that everyone can contribute to make a difference, private sector entities, non-governmental organizations, groups, individuals.

2. COP23 Bonn Nov 2017 https://www.nytimes.com/2017/11/10/climate/bonn-climate-change-conference.html

https://news.google.com/news/story/dGJfTT-eaRnBqMMbr0tV8N_42xj-M?ned=us&hl=en&gl=US

3. US withdrawal

http://sdg.iisd.org/news/us-withdrawal-from-paris-agreement-mobilizes-governmentsstakeholders/

4. Most Americans support action for climate change

https://www.washingtonpost.com/news/monkey-cage/wp/2017/06/05/most-americanssupport-government-regulation-to-fight-climate-change-including-inpittsburgh/?utm_term=.49f4df43b1e3

5. Climate change the economic effects

http://www.npr.org/sections/thetwo-way/2017/06/29/534896130/mapping-the-potential-economic-effects-of-climate-change

6. NASA captures 20 years of seasonal changes <u>http://www.news.com.au/technology/science/space/20-years-of-changing-seasons-on-earth-packed-into-two-minutes/news-story/d22b8cb87caebd9095c0dfff08f16057</u>

7. Parts of the world already affected by climate change <u>https://www.msn.com/en-us/news/weather/places-around-the-world-already-affected-by-climate-change/ss-AAv4t0u?li=BBnb7Kz</u>

8. Case in point Paris environment issues

The mayor of Paris, Anne Hidalgo, has won a long-running battle with the French government to introduce emergency traffic bans in the city when air pollution spikes. The move to speed up the introduction of alternate driving days for cars with odd and even number registration plates was announced after pollution spiked in the French capital on Monday, just weeks before the city is due to host a crucial UN climate change summit. The ecology minister, Ségolène Royal, had previously said the measure should only be applied after three consecutive days of low air quality. Parisians have criticised the government on social media for a perceived failure to act over predictions of dangerous levels of pollution from diesel fumes. But on Monday evening, Royal broke her silence to announce that the alternate vehicle ban would come into immediate effect "when the region and the city authorities demand it". The issue has been the subject of a long-running dispute between the two leading Socialists; Hidalgo approves of the bans but Royal has, until now, insisted they are not the answer to the frequently toxic air quality that transforms the City of Light into the capital of gloom. Royal told Europe 1 radio that she had decided to put her trust in (local) elected officials, who she said were in "closer contact with those living in the city". In the event, Airparif, an independent group that monitors the city's air quality, said Monday's pollution was less serious than expected because of higher winds than forecast. However, the police authorities reduced speed limits on the motorways and major roads around the capital. Earlier this year, Paris was briefly more polluted than Shanghai - one of the world's most polluted cities - when a cloud of noxious smog enveloped many of the capital's icons including the Eiffel tower. On Sunday, with weather and pollution experts warning that air

quality was set to be poor once again, Hidalgo and the Socialist president of the region, Jean-Paul Huchon, insisted the <u>"alternate traffic"</u> rule should be enforced immediately the following day. Hidalgo, who has made combating pollution a pillar of her mayoral programme, intends to ban vehicles from the main highway along the right bank of the river Seine from next year, to the fury of motoring organisations. She is also planning more <u>"car-free"</u> days across the city after declaring the first such event at the end of September a success. In the last year, the level of nitrogen dioxide (NO2) on the riverside near Place de la Concorde has regularly topped 100μ g/m3 with an average of 66μ g/m3 over the year – well above the EU limit of 40μ g/m3.

<u>France</u> has flouted European Union air quality targets since 2005, while Airparif reported that pollution levels were up to double those allowed by regulations. Five pollutants pose a problem in the capital: benzene, nitrogen dioxide, ozone and the fine lead particles PM10 and PM2.5.

French researchers estimate air pollution costs France about €101.3bn (£75bn) a year in health, economic and financial damage.

Source: <u>https://www.theguardian.com/environment/2015/nov/03/paris-to-stop-traffic-when-air-pollution-spikes</u>

9. France plans to end sales of gas and diesel cars <u>https://www.nytimes.com/2017/07/06/business/energy-environment/france-cars-ban-gas-diesel.html</u>

10. Government report on climate change https://www.nytimes.com/2017/08/07/climate/climate-change-drastic-warmingtrump.html

http://normangeestar.net/2017/08/09/government-report-sees-drastic-climate-change-impact-in-us/

11. Strategic automotive technologies, transformation of the transportation sector: the eco friendly revolution

The Industrial Revolution brought us machines in a variety of types from cars to trucks let alone machine in factories. In many ways the Industrial Revolution was a blessing making it possible for societies to make a quantum leap forward, raising the standard of living. Over time, however, some of the side effects were increasingly felt; chief among these is pollution of the atmosphere through the use of fossil fuel.

https://www.g-casa.com/conferences/prague15/pdf_paper/Owarish.pdf

12. Panasonic sustainable energy; eco-friendly businesses <u>https://panasonicmovesus.com/sustainable-</u>

<u>energy/?utm_source=Bing&utm_medium=CPC&utm_campaign=MovesUs&utm_content=Susta</u> <u>inableEnergy</u>

13. Preserving coral reefs need new technologies https://phys.org/news/2017-09-coral-reefs-technologies.html

14. Removing CO2 from the air \$7 trillion\$ per year may be needed <u>https://qz.com/1034405/former-nasa-scientist-says-the-world-may-need-to-spend-as-much-as-7-</u> trillion-per-year-to-remove-carbon-dioxide-from-the-air/

15. Trudeau climate change as an opportunity <u>https://www.bing.com/videos/search?q=climate+change&qpvt=climate+change&view=detail&</u> <u>mid=767CB1EDD6385109CA98767CB1EDD6385109CA98&FORM=VRDGAR</u>

16. Your questions about climate change answered <u>https://www.nytimes.com/interactive/2017/climate/what-is-climate-change.html</u>

17. Climate change prediction models <u>https://www.washingtonpost.com/news/energy-environment/wp/2017/12/06/the-most-accurate-climate-change-models-predict-the-most-alarming-consequences-study-claims/?utm_term=.3c56c53b50e7</u>

https://news.google.com/news/story/dufEsThklpuwqdMb1z7zS2QTmz3bM?ned=us&hl=en&gl= US

18. Climate change report 10 09 2018

https://www.youtube.com/watch?v=5N_Pr_0KOLE

19. Climate change: urgent work to do plus business opportunities Latest report paints a gloomy picture and makes an urgent call for action:

http://www.ipcc.ch/

http://www.ipcc.ch/news_and_events/press_information.shtml

https://oceanconservancy.org/blog/2018/10/11/climate-change-ocean-stark-messageipcc/?ea.tracking.id=18HPXGJAXX&gclid=CjwKCAjw9sreBRBAEiwARroYm0e_IY0AVhYU Xh8YD7X89ISddE4cWpNIPakJJpWMNZd2LvLrxooR1hoCPTcQAvD_BwE

The Paris Conference in 2015 was a success; there is obviously need for sustained action; Japan is an example to emulate.

Implementation of the Paris Treaty involves not only government entities but also business and nongovernmental entities.

There are tremendous opportunities in green business.

https://www.google.com/search?ei=NQ7TW4-7POO3ggfO_4T4Aw&q=opportunities+for+green+business&oq=opportunities+for+green+business&gs_l=psy-ab.12..0i22i30.2943.16200..19439...1.0.1.190.4299.59j3.....0...1..gwswiz....6..0j35i39j0i67j0i131i67j0i131.2lmdAdDs1VQ

20. Data mining and climate change <u>https://www.rdmag.com/news/2018/01/using-data-mining-make-sense-climate-change</u>

http://dailydemocratnews.com/2018/01/big-data-data-mining-help-predict-climate-change-impacts/

21. Bad and good news: a) Earth CO2 level b) On the other hand, over 100 cites run mostly on renewable energy:

https://www.usatoday.com/story/news/2018/05/04/global-warming-carbon-dioxide-levelscontinue-soar/581270002/

https://inhabitat.com/over-100-cities-around-the-globe-run-mostly-on-renewable-energy/

22. Treaty on Climate change implementation efforts

http://www.g-casa.com/conferences/berlin17/ppt%20pdf/Owarish%20Climate%20Change.pdf

23. UN SDGs

$\underline{https://unstats.un.org/sdgs/report/2016/The\%20Sustainable\%20Development\%20Goals\%20Report\%202016.pdf}$

24. World Bank and Green Business

http://www.worldbank.org/en/news/press-release/2014/01/27/green-business-reduce-climate-risks-caribbean

http://treasury.worldbank.org/en/about/unit/treasury/ibrd/ibrd-green-bonds

https://www.worldbank.org/en/news/press-release/2018/09/10/world-bank-launches-firstsustainable-development-notes-linked-to-new-global-sustainability-signatories-index

IMF-WB Green Growth

http://gggi.org/gggi-presenting-green-growth-at-2018-imf-wb-annual-meetings/

25. New York Green Business

The New York Green Business (NYGB) program provides recognition and incentives to businesses and other entities that are committed to sustainable practices and conserving New York's environment and natural resources. To become a member, an applicant must have a good record of compliance with environmental laws and regulations, make commitments to improve their environmental performance, and have a public outreach strategy for their sustainability achievements.

Businesses are encouraged to apply to get the recognition they deserve for their achievements, attract new eco conscious consumers, and to get resources to help them go even further along their sustainability journey. Members also receive benefits including being able to market your business as an environmental leader (including use of logo), priority access to assistance from select New York State technical assistance programs, and access to a leading network of sustainability leaders.

Interested in becoming a member of NYGB? Visit Becoming a NYGB Member.

Through NYGB, members are undertaking numerous innovative projects that reduce their environmental footprint and demonstrate that strong environmental stewardship and increasing the bottom line go hand in hand. Examples of projects carried out under NYGB include:

- Delaware North is saving 7,500 gallons of diesel fuel by switching from a national brand of hot dogs to a local one.
- Anheuser-Busch will be saving 190,600 lbs. of aluminum per year by introducing a new lighter weight can for their products.
- IBM's Thomas J Watson Research Center will be eliminating 4,200 lbs. of Styrofoam waste by banning it from their dining facilities.
- Locust Hill Country Club will be training the next generation of sustainable golf course superintendent through their successful internship program.
- Xerox Webster Campus will save 8.53 million gallons of water per year by minimizing once through cooling and installing flow meters throughout their facility to detect and repair leaks faster.

Current members are located throughout the state and you can see a description of them, along with their commitments, on our Members Page

Source: https://www.dec.ny.gov/chemical/939.html

Greening Your Business

Incorporate Sustainability into Your Everyday Business Practices

Today's businesses face many challenges. Greening up your operation shouldn't be one of them. DEC has a variety of programs to help you meet your economic and environmental goals.

Be Environmentally Conscious and Productive



Tap into cutting edge research and technology and bring pollution-reduction processes to your company. Learn how the NYS Pollution Prevention Institute makes businesses more competitive by enabling them to be more efficient and reduce their carbon footprint.

Join New York's Leaders in Sustainable Business



Get recognized for implementing green business practices. Move beyond regulatory compliance, make a positive impact on public health and the environment, and enhance your bottom line. Join the New York Green Business program.

Stay in a Certified Green Hotel

Learn about New York's certified green hotels by visiting Empire State Development's "Green Travel" website. The link may be found at the top right of this page. Here, you will find a variety of green accommodations, dining, and transportation options to book your environmentally conscious business trip or vacation getaway.

Save Money, Reduce Operating Costs and Create Sustainable Buildings

Utilize building materials more effectively. Provide healthy environments for your employees. Use land more efficiently.

Using Innovative Practices to Solve Environmental Challenges?

Tell us about your success story and submit your Environmental Excellence Awards (EEA) application today. For years, New York businesses, not-for profits, educational institutions, and individuals have enjoyed the recognition that EEA brings to their organization.

Manage Your Waste Effectively

Prevent waste, maximize resources, and increase efficiency. Give your company a competitive edge by implementing solid waste reduction and recycling into your everyday business practices.

Turn Environmental Challenges into Market Opportunities



Once a brownfield, this Brooklyn site features a public park and a retail store.

Capital, research and development, and technical assistance funding is available from Empire State Development (see links leaving DEC's website). The funding assists projects that produce measurable and significant results in waste prevention, pollution prevention, reuse, recycling and/or remanufacturing, and sustainable product development.

Benefit from Sustainable Planning and Redevelopment

Your creativity and innovation can green up the brown. The Brownfield Cleanup Program provides incentives to restore and re-use contaminated sites, which are often located in areas that are highly desirable for business. DEC's environmental cleanup programs include resources for assessment and cleanup, liability releases and technical assistance that promote long-term job creation and community revitalization.

Green Hospitality



Photo Courtesy of Jennifer Holderied, Proprietor of the Golden Arrow Lakeside Resort Nice Green Beds! Hoteliers incorporate sustainable products and smart energy practices into everyday business operations.

The NYS Green Hospitality and Tourism Partnership (a collection of state agencies, industry associations, and academia) promoted "green tourism" in New York State.

Under this Initiative, hoteliers and restaurateurs were encouraged to incorporate sustainable practices into their everyday business operations (commitments to water quality and conservation, waste reduction, resource conservation, and energy efficiency) and earn a NY State-recognized green certification. While this program is no longer active, we encourage you to visit the New York State Pollution Prevention Institute's website for more information.

Conclusion: Initial thoughts on a strategy for ASUA-UNU conference at UNHQ in 2020

In the previous conferences, two at UNHQ, one in Paris and another in Nagoya ASUA did very well partnering with UN entities and business sector organizations.

2019, ASUA is planning to go global and also financially to go public by the issuance of an IPO. And so ASUA has to have partners that can help leverage its capabilities while showing its growth potential. ASUA's strengths are what it has done in showing how to implement the Paris Treaty on Climate Change (see report on the conference held at UNHQ in July 2016) including its specific achievements in EcoDrive (there is ample empirical evidence for this). ASUA stands to do more however as shown below. ASUA is going regional as well as national. For the first set, ASUA could work with the UNCRD in Nagoya as a partner and extend its reach to UN Regional organizations in particular ESCAP, ECA and ECLAC. ASUA should invite the head of these organizations to meet at UNCRD in Nagoya. For the national level, ASUA should reach out to UNDP developing key link with the top leaders of UNDP in New York, again by inviting them to ASUA in Nagoya. To enhance its solid reputation, ASUA should talk to senior staff of UNU in Tokyo and then leverage UNU staff in NY such as arrange for an appropriate conference room at UNHQ. The Permanent Mission of Japan at the UN is also a very valuable partner in this respect. ASUA should also continue its partnership in the business sector (in particular the automobile industry) and extend its effort by reaching out to green business organizations. When ASUA organizes conferences and workshops at the regional and national levels leaders of the nations invited have to see that implementing the Climate Change Treaty involves some costs but that these can be outweighed by green business which is where the future of economic growth resides. The automobile industry stands to benefit from the work of ASUA at the national level.

It is important to keep in mind that UNCRD's mother department at UNHQ is DIESA which itself is promoting green business as an avenue to economic growth. The conference to be held at UNHQ in 2020 should be jointly chaired by ASUA, the head of UNCRD and the head of UNDP. The UN Secretary General and the head of the Climate Change Secretariat should be special guests honored for their achievements in the field of Climate Change, with a recommendation that these two entities should be considered for the award of the Nobel Prize in Economics.