



Safeguarding our Future: Strategies for an Aruban Circular Economy

Speech by Jane Semeleer
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On the occasion of the
4th Annual Future of Innovation Conference,
November 1, 2019

1.

INTRODUCTION

Excellencies,
Distinguished guests and speakers,
Ladies and gentlemen,

'Bon dia' and 'un caluroso bon bini' to our 4th Annual Future of Innovation Conference. Time flies! It is indeed our fourth annual conference on the future of innovation.

Recognizing that times and transformation itself are constantly changing and that the pace of change is dramatically accelerating, in 2015 the CBA started with its first conference on the future of money, followed by the future of regulation, and, subsequently, the future of digital transformation, which was held last year.

To our "repeat" participants, we deeply thank you for your continued support. To our "first-time" guests, we welcome you on board to today's journey to the future of an Aruban circular economy. We feel very privileged that you have taken time out of your busy schedule to be with us this morning. Thank you very much!

Looking at the agenda for today, we will entertain you with a diverse range of speakers with unique talents and knowledge on circular economy as an innovative route to a sustainable economy.

Our aim today is that when you leave this conference this afternoon, we want you to feel that you have been gifted with new understanding and insights on circular economy and that you are empowered to continue to contribute to the well-being of our community.

2. Two months ago, the CBA organized a symposium on fostering economic resilience for sustainable development, presenting also the results of a comprehensive study it carried out on this important theme.

In your goody bag, you will find a copy of this study titled "Fostering Economic Resilience: From Roots to Routes", in which one of the main findings and recommendations relates to acknowledging the importance of preservation and conservation of our environment.

Besides promoting solid institutional capabilities, macro-fiscal sustainability and a strong external sector, amongst others, strengthening our economic resilience crucially relies on

taking responsibility for safeguarding our socio-ecological boundaries, natural habitats, and environment. Without a well-protected nature, there is no future; definitely not for a small-island economy that fully relies on the wellbeing of its environment for economic development.

3. Permit me to briefly address four questions as we discuss the future of an Aruban circular economy:
 1. Why are responsible consumption and sustainable production important?
 2. Has Aruba gone “dough nuts”?
 3. How are Aruban organizations exploring new circular frontiers?
 4. And lastly, how do we design and lead from a circular future?

4. **CHANGING CLIMATES, RESPONSIBLE CONSUMPTION,
AND SUSTAINABLE PRODUCTION**

On the first question, it should surprise no one that climate change is a critical concern across the world and international institutions. Taking appropriate climate protection actions, and strengthening resilience and the adaptive capacity to natural disasters, are **key** to achieving SDG no.13 of the United Nations.

Monetary and financial institutions, including the IMF, emphasize the urgent consideration and integration of climate change measures into national policies and strategies. We are honored to have **Ms. Mercedes Garcia from the IMF** here today with us, who will address the role of fiscal policy and investments in a sustainable development.

The development and inclusion of climate change strategies in government policies are regretfully still missing in Aruba, especially considering the rise of global temperatures, and more importantly, the slow increase in local seawater temperature over the past five decades.

While a rise of an average 1.3 Celsius seems nothing to us, for our delicate marine ecosystem this is detrimental as corals die and marine life migrates.

Add to these adverse developments, the increasing loss of coastal vegetation and mangrove systems, the persistent beach erosion, and the surge in waste leakages and ocean acidification, you may start to understand the gravity of and the high risks associated with climate change in Aruba today, not tomorrow.

These trends and threats are currently being analyzed by the CBA and will be forthcoming in a working paper on climate change and overdevelopment. We hope to share this with you soon.

5. Ladies and gentlemen, extreme weather events are becoming more frequent and intense, with disastrous implications for small-island economies. In the Caribbean, the total impact of climate change and ecological disasters is estimated between 15% and 20% of GDP (annually); in some extreme cases, where the production capacity has been completely wiped out, more that 100% of GDP.

Closer to home, Aruba has certainly not been immune to the effects and impacts of climate change and natural disasters, such as hurricanes, storm surges, and swells.

Contrary to popular belief, while Aruba may not be at the center of the hurricane belt, it is certainly not outside of the hurricane belt, as witnessed by different 'near strikes' over the past century.

Records indicate that whereas a hurricane would graze Aruba every 70 to 80 years over the past two hundred years, since the turn of the 21st century and over the past two decades, the frequency and probability of a hit have increased remarkably to less than 10 years. Add to the foregoing the slow burn of our seas, the picture of increasing climate risks becomes clear and present.

What is of particular concern is the fact that since the early 1940s, our population and housing density has increased enormously, especially in areas and districts that are exposed to flooding, surges, and beach erosion, which, subsequently, of course increase the negative impact of climate change and extreme weather events.

This high concentration of public and private consumption and investments, including tourism infrastructure and other assets, shifts the risk exposure from low (likelihood) to higher likelihood, which requires, as you know, a different infrastructure policy and management of risks.

We welcome **Ms. Zayenne Lacle** as one of our special guests who will enlighten us on the development of sustainable architectures and circular infrastructures.

6. Beyond the economy, the adverse effects of climate change and overconsumption have a negative impact on our environment and loss of biodiversity. Ultimately, the quality and diversity of our marine and land-based ecosystems are intimately intertwined with the health and well-being of our community.

Expecting that we can simply continue exploiting our natural resources and/or ignoring the high exposure to climate risks and overpopulation, and sustain our economic development to safeguard the future, is naively dangerous.

While I am happy to note that there is an emerging awareness that we need to transform our economy and decouple economic growth from environmental exploitation, this is not enough for the realization of envisaged transformation.

For one, we need to assume our individual and collective responsibilities and take concerted and responsible actions for mitigating these negative effects and growing risks.

7. The urgent need for responsible consumption and sustainable production is, thus, not an option or a luxury of the future; it is a necessity and a “must have”, if we are to thrive in the next decades, not merely survive.

The 12th UN SDG focuses on the sustainable management and efficient use of natural resources, and on how we should reduce our waste generation through refusing, reducing, recycling, and reusing (the 4 R's).

The aim is, therefore, to shift the existing linear economy into a truly self-sustaining circular economy, in which we do not destroy our precious environment and continue to produce an estimated 150.000 tons of waste annually.

We are delighted to have **Ms. Alexandra Soezer of the UNDP** to convince all of us here that the only solution to climate change is to go circular.

8. In transitioning towards an Aruban circular economy, we need to recognize that there is a symbiotic relationship between the sustainability of our economy and the health of our ecology. If this fine balance is disrupted, systems surpass critical thresholds and tipping points, with major detrimental impacts.

From the early days of exploiting phosphate and mining gold, to the refining of oil and the exploitation of our beaches, Aruba has a long-standing history of over-extensive use of

natural resources. And it is time to stop this right now, and to reverse that trend in the most responsible way.

Previous studies indicate that while the value of Aruba's ecological services is estimated at about Afl. 500 million (on annual basis about 10% of nominal GDP), our economy "consumes" and "extracts" over Afl. 600 million in environmental resources.

In other words, we are overconsuming and overexploiting our environment at a rate of at least 1.3 times more than what our ecology is able to provide in a sustainable manner.

To elaborate on new consumer trends and behaviors, we welcome **Ms. Jharonne Martis of Refinitiv** who will share with us the emerging circular behaviors and demands of a new generation of consumers and tourists.

9. DOUGHNUTS OF DEVELOPMENT

The notion of an 'obese' economy overconsuming limited natural resources is not farfetched nor science fiction. This behavior is similar to our addiction to sugars and fatty foods, which we all know is not healthy for any living system, including our bodies and ecologies.

Ladies and gentlemen, welcome to the doughnuts of development.

10. Here I am of course referring to the well-acclaimed book by Mrs. Kate Raworth on "*Doughnut Economics; 7 ways to Think Like a 21st Century Economist*", which you received earlier this morning.

In her book, Kate writes:

"For over a century, economics has been fixated on GDP or national output, as its primary measure of progress. That fixation has been used to justify extreme inequalities of income and wealth coupled with unprecedented destruction of the living world.

For the twenty-first century a far bigger goal is needed: meeting the human rights of every person within the means of our life-giving planet."

11. In *Doughnut Economics*, Kate distinguishes between the *social foundation* and the *ecological ceiling* of a sustainable economy.

The social foundation includes everything that humans need in order to live. This includes access to clean water, food, and housing. But there's more to it than that. As humans we don't just want to simply survive; we want to **thrive**. It is in our DNA!

A full human life is about more than just having enough to eat. We also need social goods like support networks, education, inclusion, a sense of community, trust, integrity, and good governance. Absent a strong social foundation, and you end up with a "social crisis" or huge and costly shortfall.

The ecological ceiling is the ecological or natural boundary we need to respect if we also want the **earth to thrive**. If we cross this fragile boundary by overshooting our planetary or island limits, we risk environmental catastrophe, and what Ms. Greta Thunberg correctly refers to as a "climate crisis".

Ladies and gentlemen, with every country raising entry barriers, for Aruba and for us as Arubans, there is no Island B.

In Kate's book, which I highly recommend you to read and share your thoughts with us eventually, she goes on to distinguish several processes that are vital to our planet's ability to sustain human life.

These processes are threatened by ocean acidification, nitrogen and phosphorus loading, chemical pollution, freshwater depletion, land conversion, air pollution, climate change, and biodiversity loss.

Ladies and gentlemen, you would all agree with me that this sounds familiar?

Between these two rings or boundaries we find a safe and just home; "a sweet spot" defined by a regenerative and distributive economy.

Now, paradoxically enough in the case of Aruba, while we have broken some ecological ceilings, other "glass" and social ceilings remain relatively intact.

And whereas we may have achieved **growth** in terms of "physical expansion", the question is: have we really realized **development** in terms of "qualitative transformation" and community wellbeing?

While a comprehensive study of a “Doughnut Aruba” is wanting due to lack of available data and measurements, initial research by the CBA indicates that many of the social and ecological thresholds have been or are being surpassed.

Thus, one of the main challenges for Aruba is to tackle and resolve both “shortfalls” and “overshoots”.

12. So how do we safeguard our future?

How do we foster and strengthen a safe and just space or “**the sweet spot**” for Aruba? Enter the circular economy. But what is a circular economy?

No, it is not about roundabouts or going in circles with no direction or purpose. Yes, it is about waste and energy, but it is also about food production and imports, as well as infrastructure and the environment.

A review of the literature indicates that there are over 110 definitions of a circular economy. For the sake of brevity and simplicity, I will use a definition in line with the Ellen McArthur Foundation, which is as follows:

“A circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. It is a source of opportunity for government and business to improve quality of life and tackle global challenges like climate change”

The circular economy is a response to the classical linear economy of “take – make – break”, which we know all too well in Aruba. It builds forth on principles of “cradle-to-cradle” and economic industrial system design.

We welcome Mr. Kevin de Cuba of the Americas Sustainable Development Foundation, who will elaborate on his “cradle-to-cradle” work throughout Latin America and the Caribbean.

13. While traditionally we would think of a circular economy as recovering energy from incineration and recycling waste or products, the complete spectrum of a circular economy is more complex and dynamic.

At the most basic level, we identify the useful applications of materials and how we can recover energy from materials or recycle materials. This is the least sustainable option and has limited benefits, as it leaves the existing system of overconsumption relatively intact.

As we move from a less linear to a more circular economy, we start thinking about extending the lifespan of goods by means of repurposing, refurbishing, and re-using materials to design and develop new materials and products that may have a completely different use.

This is where innovation and transformation really start happening, which put us on the right road to an impactful contribution to sustainability.

Moving to the apex of a circular economy, the smarter redesign and production of products, services, and systems take center stage by reducing, rethinking, and refusing.

We can consume fewer fossil fuels or imported (produced) foods by producing our own energy and organic agriculture. Furthermore, these two can be combined to create synergistic effects.

We can also refuse to import and use certain products, such as plastics, and seek alternative options, or simply do without.

As you can imagine, the apex of the circular economy is the most sustainable with significant benefits, but it is also the most disruptive, requiring the greatest amount of change, engagement and commitment on all levels of our community.

In summary, this circular economy framework describes at least 10 R's (from R0 to R9) with different scenarios, strategies, and potential solutions for rethinking and redesigning our current economic systems, without further jeopardizing our current environment and future generations.

14. Essential to introducing and designing a circular economy is a clear and coordinated policy and regulatory framework, that provides key political directions, measures and indicators, as well as laws, for managing the transition process towards a circular economy, which is not an easy feat.

It is imperative that we closely monitor and measure processes and outcomes, in addition to securing reliable data for evidence-based policy. Without available and accessible data, no policy will perform according to expectations and norms. Thus, developing an open data platform of social, economic and environmental data is a must have if we are to safeguard our future.

The European Union uses a circular economy monitoring framework covering many of the different dimensions, including:

- Production and consumption
- Waste management
- Imports and exports of recyclable raw materials, and
- Private investments, job creation, and innovation.

To share with us his experiences in Europe, we welcome Mr. Arthur ten Wolde, founder and owner of Circular Future, an eco-preneurial organization in the Netherlands.

15. **EXPLORING NEW FRONTIERS**

By now you must be asking yourselves:

- What about Aruba?
- How are Aruban organizations applying and exploring new circular frontiers?

Recently, the CBA conducted an exploratory study of different industries and sectors on Aruba. While the results are not conclusive, they certainly provide an indication that circular innovations are happening.

Based on the current responses -and we invite you to participate in the survey if you haven't already -, at least 80% of businesses believe in the benefits of a circular economy. Nevertheless, less than 10% are actually experimenting with circular business models and technologies.

In general, the results suggest that Aruban organizations are still in a “wait and see” mode with reference to circular innovation.

Across the 10R framework of strategies, the majority of business have adopted certain circular business practices, with a strong emphasis on recycling and remanufacturing.

In terms of smarter production, less than one-third of companies are experimenting with reducing, rethinking, and refusal strategies.

16. Take a deeper dive into the results of this study, the findings reveal that there are different enablers and inhibitors that influence and shape the current state of circular innovation in Aruba. The main enablers and drivers are:
- Waste reduction and efficiency

- Environmental resource conservation
- And operational cost reduction

A small amount of businesses indicate that business productivity and revenue generation are key enablers.

As for the major inhibitors or barriers, organizations experience major challenges due to:

- Limited government support
- Lack of infrastructure and network support
- And the absence of expertise, knowledge, and required skills

Shortage of skills and resistance to change and business innovation are also mentioned as hurdles to circular innovation. It is important to underscore that transitioning towards a circular economy and adopting circular innovation is more than merely applying the newest technologies and platforms.

For true transformation to occur, significant effort and dedicated attention (and investments) are required in processes and people.

We are happy to welcome **Mr. Stephen Grell from Citibank**, who will enlighten us on the topic of banking on the circular economy, and how financial institutions play a pivotal role, as we transition and transform towards a circular economy.

17.

LEADING FROM A CIRCULAR FUTURE

How do we lead from a circular future?

Permit me to finalize my presentation with some final thoughts and conclusions.

Leading from a circular future means that the future has changed and will continue to change at an increasingly accelerating pace, which I mentioned earlier in my speech. While there is no crystal ball (yet) to predict this future, we have the opportunity and duty to create and shape this future to the best of our ability and integrity.

Ladies and gentlemen, awareness is surely a great achievement (and I am sure many of us have already reached that important stage), but being aware without taking the necessary

and appropriate actions is merely dreaming and a crime against our fragile eco-systems and future generations.

Proceeding along the path that got us here is no longer sustainable and will not suffice in safeguarding the sustainability our small-island community. I strongly believe that rather than dream about the future that might be, we collaborate and co-create the future we want for all living beings in Aruba, right here, right now.

From a policy perspective, there are ample opportunities to strengthen existing regulations and introduce new regulations. Designing a regulatory framework for circular economic development is highly recommended, and the CBA is committed to working with you on this. Likewise, regulatory enforcement for not only the conservation of natural resources, but more importantly, the protection, restoration and regeneration of our fragile ecosystems are urgently required.

There to, it is highly recommended to earmark both public and private investments for circular innovation, to execute pilot projects, and to actively source and attract international investments to help build an Aruban circular economy.

Further in-depth studies are also required to develop a more comprehensive understanding of the enablers and inhibitors of circular innovation with specific industries and sectors.

Designing 'deep dive' business cases within different lines of industry will be essential in securing the knowledge and skills for fostering circular innovation.

In light of the growing need for specialized expertise and skills, and considering the limited economies of scale, I would certainly recommend establishing a 'center of circular excellence' that would cater to the different needs of public and private sector organizations, in addition to sourcing and developing the required economies of scope.

And by the way, this does not mean a new 'physical' building in an environmentally sensitive area. We need to practice what we preach, and I believe it's time that we practice a different preach and together walk the right pathways towards safeguarding the present and future of our beloved and beautiful Aruba.

18. Distinguished guests,
Ladies and gentlemen,
In the now famous words of Winston Churchill:

“If we open a quarrel between the past and present, we shall find that we have lost the future”

I thank you for your attention!
Masha danki!

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