

IMPACT

INNOVATORS

MORE THAN A MAGAZINE

SPRING 2018

*Our world
needs answers...*

**Europe responds to
global challenges**

**Accelerators redefine
future of food**

10
years of
European
Innovation
p8.

Q&A with Marc Buckley

» Member of the Expert Network for the World Economic Forum for Innovation, Social Innovation, Climate Change, Agriculture, Food and Beverage | Innovation Special Adviser, Bayer Cares Foundation | UN SDG Advocate

Q What does 'impact innovation' mean to you?

A Impact innovations disrupt, help or solve more than a million people's problem or address a Global Grand Challenge through meaningful impact to society and markets. It means bringing exponential impact innovations to solve people and planetary problems in exponential times.

Q How important is it to align innovation and the SDGs?

A The world is moving away from linear thinking and the silo approach for solving problems. The SDGs are a systemic approach and are all tied to the basic needs of life especially those of humanity. Let us say it this way - it is harder not to align innovation with the SDGs than it is to do so. If you do not see our world from an ecocentric/ecosystem view you are stuck in a linear/silo view of the world.

This 'business as usual' model is ripe for disruption in 70+ markets of the world. Businesses that want to be around in the future need to make sure they have dynamic systems and business models, and include the SDGs as the foundation that provides the resilience to hold their business together well beyond 2030.

Q How should we tackle the SDGs?

A It's important we understand and begin to see SDGs as a component of a holistic system that will help us to transition to a resilient, sustainable future.

The goals are the largest open consultation ever held, and represent a tremendous opportunity to again make humanity aware of the Golden Rule as a guiding principle. They were agreed by 196 countries at the 2015 UN Climate Change Conference in Paris and aim to enable us to meet the goal of the conference—known as the Paris Agreement—to keep global warming below 1.5 degrees by 2030. The goals are: no poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice, and strong institutions; and partnerships for the goals.

They are often depicted in a linear poster, but that may disguise the fact that they must be achieved within the safe operating space of a resilient and stable planet. We need to transition the planet into a safe operating space. Looking at an exponentially growing problem in a linear

way may not be the best way to understand it. In the same way that Maslow's hierarchy of needs depicts our physiological needs, it is helpful to look at the SDGs in the guise of a wedding cake, as devised by Johan Rockström, Executive Director of Stockholm Resilience Centre, and Chairman of the EAT Advisory Board, and Pavan Sukhdev, Founder and CEO of Gist Advisory. The base layer is the biosphere: life on land; life below water; clean water and sanitation; and climate action. The central layer contains society: no poverty; sustainable cities and communities; peace, justice, and strong institutions; affordable and clean energy; good health and well-being; quality



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education; gender equality; and zero hunger. The top layer is the economy: decent work and economic growth; industry, innovation, and infrastructure; reduced inequalities; and responsible consumption and production. And at the pinnacle is partnership to attain the goals. This shows how all the SDGs are directly or indirectly connected to sustainable and healthy food. It is a paradigm shift to see our planet as non-negotiable, and not as a factor that limits prosperity, transformation, and success. It proves that food is a prerequisite for success. If we can succeed with food, we will succeed for all people and also for our planet.

More specifically, the wedding cake shows

how global food reform can affect the whole planet. The agriculture, food, and beverage industries are the greatest strain on natural resources and on the health and wellbeing of everyone on Earth. The majority of the food we grow first goes to feed cars, then animals, and lastly humanity. Our food is creating a pandemic of obesity, diabetes, asthma, heart, and other health problems. The fossil fuels and refrigerants we use to produce and transport these products are a bigger emitter of greenhouse gasses than the oil and gas industry, and are keeping that industry in business. The packaging for food is causing biodiversity loss in our oceans and contamination on land. Globally, 30%

of all food produced is wasted or thrown away before it is consumed. If we dispose of this waste by burying it as landfill, it comes back to bite us as methane, which is seventy times more powerful at trapping heat than carbon dioxide. Even if this waste is burned or dumped into water, the long-term results are not much better. There is a third component to this. The Paris Agreement and the SDGs are not the only things that are required to keep global warming below 1.5 degrees by 2030. An economic and financial figure was agreed as well: to invest 90 trillion USD worldwide in sustainable developments in infrastructure, including private and public energy,



SUSTAINABLE DEVELOPMENT GOALS



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transport, and water by 2030. These climate-friendly investments will pay for themselves in the medium to long-term, and will ensure that we reach our 2030 goals. This figure represents six trillion USD per year from 2015. We fell 700 billion USD short of one trillion USD in the first year, and 200 billion USD short in 2016. However, we are on track to break one trillion USD in 2017, which will still leave us 17 trillion USD behind in sustainable developments for 2018.

As well as needing to understand the SDGs properly, we need to put the 90 trillion USD by 2030 into perspective. The UN predicts that there will be 8.5 billion people on the planet by 2030; this represents a spending of about 10,500 USD per person, or 882 USD per person per month for one year. It is also important to understand the resources required to sustain one human life to a normal life expectancy in 2017. This has been calculated at 1.6 global hectares (a global hectare is an expression of ecological footprint and biocapacity). Since August 2, 2017 we have been using 2.87 global hectares per person, which represents a deficit of 1.17 global hectares per person. If we continue with business as usual, human demand on the Earth's ecosystems is projected to exceed what nature can regenerate by about 75% by 2020. Similarly, if we continue on our current path, the Global Commission on the Economy and Climate projects that the world will invest 89 trillion

USD by 2030 regardless, most of which will be spent on insurance and emergency response—essentially Band-Aids for high-carbon, climate-damaging businesses. By investing the 90 trillion USD in resilient, sustainable infrastructures and low-carbon, renewable projects, we would have an additional 14 trillion USD investment with long-term returns that will support 8.5 billion people by 2030. It's been business as usual for too long. We need to stop and reverse global warming now. Businesses that are reducing their carbon emission by 30% to 60% are still doing harm, just less harm. If you're headed in the wrong direction, you need to stop and turn around. Slowing down just means you're going slowly in the wrong direction.

Q What steps can people take to contribute to the SDGs?

A Have a voice and let social and political leaders know how you feel. Break old habits and adopt new ones with your own personal SDG adoption of the goals. Innovate within your own life to be resilient and local with how you eat and use resources. The reform is not with you but the agriculture, food and beverage producers. Currently we have little say in how they produce. We can make our voice heard and let them know they need to change their ways to sustainable production. There are many tools available to help and make this easier. It starts with a desire to change then shaping it into new positive habits.



The top three things we can do to stop and reverse global warming are:

①



Global food reform

②



Empower women and girls

③



Rethink refrigerants



Is Marc speaking near you?

- May 7-10: Seeds&Chips Milan, Italy
 - May 9: FReSH: The 4.0 Food Economy @ Seeds & Chips by AHK German Italian Chamber of Commerce Milan, Italy
 - May 16: LifeGate Food Business Bologna, Italy
 - May 24-25: Pioneers Vienna, Austria
 - May 30- June 3: Bayer Beijing Beijing, China
 - June 8: 60 years of Young, Sustainable and Quality Agriculture Giovani di Confagricoltura – ANGA Rome, Italy
 - June 11-12: EAT Foundation, EAT Stockholm Food Forum 2018 Stockholm, Sweden
 - June 19-22: Tech Open Air Berlin, Germany
- Check out www.marcbuckley.earth for more details and an updated list of events.



Bayer Foundations

WE NEED



"If you want to be a startup billionaire, you have to solve a billion people's problems"
Thimo V.Schmitt-Lord MBE, Head of Bayer Cares Foundations

We believe in the game changing power of innovation – we support pioneers who apply tech innovations to humanity's biggest challenges around health and food. In 2018 we are scouting for startups, innovators, and impact innovations particularly focused on agriculture and food production for our seed funding programs and new book 'The Beauty of Impact – Food'. We are searching for innovations that solve the food crisis and other global grand health-related challenges that we can promote and fund to bring to the rising billions in need around the world.

Seeking funding yourself for a crazy 'Innovation-4-Food' idea?
Impromptu Pitch, Seeds&Chips, May 10 from 2-4 pm @ AHK German Italian Chamber of Commerce
Pavilion Bayer Booth

The next opportunity to meet the Foundation's CEO - Thimo V. Schmitt-Lord, and UN SDG Advocate, Expert Network World Economic Forum, Open Innovation Advisor and Speaker - Marc Buckley is at
Seeds & Chips, Milan, May 7th-10th