



July 2021

Our shared world. Our shared responsibility.



Recyclable Plastic: The better option for the planet

In light of Plastic Free July, we show you the 7 different types of recyclable plastic so that you can make better decisions when shopping.



Label me confused

Find out how minimising confusion and misleading information on the packaging of goods can help minimise plastic waste!



Farming our way out of the climate crisis

Project Drawdown wants to reduce the impact of agricultural activities to the global climate by managing landscapes to enable the self-organizational healing of complex-adaptive, natural systems.

Editorial

Hello Everyone,

This month we bring you an international special packed with informative articles to highlight issues of importance from an international perspective. As we quite reasonably focus on what we can do to reduce the impact of climate change on an individual and community level, this month's issue serves as a reminder that it is also a global challenge that we must address together.

This month is also Plastic Free July so re-use that plastic spoon, bring your own water bottle, buy in bulk, carry a reusable bag, embrace Tupperware instead of clingwrap, and help us reduce single-use plastic waste in our world!

Kind regards,
Daniela Dal'Castel, Newsletter Editor – HOPE Inc.



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HOPE E-news Bulletin 2021 #07 --- July 2021

The following items have been gathered from various e: newsletters received by HOPE in recent times; and/or prepared specifically by HOPE members and supporters. If you have any news to contribute, please forward to office@hopeaustralia.org.au. Deadline for articles is 15th day of the month.

Editorial

Hello Everyone,

This month we bring you an international special packed with informative articles to highlight issues of importance from an international perspective. As we quite reasonably focus on what we can do to reduce the impact of climate change on an individual and community level, this month's issue serves as a reminder that it is also a global challenge that we must address together.

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Kind regards,

Daniela Dal'Castel, Newsletter Editor – HOPE Inc.

HOPE Office News --- July 2021

Good morning folks,

In recent times, our membership numbers have decreased significantly – and so, I need your help by inviting your networks to support the work of HOPE. Membership and Volunteer details are available at [HOPE Australia Protect the Environment: Membership](#).

Also, we urgently need to raise funds to cover our annual operating expenses. Donations can be made directly to our Public Fund account at [HOPE Australia Protect the Environment: Donations](#).

A copy of the Minutes from June's Ordinary Meeting is now available at [HOPE Australia Protect the Environment: Committee Reports](#).

Lastly, we welcome Stephanie Polinar as our new Website Content Officer.

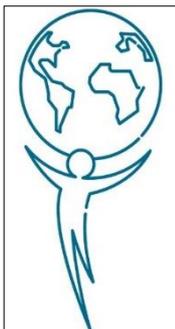
Regards,

Frank Ondrus, Office Manager – HOPE Inc., ph. 07 4639 2135

June highlights from the Office:

- Accounts paid – Membership Renewal 2021-22 with Volunteering Queensland; and Annual Hosting of our website with CLEVVI (Toowoomba)
- Submitted online grant application to Arrow Energy's Brighter Futures Program re: Development of 3-fold Waste Minimisation brochure.
- Issued nationally e: Media Releases re: Report on HOPE's 'After the Virus' Podcast series' and "Introduction to Eco-Social Work in Australia"
- New "Special Report" assignments are proposed for the subjects of:
 - Review of "Recommendations to strengthen the EPBC Act";
 - 'Opportunities to better protect our Threatened Species';
 - 'Dealing with Invasive Species (plants and animals)';
 - "Transitioning to Sustainable Energy Future";
 - "The need to Eliminate Nuclear Weapons, Globally" and
 - An overview of the GM-FREE Australia Alliance and its supporters"

International Articles



The Alliance of World Scientists - scientistswarning.forestry.oregonstate.edu

By Xiang 'Phoebe' Huang - HOPE researcher Qld

Main Aims

The Alliance of World Scientists (AWS)'s goal is to be a collective international voice of many scientists regarding global climate and environmental trends and how to turn accumulated knowledge into action. AWS is the only independent, grass-roots organization comprised of scientists from around the world committed to the well-being of humanity and the planet.

Current projects

AWS collected the scientists' opinion about the article "World Scientists' Warning of a Climate Emergency" by Ripple et al., which was recently published in BioScience Magazine. The current number of signatories is 13,802 from 156 countries.

Current number of signatories: 13,802 from 156 countries

[Read the Article](#)

[Sign the Article](#)

[View 11,000+ Signatories](#)

[View the Signatories](#)

(scientists only)

(signed before Oct. 14, 2019)

(signed after Oct. 14, 2019)

Access to resources

The climate crisis has arrived and is accelerating faster than many scientists expected. It is more severe than anticipated, threatening natural ecosystems and the fate of humanity. AWS listed several Journal Articles related to Scientists Warning, download the full articles at <https://scientistswarning.forestry.oregonstate.edu/journal-articles-related-scientists-warning>

AWS listed several Videos related to World Scientists' Warning of a Climate Emergency, find the full information at <https://scientistswarning.forestry.oregonstate.edu/videos>



Do you know the 7 different types of recyclable plastics?

Provided by Bobby Firestein, Ecoprint.com

The benefits of plastic are undeniable. The material is cheap, lightweight and easy to produce. These qualities have led to its boom over the past century. And the trend will certainly continue as global plastic production skyrockets over the next 10-15 years.



Unfortunately, we are already unable to cope with the amount of plastic waste we generate. Of the 8.3 billion metric tons that have been produced, 6.3 billion metric tons have become waste; with only 9% having been recycled. The vast majority accumulates in landfills or is sloughed off in the natural environment as litter. Some 13 million tons of plastic enter our waterways every year, with most of that ending up in our oceans. This waste harms biodiversity, economies and, potentially, our own health.

Clearly plastic pollution is a menace that needs to be addressed. While we should all strive to use less plastic in our daily lives, we can also make a serious commitment to recycling.

The first step to effective plastic recycling is learning about the different types of recyclable plastics.

How to identify recyclable plastics

If you look at the plastic storage containers in your home, you'll find numbers engraved on them. These are the SPI Resin Identification Codes ("SPI Symbols"), a set of symbols placed on plastic items to identify the resin type that the items were made from. It's these plastic recycling codes that help you differentiate between recyclable and non-recyclable plastics.

There are seven types of plastics in common use:

1. PET (Polyethylene Terephthalate)

PET is a common form of single use plastic mainly used for water and soda bottles. Although these plastics are commonly used, they pose a danger when it comes to reuse. The antimony trioxide used to make these plastic containers is carcinogenic. So, as part of your recycling program, be cautious on how long you keep foods in these containers.

2. High-Density Polyethylene (HDPE)

Used for things like milk jugs, detergent bottles, and toys, HDPEs are considered one of the safest types of plastic and are the most recycled. Most of them are safe to reuse, which gives you multiple ways to recycle, especially at home. Before putting them into the recycling bin, you can try reusing them for everything from storing cereals to carrying water.

3. Polyvinyl Chloride (PVC)

PVC is used in toys, plastic wrap, pipes, and other household items like garden hoses. PVC poses an environmental and health risk, and products made with PVC cannot be recycled. Therefore, it is best to avoid using PVC if possible.

4. Low-Density Polyethylene (LDPE)

LDPE plastics are thin, less dense, and less crystalline, making them more flexible. They are commonly used for items like plastic bags and squeeze bottles. LDPEs are safe, cheap to process, and have infinite uses. These properties make it difficult to recycle, but many communities are starting to accept LDPEs as part of their recycling programs.

5. Polypropylene (PP)

Most PPs fall between LDPEs and HDPEs, hence they are relatively safe to use. PPs are commonly used in disposable diapers, yogurt containers, chip bags and rope. Because of their heat-resistant qualities, they're also popular for hot food containers. Unfortunately, only about 3% of PPs are recycled. In fact, some research suggests

PPs should not be part of plastic recycling and waste management in the United States.

6. Polystyrene (PS)

PS plastics are commonly used for egg cartons, packing peanuts, food containers and more. Elements disperse this ultra-lightweight plastic, and bits of PS end up on beaches and in the ocean. The consequences of PS on human and marine life are yet to be calculated. Consumers are advised to stay away from PS plastics since they are not widely recyclable and pose a health risk.

7. Other

These are plastics that are not identified by numbers 1-6. They are a combination of different materials, such as polycarbonates and BPA. There are many health complications tied to these materials, and they are not reusable or recyclable. It is best to avoid these plastics altogether, but especially for things like children's food.

Despite the efforts by researchers and manufacturers to create unique plastics, most of them still end up in our waterways and landfills. And many recyclable plastics cause serious health problems; they shouldn't be used, let alone recycled. If you are committed to fighting environmental pollution, find out which plastics can be recycled and do your part. And above all, swap out plastic items for more sustainable, reusable options.

LET'S TALK RECYCLING

There are many types of plastic with a variety of uses, and their ability to be recycled vary. The number found on plastic containers indicates the type of resin used. Here's how you can recycle each type of plastic!

RESIN IDENTIFICATION CODE (RIC) AND NAME						
PETE Polyethylene Terephthalate	HDPE High-Density Polyethylene	PVC Polyvinyl Chloride	LDPE Low-Density Polyethylene	PP Polypropylene	PS Polystyrene (Styrofoam)	OTHER Miscellaneous Plastics
PROPERTIES AND COMMON USES						
Clear, tough plastic	White or colored plastic	Hard, rigid plastic	Soft, flexible plastic	Hard but flexible plastic	Soft, flexible plastic	All other plastics
Soda or water bottles, peanut butter jars	Shampoo bottles, milk jugs, bleach bottles	Detergent bottles, plumbing pipes	Shopping bags, squeeze bottles, food wraps	Yogurt containers, straws, medicine bottles	Disposable coffee cups, packing peanuts	Baby bottles, compact discs, sunglasses
CAN I RECYCLE IT?						
YES	YES	NO	NO	MAYBE	NO	NO
Picked up by most curbside recycling programs	Picked up by most curbside recycling programs	Check for your area's specialty recycling programs	Check for your area's specialty recycling programs	Check your local recycling guidelines	Check for your area's specialty recycling programs	Check for your area's specialty recycling programs

Waste has a tremendous impact on the wellbeing of our planet. The trash in landfill sites releases harmful chemicals into the environment. Additionally, over 17% of all U.S. greenhouse gasses are emitted from landfill sites.

Recycling is simple. It's an effective way for everyone to help reduce pollution and keep our world healthy for the generations to come. To learn more about Ecoprint's recycling efforts, go to www.ecoprint.com/sustainability.

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Overview of Future Earth newsletter

By Adam Walter – HOPE Researcher Qld



Who are Future Earth? Aldo Leopold, the father of wildlife conservation, believed that ecologists saw marks of death in a world that otherwise believed itself well and refused to be told otherwise. Since its launch in 2015, Future Earth, the world's largest global community of sustainability scientists, is the informed voice notifying the world of these urgent marks of death, through research, innovation and sustainable practices, encompassed in an Earth systems-based approach (Figure 1). This kind of approach examines the

interconnectedness of humans and the major Earth systems – climate, terrestrial, oceanic, water cycle, urban growth, economic development, biodiversity, socio-political systems and energy consumption (Future Earth 2021a). They aim to achieve visions of a sustainable and equitable world by using the best available research and acquired knowledge to proactively develop solutions to support the interconnectedness of. Currently, in a welcome sign of the times, Future Earth are shifting their management structures to become more inclusive, efficient and directly relevant.

What have they done? Future Earth has embodied the facilitation of research and innovation through over 20 extensive global research projects, which have worked on anthropogenic interactions with our natural world. A significant accomplishment of Future Earth was the organisation and hosting of the '7th International Conference on Sustainability Science' (ICSS 2017) in Stockholm. This and other sustainability conferences they've organized or co-hosted have provided networked platforms to share knowledge with political, civil and industry leaders, as well as with the public. This proactively assists in shaping the global narrative, which can then be transformed into action at individual, industrial and political levels. A graphic depiction of the Future Earth strategy is shown in Figure 2

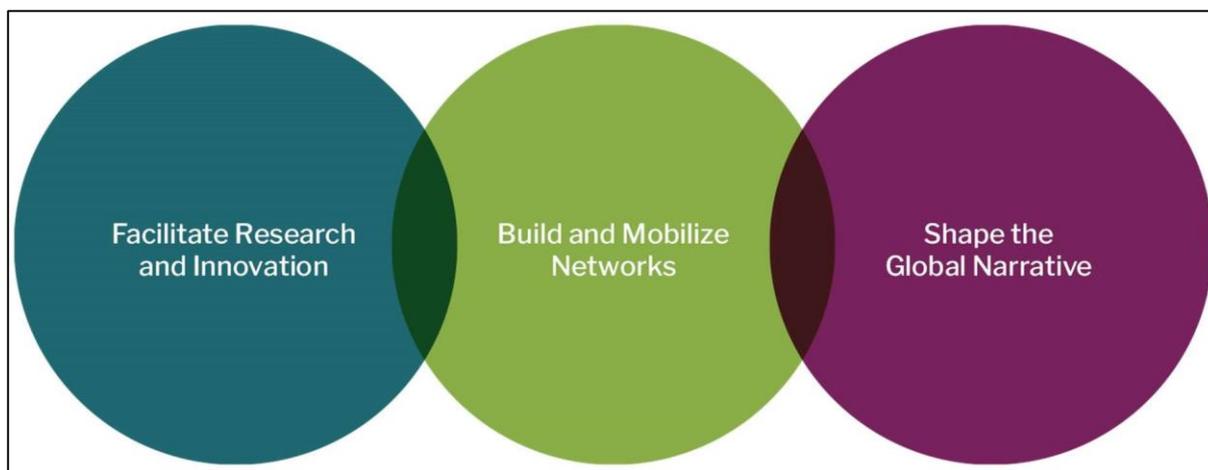


Figure 2: The 3 key strategies of Future Earth (Future Earth 2021a)

The January 2021 edition of the Future Earth newsletter (Future Earth 2021b) outlines a plethora of different projects, global news, and opportunities and events that are of particular interest to those concerned about the state of the climate and environment. Of particular significance is the crucial act of the new President of the United States of America, Joe Biden, recommitting to the Paris Climate Agreement, in a move that has been lauded by many experts as crucial in the mitigation of future climate change (Bodansky 2021). Topics such as new insights on science, sustainable resource management, eating habits of humans, the possible decline of marine science post-COVID and the surprisingly positive economic benefits of sustainable practices are covered, with links provided to further the readers learning. Several webinars and events are also listed covering a broad range of issues, events and opportunities that are directly relevant to the global environment.

The newsletter, which is broad in its scope, but surprisingly succinct, is reasonably interactive, encouraging readers to peruse at their own pace and follow their interests, and quite fittingly ends with a wonderful quote from Aldo Leopold. The Future Earth newsletters are fascinating and insightful reads and base-sources of information for those interested in the breaking down and synthesis of high quality and recent research into the past, present and future states of the Earth systems.

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Project Drawdown – A Drawdown Primer: Farming Our Way Out Of The Climate Crisis

By Adam Walter, HOPE volunteer Qld

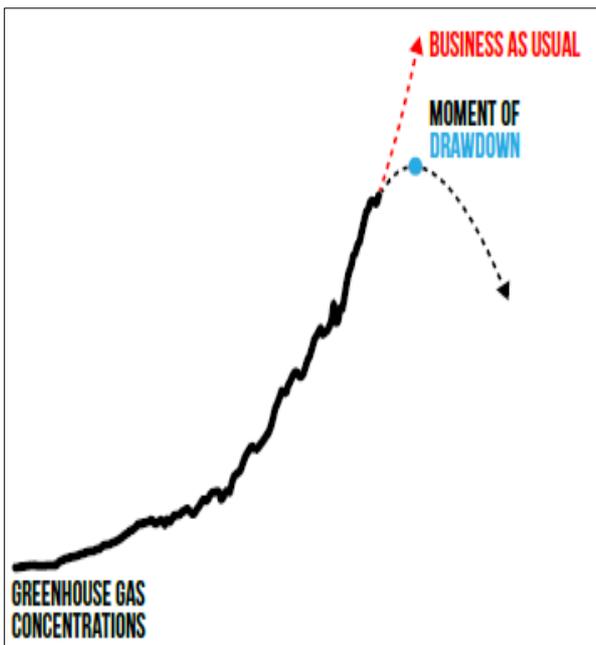


Figure 1: Reaching the moment of “Drawdown”
(Project Drawdown 2020, p.7)

Project Drawdown is a non-profit organisation founded by renowned environmentalist Paul Hawken and Executive Director of the Buckminster Fuller Institute, Amanda Ravenhill. It seeks to provide research, communication and proactive steps towards climate mitigation, with the aim of achieving ‘drawdown’ – the point whereby global greenhouse gas emissions begin to decline (see **Figure 1**). They accomplish this through a compartmentalised approach that addresses different sectors of society and how they can best act within the parameters of modern technological limitations to move towards drawdown, and thus, stop global warming.

This particular primer, ‘*Farming Our Way Out Of The Climate Crisis*’ is concerned with the current impacts of land use for agricultural practices, and ways in which they can be optimised to minimise impacts on local ecosystems and the global climate.

When we think of greenhouse gas emissions, we tend to limit our scope of thought to the burning of fossil fuels to produce electricity, releasing significant amounts of Carbon Dioxide (CO₂) in the process. Whilst this is not an inaccurate perception, it is perhaps a simplistic one that neglects to appropriately consider the plethora of actions that formulate contemporary agricultural practices, such as the release of CO₂ from land clearing, methane (CH₄) emissions from ruminant livestock and nitrous oxide (N₂O) emissions, primarily from

manure and synthetic fertilisers. As **Figure 2** highlights, approximately 24% of greenhouse gas emissions come from the food, agriculture and land-use sector, which is fractionally less than the 25% that comes from electricity generation through the burning of fossil fuels.

Globally, 13% of CO₂ emissions, 44% of CH₄ emissions and 81% of N₂O emissions come from the FALU sector (Intergovernmental Panel on Climate Change 2019). This sector undoubtedly has a significant role to play in combatting and mitigating climate change. Effecting change within FALU requires both the reduction in greenhouse gas emissions, and the utilisation of regenerative practices to enhance carbon sinks in agricultural land.

A focal point of this primer is the use of regenerative agriculture, defined by Massy (2020, p.551) as “managing landscapes to enable the self-organizational healing of complex-adaptive, natural systems,” to create CO₂ ‘sinks’ to primarily capture and store CO₂. The permanence surrounding the storage of CO₂ within biomass and soils is variable, however. Changes in land use and the increase in environmental disturbances such as drought and fire are predicted to increase the rate of transformation of carbon sinks to carbon sources. Currently, approximately 41% of our greenhouse gas emissions are captured by oceanic and terrestrial ecosystems. This provides a foundation for the proactive goals of this primer, which ponders the optimisation of our agricultural practices ability to remove carbon from the atmosphere. Several notable ways that this can be achieved include:

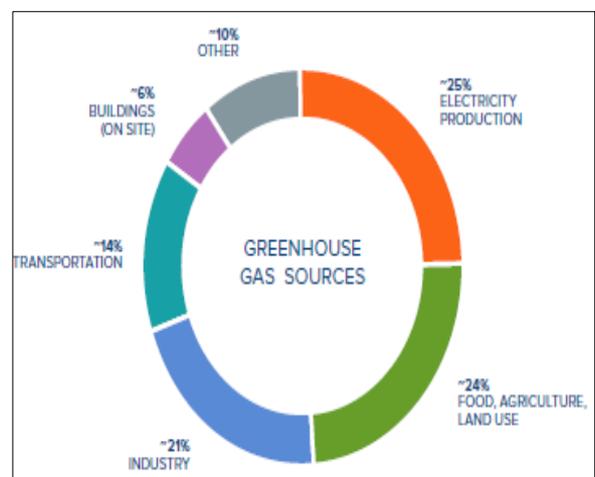


Figure 2: Greenhouse gas emissions by sector (Project Drawdown 2020, p.4)

- i) **The conservation and restoration of tropical forests** – the clearing of these forests is the largest agricultural source of greenhouse gas emissions.
- ii) **Optimising animal agriculture** – this is a major source of CH₄. Feed additives such as *Gigartina sp.* can limit production of methane gas in ruminants (Maia et al. 2016). Improved vegetative spread and improved manure management can minimise N₂O emissions, with pasture grasses from the genus *Bachiaria* being able to scavenge manure for nutrients, minimising N₂O off-gassing.

- iii) **Optimising rice cultivation** – reducing tillage stabilises soils and reduces the emissions of CH₄. System of Rice Intensification (SRI) tools such as wide-spacing, intermittent watering and application of compost are useful tools in minimising CH₄ emissions of rice systems.
- iv) **Optimising nitrogen fertiliser use** – consultation with agronomists on reducing fertiliser use without impacting yield, as per Spearman's Law of Diminishing Returns (explained in Grossman 2020). Planting clover and other nitrogen-fixing plants is a natural assistant in fertilising and providing nitrogen for plants planted later.
- v) **Recognise fundamental importance of carbon-rich ecosystems** – Peatland soils are excellent in the sequestration of carbon, and despite only making up 3% of global soil content, they account for 30% of the world's soil carbon. The clearing and disturbances of these soils releases a significant quantity of carbon into the atmosphere (Leng, Ahmed & Jalloh 2019).

As individuals, we can also assist in minimising greenhouse gas emissions from the FALU sector by reducing our food wastage and consuming less meat and dairy products.

The utilisation and transformation of working agricultural lands as a potential carbon sink is a form of utilising nature's own carbon sequestration to mitigate further climate change. It is possible for farmers to maximise carbon sequestration potential through the planting of cover crops, effective application of compost and incorporating elements of agroforestry. Biochar may also be an effective economic tool and greatly assist in carbon sequestration as shown in **Figure 3**.

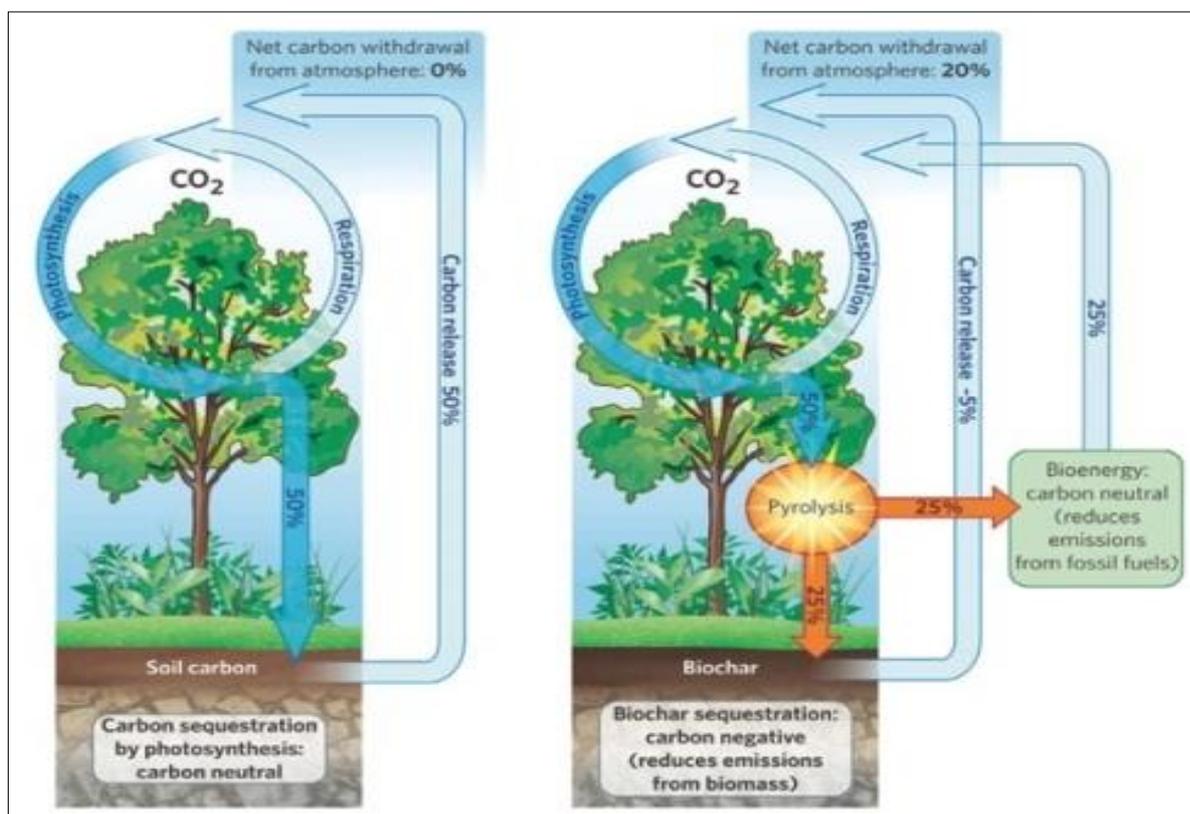


Figure 3: The potential of biochar to be carbon negative (Tenenbaum 2009)

The suggested ways in which we can create carbon sinks through land use and agriculture, include:

- i) **The restoration of forests and planting large areas of trees** - Replanting and restoring trees absorbs CO₂.
- ii) **Regenerative practices within cropping techniques** - No-till cultivation, cover cropping, and compost application assist the ecological health of the landscape and help restore soil fertility and ecosystem productivity.
- iii) **Perennialising agriculture** - this can be achieved using perennial crops and agroforestry systems, whereby trees are integrated into crop production (see **Figure 4**).
- iv) **Adopting Adaptive Multi Paddock systems and adjusting stocking rates** – promoting the accumulation of soil carbon through regenerative agricultural techniques can be an effective method of managing grazing lands.



Figure 4: Agroforestry - Farmers in Missouri plant rows of pecan trees between annual crops (USDA National Agroforestry Center 2016). Used under a Creative Commons Attribution 2.0 Generic Licence (<https://creativecommons.org/licenses/by/2.0/>).

It is of fundamental importance to recognise however, that many of the optimisations, adaptations and systematic changes listed in this primer are not sufficient to effectively address climate change as standalone measures. A multifaceted approach, whereby emissions from other sectors are also significantly reduced, should be the aim to achieve drawdown.

This primer endorses actions that focus on immediate emission reduction strategies and long-term regenerative agriculture and carbon sequestration optimisation strategies from the agricultural and land use sectors. It does not overstate the capacity of the FALU sector to impact climate change but ensures that we know how important mitigative action in the sector is to our chances of successfully combatting climate change. The recommendations listed align with HOPE's slogan of "Think globally, act locally" in that many can be implemented on an individual or local level, often through simple measures and adjustments. It is a proactive, evidence-based informative piece of writing that contains crucial information that we must enact with relative haste within the FALU sector if we are to achieve drawdown.

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The Impact of Evolutionary Pressures on Economic Narratives

By Anh Ngoc-Lan Huynh, HOPE Researcher (QLD)

The Impact of Evolutionary Pressures on Economic Narratives was an article written by Dr Carey W. King. Dr. Carey King is Assistant Director and Research Scientist at the Energy Institute at The University of Texas at Austin, with appointments at the Centre for International Energy and Environmental Policy within the Jackson School of Geosciences and McCombs School of Business.



Fig 1. An example of air pollution related consequence from fossil fuel

The challenges in consuming energy

There are various narratives along the two axes of energy and economies due to a comparison of the costs and capabilities from different sources of energy and technology. Each proponent uses narratives to prove the validity of its position. At opposite ends of the energy, the axis involves fossil fuels and renewable energy narratives.

Fossil fuels are most notably high energy density and portability which ensure low cost and high utility. The disadvantage of fossil fuels can be mitigated by enhancing the technologies we used to burn them which helps us reshape and control

environment. However, another proponent is to use renewable energy as clean and safe for the environment. In fact, we cannot compare the two sides of fossil fuels and renewable energy without economic narratives. At one end of the spectrum is technological optimism and perpetual GDP growth, and at the other end is technological realism and the need for a steady-state economy or even degrowth toward a steady-state economy.

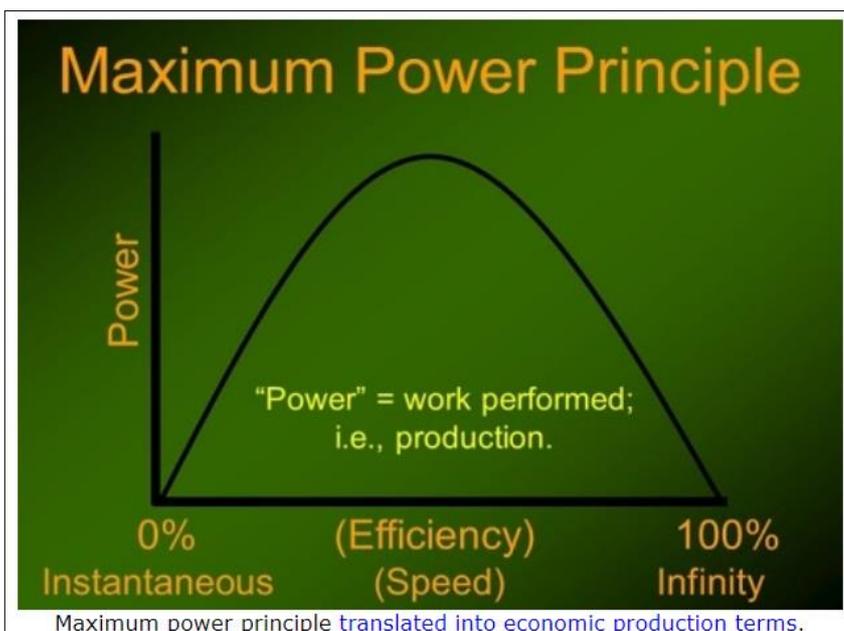
The challenges in energy system

An energy system cannot understand itself directly that we need to build a model to gain some information about its efficiency. The writer concluded that the maximum power principle explains the system operation clearly. The higher rates of energy consumption induced by a high rate of demand from environments. Since there is no specific principle to measure how energy system should operate, one proponent believes it should base on the need for stakeholder and planning is quite important.

Energy consumption depends on the price of fuels in terms of economic perspectives. Prices that plague the market lack full and accurate information about the costs (especially the environmental and social costs) of production. Prices can even be determined by reckless whims of buyers and sellers. Even in well-structured markets, where short-term whims play little role, prices often reflect only a portion of the full costs.

The issues arising from energy system today

The fossil fuel resources are limited which can be scared by an uncontrollable usage. The writer highlighted the main reasons such as no long-term planning or design. Similarly, markets focus on short-term profits and consumer utility rather than long-term societal goals. Dr King suggested having a price controlling strategy to manage the demand and usage of fossil fuels as generally accepting ways of economic thinking instead of biophysical principles.



Review of United Nations Environment Programme & Consumers International (2020). “Can I Recycle This?” A Global Mapping and Assessment of Standards, Labels and Claims on Plastic Packaging.

By Sofija Belajcic - HOPE researcher NSW



This publication provides a mapping and assessment of standards, labels of claims and plastic packaging. It was developed in collaboration with Consumers International and the United Nations Environment Programme [UNEP] and was published in support of the One Planet Network-Wide Plastics Initiative, an initiative focusing on plastic packaging as the main source of marine litter.

In summary, the findings of the report conclude that whilst sustainability information about plastic packaging is being communicated to consumers by businesses, this information is often confusing and misleading, giving rise to inaction on the part of consumers to reduce waste. The report provides recommendations for policymakers, standards setters and businesses on how to improve the information communicated to consumers, thereby empowering consumers to make more informed choices when it comes to purchase, use and disposal of plastic products.

Scope

The scope of the report is limited to on-package communications to consumers about the sustainability of plastic packaging and disposable plastic food-ware. Specifically, it focuses on labels and claims found on plastic packaging and the standards and certifications upon which they are based.

The report excludes reusable packaging, food-ware and plastic products. This narrow focus of the report is due to the fact that plastic packaging and disposable food-ware are most prevalent in the ocean. In addition, 40 per cent of plastic packaging is discarded after one use, making its inclusion as a core focus of the report significant in assessing on-package communications.



Research methodology

The report's research methodology included identifying known labels and claims on plastic packaging, mapping labels and claims through online searches and local searches, grouping these labels and claims according to the theme being addressed, developing a framework for the assessment of labels and claims, identifying relevant standards for each theme, using expert knowledge to review the global mapping, developing a comprehensive catalogue of relevant standards, labels, and claims on plastic packaging based on these findings.

The key findings of the report are that:

- There are varying levels of reliability, clarity and transparency of the labels and claims on plastic packaging. In order to ensure cohesiveness, businesses should follow the Guidelines for Providing Product Sustainability Information (UN Environment and ITC 2017) in their plastic packaging communications.
- Consumers find labels and claims very confusing so definitions about the content and reusability of plastic packaging need to be harmonised at a global level.
- Standards, labels and claims need to better reflect actual conditions in order to bridge the gap between what the claims say and what actually happens to the product once it is discarded.
- The 'chasing arrows' symbol is sometimes used for labels and claims not relating to recyclability which leads to consumer confusion. For example, the resin identification code, which identifies what type of plastic the product is made from, is often mistaken for being an indicator of the recyclability of the packaging. This is because it uses the 'chasing arrows' symbol just like the original recycle icon. Another example is the "Green Dot" label which indicates that for such packaging, a financial contribution has been paid to a qualified national packaging recovery organisation. However, this label is also confused with recyclability. Therefore, the use of the 'chasing arrows' symbol should be restricted to indicating recyclability.
- Businesses should adopt clear and well-designed recyclability labels which reduce consumer confusion and ensure policies are properly enforced. For example, the Australasian Recycling Label received a positive net assessment for clarity, accessibility and reliability, with the assessment noting that it contained specific instructions, was easy to use and was also consistent.

Based on the findings, the report's recommendations are for businesses to adopt clearer labels and claims which provide practical information to consumers and clearly highlight the recyclability of the packaging and how to recycle the packaging. Specifically, the following recommendations were noted in the report:

- Businesses should take steps to ensure their labels and claims correspond with at least the five fundamental principles of the Guidelines.
- Global consistency of definitions regarding the content and reusability of plastic packaging in standards needs to be established.
- The definitions and technical requirements used in standards related to recyclability, compostability and biodegradability should be accessible and reflect real world conditions.
- Businesses using the 'chasing arrows' design for claims other than recyclability should redesign these images without the arrows and be revised to reflect the updated triangular design.
- Businesses should use recyclable plastic packaging and adopt an established recycling guidance label appropriate to their geography and commit to placing it on all packages at a readable size.
- Organizations managing these labels should try to minimise consumer confusion.
- Governments need to enact policies to enforce the following of recycling guidance by consumers.

Conclusion

The report clearly highlights the gap between information provided and consumer understanding of that information. The main criticism throughout the report was that consumers mistakenly understand the label or claim to mean one thing whilst in fact it refers to something completely different. This is evident in how recycling guidelines labels often give the impression that an item is recyclable even if it is not likely to be recycled due to practical limitations. The effect is one of 'greenwashing' amplified by the fact that labels commonly use small type making them unreadable to the average consumer. However, overall, the recycling guidelines category of labels received the best reviews, whilst the biodegradability labels received mainly mixed or negative reviews. This indicates the difficulty in communicating the subtle differences between plastic compostability and biodegradability.

International Campaign to Abolish Nuclear Weapons (ICAN)

By Sofija Belajcic - HOPE researcher NSW



Main Aims

ICAN is a broad campaign stretching across multiple countries and continents and focused on mobilizing civil society to support the prohibition and elimination of nuclear weapons. It consists of non-governmental organizations in one hundred countries and its main aim is to campaign against the use of nuclear and promote adherence to and implementation of the United Nations nuclear weapon ban treaty.

Major Achievements

One major achievement of ICAN in 2020 include securing 17 ratifications totaling the 50 ratifications needed for the Treaty on the Prohibition of Nuclear Weapons to enter into force. The 24th October 2020 saw Honduras become the 50th country to ratify the treaty, allowing the treaty to enter into force on 22 January 2021. In addition, there were 6 new signatories to the treaty which were Belize, Malta, Mozambique, Niger, Sudan and Zimbabwe.

Another significant achievement was that on 7th December, the United Nations General Assembly resolution supporting the TPNW received 130 votes in favour, the most it ever received.

On the research front, the ICAN commissioned public opinion polls in late 2020 to analyse public opinion on the TPNW in NATO countries. The results show that in the 6 NATO countries -Belgium, Denmark, Iceland, Italy, the Netherlands and Spain, -chosen to take part in the opinion poll, there is high public support for the TPNW. For example, 89% of the Spanish population supports their country joining the TPNW whilst 77% of Belgians support their country joining. This illustrates that in these countries which either have nuclear weapons, host nuclear weapons or endorse nuclear weapons, public opinion is at odds with the government stance. ICAN also released its first report in decades estimating annual nuclear weapons spending -amounting to nearly \$73 billion, sparking media interest from major news outlets such as CNN and the Guardian.

Current Campaigns/Projects

To learn more about ICAN make sure to follow them on Facebook, Twitter, YouTube and Instagram. You can also sign up to receive news updates, calls to action and inspiring stories about ICAN's activities.