
Disrupting
'Business
as Usual'
IRCU

Let's face it – the linear economy model (take-make-dispose) that humanity so enthusiastically subscribed to, without much questioning, since the First Industrial Revolution worked well to a certain point in history. Now, not so much anymore, though. Susanne Karcher, an integrated resource and waste minimisation specialist from EnviroSense, takes a closer look at how to turn our linear economic thinking into a more circular one for much reduced waste and increased sustainability over the long term.

LAR ECONOMY

'Linear' was good enough when there were fewer of us and natural resources were seemingly in abundant and never-ending supply. Possibly all was still fine and fairly 'sustainable' until the early 20th century.

That however changed dramatically after World War II when the 'Wirtschaftswunder' was declared in Germany and the likes of President Eisenhower declared an 'ever accelerating rate of consumption of goods and services by each and every American' as the sure-fire way to ramp up the war-torn economy. 'Consumption' was increasingly accepted as a means to the end of our existence – a measureable pillar for economic growth, to exhibit personal prosperity and as a 'fix' for instant spiritual satisfaction.

It was therefore in the interests of economic growth that things needed to be consumed, burned up, replaced and discarded, all at an ever-accelerating rate.

That was 'the growth strategy' politicians subscribed to and the global 'Joe Public' unwittingly accepted. No one really had a problem with (or was blissfully unaware of) the fact that what had become our 'business as usual' model had ugly side-effects in that it was incredibly wasteful and inefficient. As pointed first out by Paul Hawken in Natural Capitalism, a linear economy model runs on a material efficiency of only 1%. To quote Annie Leonard in the *Story of Stuff*: ' ...99% of the stuff we harvest, mine, process, transport through this system called a "Linear Economy" is trashed within six months.'

In the 21st Century, humanity increasingly faces growing evidence of severe pollution, mountains of rubbish and toxic trash on land and in oceans, plus moody climates and vanishing habitats as a direct result of this consumption frenzy. One symptom of overcompensation is the phenomenon described as 'shopping' as a 'recreational pastime' spent to buy things we don't really need, paid for with money we don't have to impress the neighbours we don't like.

Luckily, many people are waking up to this self-inflicted tragedy, and hopefully in time. This is why many agree that gentle 'adjustments' of trying to be 'less bad' and improve the efficiencies of what we do wrong in the first place does not serve us anymore by a long shot. What we need is disruption.

Disruption requires that we press the 'reset' button and re-ponder what economic growth requires to be called sustainable and equitable.

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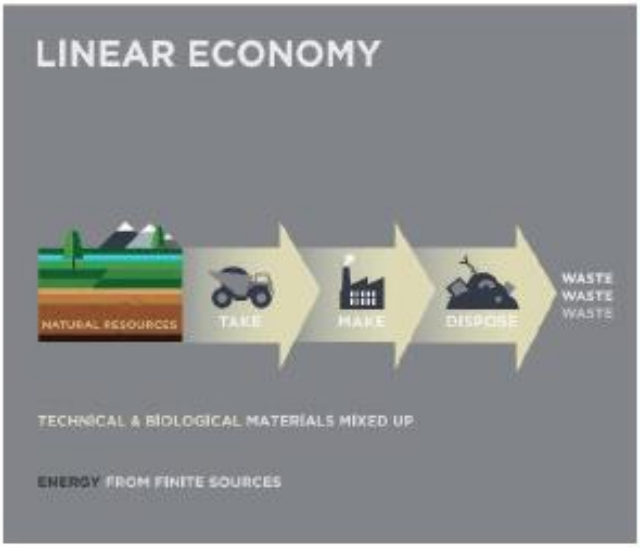
The challenge we are now faced with is to grow an economy while being able to decouple this growth systematically from rampant resource exploitation; to redesign our linear economy into a circular economy, one which not only uses less virgin resources from the outset through smarter product designs and more efficient processes, but which re-uses and recycles them, again and again, as many times as possible. The Ellen MacArthur Foundation is one organisation striving to create a movement that works with business, government and academia to build a new framework for an economy that is restorative and regenerative by design.

This promise of smarter economic growth has convinced the European Commission recently to sign off on of a strategic package worth nearly €6bn to stimulate various circular economy opportunities to boost global competitiveness and foster sustainable economic growth in Europe, all while reducing resource dependencies, waste and pollution, and still generating new jobs.

The proposed actions will contribute to 'closing the loop' of product lifecycles through greater recycling and re-use, and bring benefits for both the environment and the economy. The plans will extract the maximum value and use from all raw materials, products and waste, fostering energy savings and reducing Green House Gas emissions.

KEY ELEMENTS

Business sectors now need to turn the increasingly likely threat of their 'going extinct' in a future world of resource scarcity into an exciting challenge



in which they will have to be willing to redefine their traditional and historical 'core business'. This includes self-challenging the meaning and purpose of their very businesses and what they are able to offer in a circular economy with regards to innovative products while replacing the need to endlessly sell products through a switch to the provision of 'services'. But more on this aspect later.

So, except for a few global pockets of excellence in product and service innovation, why is it not clear to all of us that the circular economy revolution is on its way with tax reform as a key driver? To achieve the requisite reforms, two things are needed – political will and a full understanding what is required to transition from linear to circular in economic activity terms.

A successful emergence in South Africa of the circular economy requires a mix of various strategies and approaches, including, among other things, the designing of products and circulating 'nutrients' or production inputs (biological as well as the technical ones that make our consumer goods) with a maximum potential to maintain, repair, reuse and recycle in the quest for 'zero waste to landfill'.

That sounds like an obvious one, but in practice it's not. In a linear economy consumer goods from panty hoses to PCs are deliberately designed to result in fast obsolescence (whether real or perceived), made to break prematurely or 'designed for the dump'. Single use packaging is not very intelligent environmentally or otherwise.

And that needs to be challenged and changed. And it is being so, by clever people redesigning products such as smart phones (like Fairphone, Phonebloks) where parts can be replaced, broken stuff can be fixed ourselves, teaching us how to jump off that crazy mill that is effectively forcing most people to (unnecessarily for the most part) upgrade every two years.

Also required is something we could call 'servitisation', being the move away from personal ownership of a product to access to product and add-on services instead.

This one might be hard to crack and promote in emerging economy such as South Africa where many previously marginalised people aspire specifically to follow the 'American Dream' – which may be abbreviated for current purposes as 'to own lots of stuff'. So the secret is to provide stuff but keep the ownership with the provider (naturally the product manufacturer). It is not a novel idea – it's called leasing and that is how we used to get tied into a lifelong contract with a copy-machine service provider such as Xerox or used it to finance a car. But now it has been rediscovered and applied to washing machines, carpet tiles, light bulbs and even to designer jeans.

Firstly, not owning means people pay for use only. You decide: how much dirty laundry you want to wash, how long you want to wear those jeans, how much lamps you need to light up a room and how long and bright they need burn. In that way consumption is directly linked to how much we pay. The best incentive to save resources – it's in your

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interest now to carefully watch your consumption pattern.

In that way a washing machine can have many users; a much-prolonged life time and can be shared too by a community. Luxury goods that would remain unaffordable to own for many can in a circular economy be accessed by so many more (at a reduced leasing rate as equipment ages) and if it's broken it's not your problem. It will be fixed or replaced by the product maker who is now more of a 'service provider' and will ensure to keep enough technicians employed to fulfil repair and maintenance functions. And to make sure that product does not brake prematurely, it will be better designed too. It's simply a win-win-win. Less waste, better and wider access to goods, fairer pricing (only pay for what you consume) and the creation of jobs in the service industry.

The future looks bright and the likes of Philips are already communicating it to their clients that their imminent future core business is shifting that they are willing to disrupt their traditional 'business as usual' – not to sell lamps but to provide light. Similarly, Nike see themselves in the business of 'shoeing people' and Interface gives you the service of 'carpeting' according to your needs and in the form of tiles. So now you can just replace the one and send it back to them (remember they continue to own it, so they want it back to make new tiles out of it) when someone spills a glass of red wine on it.

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TAX REFORM

Another crucial step in moving towards a circular economy involves a move away from taxing services (like work labour) to the taxing of resources.

This is the third key strategy that is required to unlock circular economy to its full potential. In essence this is an 'upside down' tax reform that moves away entirely from taxing personal services (eg in form of personal income or company taxes) but links heavy taxes to the extraction (virgin minerals) and use of resources instead, thereby also enforcing the 'polluter pays principle'. Needless to say, that this will require major political will to change and replace the heart of the engine that currently pushes on with linear economic favouritism in the form of tax breaks and subsidies for bulk polluters. Sadly, prevailing tariff structures of critical resources such as electricity are provided by our parastatal to a wasteful 'bulk user' with a 'capped price'. That does, of course, nothing to motivate closing more resource loops by going 'circular'.

HEART & MINDS

For the circular economy to take full flight changing human hearts and minds might be a far bigger challenge than solving technical and logistical difficulties. We live in a society where the full environmental and social costs are not included in the price paid for utilised resources. This keeps the existing take-make-break linear economy artificially cheap and this is the challenge humanity faces now. Who will pay the interim price and provide the support with regards to unlocking finances, political and financial reforms to make this much needed transition from linear to circular?

That's a great question, and one that needs some quick thinking and smart action to get the necessary outcome into our likely and desired future. SG

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