BEYOND SUSTAINABILITY

By 2024, it will be clear to organizations, citizens and governments, that efforts to retain conventional socio-economic norms are not compatible with sustainable models. However, businesses should already be pre-emptively thinking beyond sustainability; acting collectively to pursue regenerative models and enduring behavorial change.

It may not always seem to be the case, but the last century has brought positive humanitarian progress in many areas: extreme poverty has been reduced, some diseases such as smallpox have been eradicated and fewer people die in wars[1]. But progress has not always been to the benefit of all. The economic models that created health, wealth and prosperity in the past are not sustainable, because they have led to consumption levels that are outstripping the rate at which the planet's resources can be restored. This includes the problem of our Greenhouse Gas creation and the urgent need for decarbonization of operational processes.

To enable the transition from the polluting and damaging technologies of the past, businesses will have to develop new models and digital tools to predict their future environmental impacts. They will also need to help their customers and staff to see the benefit of embracing the required changes with more urgency.

Failure is not inevitable

There are many examples of regenerative practices that prove that unsustainable approaches can be avoided. Examples include re-wilding projects like the Masarang Foundation[2] in Indonesia and the Greening the Desert programme in Jordan[3] both of which have restored habitats and increased biodiversity. The impressive results of these programs demonstrate that it is possible to restore ecosystems and return profits and benefits to local communities.

While these examples of small-scale programmes are inspiring, they cannot by themselves make enough impact to reverse the damage caused to the planet by human development. They raise obvious questions for individuals, governments and business, including:

- How can mindsets and behaviors be changed to unite efforts at a scale that make a real difference?
- How can business ecosystems be developed that will give field workers and local communities the necessary access to experts?
- What are the technologies, tools and techniques that will enable us to achieve change?

Can technology alone solve the problem?

Is it possible to change direction without losing the progress we have already made in health, wellbeing, education and prosperity? The response to the current COVID-19 pandemic would suggest that it is possible to make rapid and significant changes, when forced to. For example, the technologies deployed to facilitate homeworking are already having a positive impact on global emissions and the carbon footprint from business travel.

[1] http://www3.weforum.org/docs/WEF_Globalization_4.0_Call_for_Engagement.pdf
[2] https://masarang.nl/en/what-we-do/reforestation/
[3] https://www.middleeasteye.net/discover/desert-green-jordanians-frontline-climate-change-turn-permaculture

Beside this, some traditionally polluting industries steps are already being taken, such as the repurposing of the La Mède oil refinery to produce biofuels and clean hydrogen[4]. Technology can be an enabler, but it is human engagement that provides the inspiration for change.

Decarbonization

In today's linear economy, there is a disproportionately small cost impact to businesses that create unsustainable CO2 emissions. In the future, economic models will be required that reward regenerative and sustainable practices, including carbon capture.

But tackling the problem globally and comprehensively will need us to think differently. We will need to change economic models, regulations and wider societal value systems. In part, this can be achieved through:

- Developing new business models which intrinsically generate lower greenhouse gas emissions.
- Virtualizing and eliminating physical operational processes through AI, automation and Digital Twin technologies.
- Encouraging adoption of industry digital platforms that support new ecosystems for sharing and collaboration, and lead to multi-sided markets for GreenTech, surplus power or heat and new energy sources such as clean hydrogen.

A new way to measure economic success

The way that businesses target success needs to be changed. For decades, profitability and economic growth have been the primary measures of economic success. But if these measures reward organizations for creating the threat of damaging Event Horizons then new tools are needed - a shift from traditional metrics that reward growth and consumption, toward those that value a regenerative culture. The Value Balancing Alliance developed a model which aims to "empower decision makers to create and protect long-term value"[5]. With financial support from the EU, over the next three years, they will develop standards to value and measure the environmental impact of companies. The more that such standards become accepted, the greater the value of regenerative cultures in both emerging and technologically advanced economies. Successful corporations will be those that actively work toward restoration of ecosystems and environments, rather than those which solely consume them: Products and services must ultimately become Regenerative by Design.

In conclusion

Digital services businesses need to take a leadership role in developing and proposing tools and models which will deliver against decarbonization targets. This will foster a new business climate that focuses on actions that help reverse the effects of climate change and overconsumption of raw materials.

By leading the shift from technologies and mindsets which have created the problem, toward those which will begin to regenerate environments and ecosystems, we will create new jobs, tackle inequality, and help restore the future for generations to come.

[4] https://cleantechnica.com/2019/07/07/total-reopens-la-mede-oil-refinery-as-biofuel-facility/
[5] www.value-balancing.com

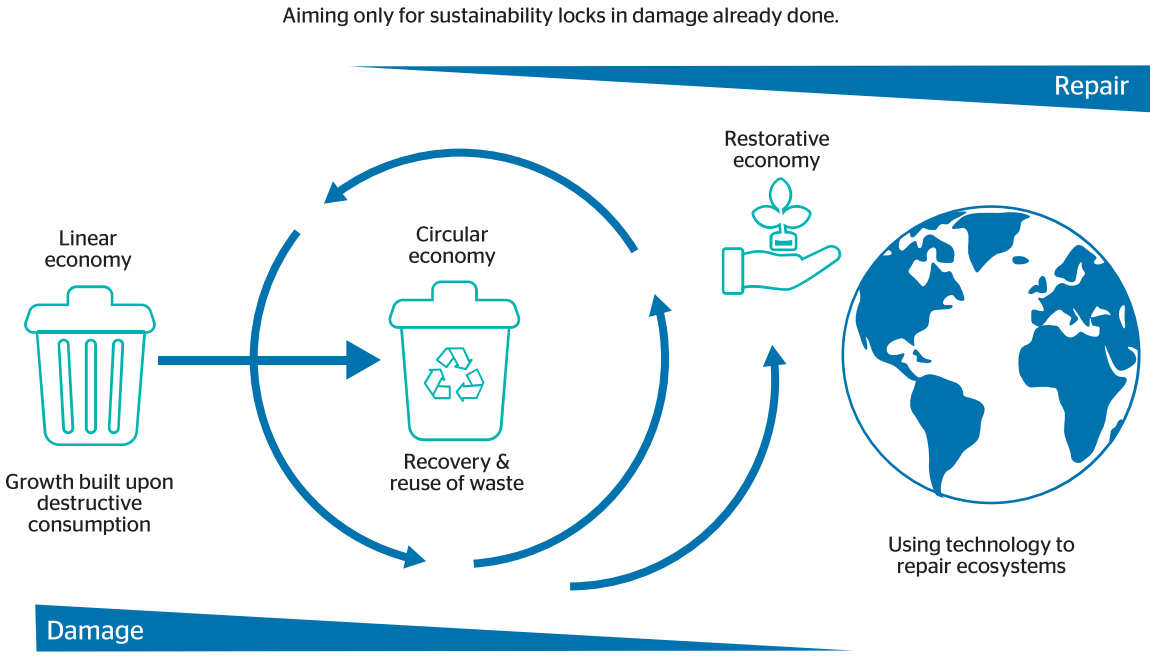

Figure 9: Moving to a restorative economy.