# Title: [New Economies Changing Cities and Regions](http://www.smartcityexpo.com/en/the-event/media-center/sessions-2017/agenda/-/agenda-actividades/-New-Economies-Changing-Cities-and-Regions-/993425)

Subject: Circular Economy

* Circular Economy

Abstract:

In a world of limited resources, new economic paradigms are needed. Business models based on circularity, such as circular supplies, resource recovery, product life extension, sharing platforms and product as a service are gaining ground. How can cities and regions get away from the ‘take, make, dispose’ model and capture the full potential of Circular Economy? How can this way of doing business turn into the new normal in the 21st century?

Speakers:

#### Roman Serdar Mendle

#### Koon Hean Cheong

#### José Maria Pique Riera

#### Christophe Ferrari

#### Oliver Juli

#### Nicolas Keutgen

Conference:

hello and welcome and welcome to the

first session on circle economy here

today at the Smart City Expo World

Congress we're very excited to be here

my name is Julia and I'm coming from the

Ellen MacArthur Foundation where I

manage our network of governments and

cities working towards circle economy

I'm very excited to be here today with

our excellent panel of speakers and

discuss with you how circle economy is

changing the economies in our region in

general our global economy is changing

the take make and dispose linear model

coupled with the growing demand for

resources and the growing population and

accelerated globalization is changing

our economy new challenges are coming

everyday challenges that we didn't know

of before and we don't really know how

to handle climate change pollution of

our soil water and air unemployment

growing inequality and growing amount of

people that feeling disfranchised from

our society today and are living in a

fear that their children will be worse

off than they are and in face of this

changing global reality often it's the

cities and the regions who are in facing

this these challenges and are forced to

think outside of the box and think how

they can leverage their local context to

unlock new value empower their citizens

create a new new car new economic models

within their regions to address these

global challenges in the local context

we're gonna hear from our speakers today

on how they leverage the circle economy

model to deal with these challenges and

create new opportunities for development

and we're gonna start with the single

city example coming from Amsterdam where

me so Janna meter which from the circle

innovation office is going to share with

us how Amsterdam uses the circle economy

to empower citizens and build a more

resilient environment in the city then

we're going to move to a regional

perspective and they have Maria canoes

from the sustainable development

sustainable development office of the

Catalonian government share with us the

work she's doing together with Alejandro

from Lombardi on the European European

project of circa economy in regions

where they use the policy toolkit from

the MacArthur Foundation to assess which

new value can be created through the

stock economy and then we're going to

open up for more global perspectives

with James Pennington from the World

Economic Forum share with us how cities

and regions are working around the world

and on circle economy innovation and you

have in your phone's the app that called

that allows you to ask questions and

vote on questions that you think are

worth asking so please submit your

questions and we're gonna be looking

forward to hear from our speakers and

from you

thank you so Dianna

this is not this is I think your

presentation

for yours that's yours maybe you want to

start no

yeah

so good morning everyone welcome today I

want to tell you a little bit more about

do you hear me Braille I want to tell

you more about our approach in Amsterdam

and how we work on the circular economy

together with our citizens so I don't

know if you have been to Amsterdam so I

always start with this slide to give you

a little bit of an and a few how our

city works and looks like Amsterdam has

only 900 thousand citizens so it's not

that a big of City but it's a very

interesting City to think about circular

economy because of this small scale we

have we are like 220 square kilometres

and have a lot of historical buildings

so this means that we have a lot of

challenges of making our cities

sustainable within the existing city

like Julia explains we are also

addressing this big global trend of

urbanization and what we see happening

is that the city of Amsterdam is

currently growing with 11,000 citizens a

year so this is a very big amount so

Amsterdam has to also build a bigger

city so next to the big challenge that

we have of making our existing city more

sustainable we are building in the next

ten years 65,000 new houses how can we

do this in a way that we still stay an

inclusive City that it's affordable for

everyone that we say that we are

remained to be an accessible city with

bikes with cars with public transport a

green city and the compact city all of

these building stones come together with

our circular economy approach so what is

our approach first we started to think

what kind of streams do we have in our

city looking at traffic but also at

waist so we made in metabolism scan what

kind of waste is entering the

and what kind of streams also water

energy mobility and what kind of streams

are leaving our city and can we even

look and find solutions to not make them

leave the city anymore the interesting

or the important parts that we find out

is that circular economy and closings

our cycles doesn't always happen at this

at the city level you really have to

find out what kind of streams are

interesting to close at the scale of the

city for what kind of streams do you

need co-creation in cooperation with the

regional level maybe even national level

or European or global level so this is

very important to find out what we did

is map all the companies that are

currently surrounded in the Amsterdam

metropolitan area and we saw that we had

two big possibilities the one was

focusing on the construction chain so

the construction sector and the other

one was focusing on the organic waste

sector so the food chain interesting

thing is for example for this for this

organic waste chain if we were able to

close this cycle or this chain in the

regional level within the next ten years

it will bring us 150 million euros of

value every year and it will bring us

700 new jobs additional jobs so this was

a very good incentive also for our

politicians and our councils to start

working on the circular economy very

important step when you start working on

a circular economy is to understand that

it is about a system change and that we

cannot continue with circular projects

within the existing system we really

should find a solution to heck this

system so we said we should repurpose

our city with existing instruments with

existing things that we are doing

see if we can redesign these systems I

will explain your in five steps what

this exactly means and how you can do

this together with your companies and

your citizens so the first one is always

start with research and valorisation

involve knowledge institutes and and

address your urban challenges and find

solutions to implement and test them in

the city so this is a great project of

the AMS Institute where we use our

domestic plastic waste and we put this

in the 3d printer and made street

furniture out of it this was a great way

to show citizens that with collecting

their waste that we can give something

back to the neighborhood we can make

playing furniture out of it but also

these great city benches other thing is

use your city as a living lab and see a

different kind of opportunities of using

living labs for example festivals we

have a very big festival business in the

Netherlands we have around 800 festivals

a year and there's like I don't know 25

million euros of money that is being

spent during these festivals so

specifiers can be really considered as

very small cities they have a great

scale to test new innovations so this is

a example of digital that's also here at

the Dutch pavilion that really had this

ambition to become 100% circular

festival within the next 10 years and

they are doing this by the similar way

like the city approaches so we as a city

can learn from them what works and what

doesn't work and see what we can

implement and scale up in the city other

thing is look at your own instruments as

a government or as a corporate we have a

very powerful tool as city governments

and that is procurement so we are

looking and how can we use this

procurement instrument we procure for

like 1 billion euros a year including

infrastructure public lighting etc and

can we use this interim instrument to

challenge new companies to challenge

these frontrunners and help them in

scaling up we have this great style of

residence program for example where we

invite startups to work for months

in-house with the municipality and if

they come up with a good circular

solution we guarantee that we buy their

solution so you really help them to

scale up and they help us because they

are able to redesign the system starting

from a clean paper

the last one is communica munich 8 and

there are the fourth ones communicate

and learn and we do that in two ways one

is sharing all the projects that we are

doing in the city in an open source

platform we call it MCM smart city calm

at this platform every citizen every

company even also you if you're not

living in Amsterdam are invited to share

your innovations your projects and also

respond or ask questions about the

projects that are published on the

website it's an open-source website

where we really want to exchange what we

are doing with as many people as

possible other thing is urban living

labs like explains you should use your

city as a living lab but what does this

exactly mean and can we also extract

generic lessons from these living labs

so we always monitor and and implement

smart learning when we stimulate these

living labs because if you don't do that

then you will never be able to scale it

up afterwards and the last one I think

the the nicest one is have fun and play

in your city and what I mean with that

is with circular economy we focus a lot

on the negative aspects or with

sustainability so we should we have a

co2 problem or we have too much waste

and all the challenges that I also hear

a lot here when I talk to people but you

should also focus on the positive

impacts in the and the all the energy

and positivity that comes out of it and

when you meet people in your city that

have great ideas and feel this energy

inside them and and and involve them in

your thinking processes so this is an

example of how we started in urban area

development plan very invited all the

stakeholders to play the city and they

were all using the serious game

instruments to start to understand each

other and to get on the same level with

each other thank you so this is actually

my first time that I managed to present

within the time frame so I'm very proud

and if you have questions please send in

the app thank you

[Applause]

good morning everyone first of all I

would like to thank the organization and

the Catalonia region for roasting me and

the region that I represent here

Lombardy region the region of Milan

crossing me in this interesting and very

important meeting my name is Alessandro

d'arco

I'm a public officer in Nam body region

and I'm the project manager of the CSF

project I will share this presentation

with Maria thanks to be here and to host

for inviting me and Catalonia region is

a partner of the sister project and

Maria is a head of the sustainable

development unit here in Catalonia

region so Thea's a project we have

different kind of pronunciation for the

acronym of this project and you can

easily understand from the name it's a

project about circular economy and the

aim of the project involves sorry

the pros are que thank you very much

the project involves a different

European partners quite well distributed

in Europe as you can see from the map if

you can understand that this is a map

because it's not well done but ok it's

the map on our flyer we have a four

region number the region Catalonia Louis

laser in Poland then we have Eau de

France in the northern part of France we

have the municipality of the London

municipality and the sofa municipality

in the project and then Slovenia and

Holland in the Netherlands the first

objective of the project is of course to

try to make our economies in specific

sector in our region in our areas more

circular tried to make our economies

less linear but this is a very huge and

difficult effort of course in particular

in a nutshell what we are trying to do

is to find in our economy gaps in

circularity and we call these gaps

opportunities and then we are trying to

understand why we have these gaps

in other terms what hampered the

development Indian escapes of circular

economy and we call this why this reason

berries and then we are trying to

understand why can we overcome this

berries and so what can be the policy

solution we can find and we call this

policy solution policy options so then

we and in the end of the project we will

collect all these option this policy

option in an in an action plan one for

each partner in order to steer our

economies the world's economy and then

let's sorry

let's check the sector go back sorry

it's not okay

we are working on several sector but

here we would like to focus just on one

sector the textile sector that is a

sector that we share in terms of

interest with Catalonia and so let's go

quite quite fast to see some of the good

practices we have identified okay just

few words on this slide the textile

sector is quite complex because you can

have two different kind of branches in

the sector one is for the business to

consumer and the other one is for the

business to business so perhaps the

opportunities and the bearings and also

the good practices we can find during

our activities could be very really

different from considering the two

different branches of the sector and

then let's go ahead to the good

practices that is the that are the first

step of our project before finding the

real opportunities and I will just like

to propose you three good practices we

found in long body so far most

interesting perhaps and then leave the

floor to Maria for the Catalan best

practices the first one is a good

practices done by a company that has a

company providing technical services for

the nylon socks recycling sector and

they have a very ambitious goal they

would like to reach the 95 percent of

recycling of the raw material it within

a reasonable time and now they are

working on in this direction they are

quite clever and they are succeeding in

there

the other one is Chandra khat another

company who is providing an support in

terms of results and development for all

the textile sector in our region and

they are providing along all the value

chain this kind of support both for

innovation and circularity and the last

one is a virtual market platform that is

now under development almost finished I

can say concerning a visual market means

a place on the web where every company

can put the waste they have they have in

order to make them available for other

companies that then that can exploit

them for their business so this three

example very simple but I think very

effective and concrete now let's see

what Catalonia is doing at what

Catalonia found so far I hand you over

to Mira for her presentation thank you

Andrew I will very shortly go through

three best practices we have found in

the textile in Catalonia just to to show

different kind of opportunities and

different kind of businesses the first

one is from mango a very important

fashion manufacturer and retailer which

is promoting very strongly the use of

site of sustainable fiber into its

committed collection and also in other

lines and it has a very ambitious target

to reach a 50% of sustainable cotton by

2020 to the next best practices its

Phila to reserve now which is also an

important fiber manufacturer which is

built it my two factors pet recycle

fiber coming from waste management plant

and ocean waste and also recycled wood

line and cotton coming from yarn

recycling plants and they have the goal

to reach a hundred percent production

coming from recycled sources and finally

a very important institution from the

sauce

your point of view it's a cooperative

with worker and the risk of explosion

that collect second-hand clothes and in

order to reuse or recycle them

so after analyzing the best practices of

all the regions from the project and

also we have done a benchmark all over

Europe we realize that there are plenty

of opportunity in the textile those

opportunity cover all the kind of

topology define at the resort

methodology developed by del McArthur

foundation as Julia mentioned but if we

if we want to - if we focus into the

industrial businesses we can say that

the two opportunities that has more

possibilities in the short and medium

term and are those related to optimize

and loop mainly because their

environmental impact is higher regarding

the result of waste already reduction of

resource consumption the barriers are

low or moderate the level of investment

is moderate and it can be well

integrated into the paradigm of those

kind of industries and the replicability

is also high nevertheless if we want to

pro

now if we want to promote disruptive

change of the of the textile sector we

should not stay only in the optimized

and loop opportunities we should go all

over all the different type of

topologies of all opportunities we

should involve all the actors of the

value chains and finally we should

address also new processes to consider

resources and waste coming from other

sectors and other industries so beside

the fact that as most of the interacts

the most important goal the aim of the

project is to influence the European

Regional Development found already with

the work that we are doing we have been

able to influence different kind of

policy instruments developed by the

different regions first of all we can

say that thanks to theory we could

refine the London circular economy

roadmap both Lombardi and Lower Silesia

are working in their overall strategy on

circular economy and also thanks to Sir

key the city has fits a very strategic

project that we have in Catalonia which

is an observatory on circular economy

that has the aim to be civilized and

give currents of all the all the efforts

that plenty of institution and

stakeholders of our country are making

in favour of circular economy we will

present Observatory tomorrow in our

stand so just to finish as we have seen

also in the previous presentation local

and regional government we have plenty

of opportunities which we can catalyze

big changes regarding circularity mainly

thanks to our competences and especially

after carrying out a deep analysis on

opportunities barriers of material flow

but for that in order to profit of the

take advantage of our potential

shall we should keep a strong

collaboration coordination and coherence

collaboration between the different

level of government in order to be able

to scale up a demonstrative project all

across the log the territory

coordination between the different

stakeholders in order to promote strong

public/private partnership and coherence

among policies and roadmaps along the

whole territory and in a regional or

European level as you can see in the

silca project we cover the three aspects

not only between the different partner

but also in a domestic framework in

south inside our regional and our in our

local administration thank you very much

[Applause]

hello everyone

pleasure to be here today and thank you

very much to my fellow panelists has

been a very interesting set of

presentations so far my name is James

Pennington from the World Economic Forum

and I'm responsible for the work that we

do on circular economy in emerging

markets so I'm gonna give a bit of a

different perspective I guess one

because I don't work for a city or

region we're a global organization

quite well known for an event we have

every January in Davos but we also have

a number of other projects and also

because I'm going to give a slightly

different perspective with a bit of a

focus on what's happening in emerging

markets particularly in China and in

Africa so I just I just want to set the

scene from a global perspective when you

look at the real macro perspective

there's lots of reasons why we need to

change to a circular economy but I think

this is probably the most compelling so

as you can see in the last decade or so

we've been using more materials per unit

of GDP growth so we're really going in

completely the wrong direction if we

want to have a more circular economy we

need to be growing the economy and using

less materials as we do it and that just

isn't happening at the moment so we need

a big change just in this presentation

some of the messages that I want to get

across hopefully they'll come across

firstly this isn't marginal this is a

big deal we're talking about big numbers

here and big opportunities second this

is not a European only story a number of

other countries such as China have had

circular economy laws going back to the

early 2000s maybe before even some apart

from maybe the most progressive cities

such as Amsterdam were maybe thinking

about it but other cities won also this

doesn't look the same everywhere it's

really playing out very differently in

different countries depending on things

like the stage of development the policy

environment etc and also this isn't

always easy there's a lot of there's a

lot of potential disruption there's a

lot of need for collaboration across

different sectors and dialogue and

understanding and new ways of

policymaking and implementing some of

these strategies so first I want to talk

about China and I'm gonna focus on the

sharing economy because in Chinese

cities this is a really big opportunity

and it's

it's growing quite fast so just in

perspective when we talk about big

cities and Saddam we heard who has the

population of 800,000 in China there are

over 160 cities with a population over 1

million and many which have populations

over 20 million so just huge numbers of

people living in two cities 300 million

people have moved into cities over the

last couple of decades and also here's a

statistic which I just is fairly

unbelievable but in 2016 20% of global

GDP growth came from agloe growth in

Chinese consumption so we're just

talking about a huge huge number and we

really need to think and in China the

government is working very hard to think

about different ways of consuming now

one of these is the sharing economy

which as you can see here is predicted

to grow by 40 percent over the next few

years one of the best-known companies in

China in the sharing economy is didi it

may not be a household name here but

it's very similar to Oba and how it

works it's a ride-sharing company but

it's twice the size of uber in terms of

the rides it takes every day and I think

what's interesting about this and where

this comes to the circular economy is if

you look at the number of two million so

two million passengers a day are

carpooling with didi so that's two

people going in the same direction

sharing a sharing a ride so if you have

one taxi with one person in it you

automatically have the spare capacity of

the three extra seats in your taxi and

putting one person in it can be it make

a huge difference so MIT did a study

where they they found that 80% of all

journeys in most cities could be pulled

in this way and that could that could

reduce trips by 40% so as we go forward

and Deedee's looking at this redesigning

cars for sharing as we move to

electrification moved to self-driving

cars pooling of rides could be quite a

major shift for the transportation

system and moving towards say pooled

mini buses we could see traffic levels

dropped by up to 70 or 80 percent

according to some studies here's another

interesting model coming out of China so

these are Dhokla spikes enabled by the

IOT and mobile payments o fo and mobike

are the two biggest companies like this

so just to put this in perspective China

used to be famous for people riding

bikes in this

around 70% of all journeys were taken by

bicycle but that went down to nearly

zero over the last few years but now in

just the last year or so it's back up to

11% and what people do is they scan

these bikes they cycle them then they

leave them wherever they want and they

lock them up and there's been recorded

by Sinopec a 7% drop in the amount of

fuel consumed in Beijing but it's

because of these these bikes is what's

thought and there's a need for them in

China because also there's some legacy

problems with urban planning there's no

real the infrastructure hubs aren't as

strong so there's a big last mile

transport problem and also interestingly

government's starting to partner with

these companies to use the data to

improve urban planning going forward as

well this is another study we did for

the Chinese government with air B&B; so

in this study we looked at the effect of

home sharing around large sporting

events and found that in partnership

with the Rio municipality in during the

Olympics Airbnb created the equivalent

of 257 average sized Hilton hotels so

there's again this is not marginal this

is quite big numbers and normally I mean

if anyone was in cities after the

Olympics there's often a lot of spare

capacity hotels that are built which

aren't necessarily used afterwards so

this was quite an interesting finding

however as I said it's not always easy

and with the sharing economy this is

such a big such a big part of the

economy there's often backlash as well

so really I think to make this work

there's people have very very real

concerns whether that's labor rights

whether that's house prices or whether

that's just simply too many bikes on the

street and now often in China with

millions of these bikes on the street

you'll see them piled up all over the

place so there's a real need here for a

better policy dialogue for a better way

for these platform companies to work

with policy makers and see more of the

productive partnerships like in like

during the Rio Olympics there may be

some of the less productive partnerships

that we've we've seen elsewhere as well

I also just want to speak briefly about

some of the work we do in Africa as well

so there in across the continent just to

give some macro numbers as well the

middle class growth is predicted to be

123 million today will reach 100 at 1.1

billion by 2060

according to the AF DB and the

population urban areas is predicted to

grow from 36% in 2010 to 50% by 2030

so also we see a huge huge urbanization

trend and often a lot of these cities

aren't necessarily ready for that kind

of influx of population in from

everything from energy to waste

management to all of these different

areas so there's a there's a strong

drive for the circular economy in Africa

at the moment in fact we've seen a lot

of leadership from a number of companies

and as a plug for some World Economic

Forum work we have a meeting on Thursday

in Bonn which will launch the African

circular economy Alliance which is

headed by the ministers of Environment

from Rwanda South Africa and Nigeria as

well and there's a there's a really

strong momentum there in terms of moving

this forward as a key agenda in Africa

just to give one example we're working

on lot of projects with electronic waste

and I think this is just quite

emblematic of many of the issues that

are being faced in Africa so not many

people will think this but Africa's will

produce more waste than Europe in 2018

and a lot of that at the moment is just

going straight into the informal sector

there's really one or two formal

recycling facilities on the whole

continent and this has a huge impact on

human health you can see here some one

recycling a lead acid battery and this

is very much the standard procedure

manual dismantlement in very small

artisanal businesses with very with

minimal safety requirements so this is

causing a major problem to human health

but at the same time electronic waste

and many other waste streams as well

represent a huge opportunity so as you

can see 70 70 mobile phones is the same

quantity of gold as one tonne of gold

ore and the total value of this is

estimated around 50 billion per year so

really to move the move this forward

there's a need for a massive investment

in formal recycling and to do that you

need huge alignment between different

stakeholders so we've been working with

the Nigerian government on a project on

extended producer responsibility which

is when a small subsidy from the sale of

electronic goods substitute subsidizes

the recycling of electronic goods and to

make this work you really need to have

buying at the ministerial level you need

to have the companies involved you need

to have local producers local academics

and really

a strong coalition around this and also

the multinational companies as well

because as with circular economy which

hopefully will have more time for the

discussion in the panel a lot of this

really starts at the design level and

what goes into the products in the first

place and that can't be ignored so for

the for the World Economic Forum what

we're doing about this we've created the

platform for accelerating the circular

economy

it's co-chaired by the organization's

you'll see on here and what it is is a

one stage it's a networking organization

which really brings together at the

leadership level all of the major

stakeholders from public private and

international organizations and then

it's a project accelerator which works

in countries to bring forward

high-impact projects so we worked with

the Chinese government on their sharing

economy policy we're also working in

Nigeria and in Rwanda on electronic

waste and on another or other issues as

well which I'm Happold to happy to go

into and so here is a list of all of the

members of the platform so far we meet

once a year at Davos so one of the

benefits of this is it's it's really at

the CEO and leadership level which means

that all once there's been a decision

made there a lot of these organizations

a lot of the government's really sort of

come into line and get something moving

and I think also just looking at the

list of some of the companies here of

some of the government's here of some of

the organizations you can also see as I

said at the beginning this isn't

marginal all of these people are really

paying attention to this and looking at

how we can move this forward together

and happy to answer any questions about

this and speak about how other companies

and organizations and governments can be

involved thank you very much

[Applause]

thank you really inspiring presentations

and I missed each time how much we have

to learn from your experience working

with this everyday I'm sure we all have

lots of questions but I'm gonna start

and then open up to the floor so Jenna

so Jenna my first question would be to

you you meant you finished your talk on

this like very positive and energetic

impact of the circle economy in the city

could you share with us some of the

examples of how you already see the surf

economy positive impact on city and life

in Amsterdam I think I have a great

example I think the best way to involve

your citizens is to provide them with

tools and instruments that they can use

but also to think about incentives to

really stimulate them to be part of this

transition a great example in Amsterdam

is called wasted and there are we

invented we started a project where we

invited all the citizens in the

neighborhood to collect their plastic

waste as you saw at the 3d printing

example but the moment they brought the

waste to the to the hub they got a coin

in reward back for it I think we have

these similar projects also in other

cities maybe also in your city but that

is very interesting because suddenly

these citizens got an incentive to be to

bring this waste and because they got to

be this coin discount in their

supermarkets and in their cafes and

restaurants in the neighborhood so it

was also helping the local economy at

the same time so this is a very good

example where you can have this

win-win-win situation

that can I add something extra difficult

part became when suddenly people started

to steal plastic waste from each other

so it even got to extreme so then you

have different kind of regulation

because you cannot enter a hotel lobby

and collect their all the plastic waste

that they just suddenly unpacked

mattresses or something so that was

happening but that is very positive

because people really started to see

waste as a resource and I think that is

what we want to achieve thank you thanks

it's really interesting Alejandra and

Miriam you told this like amazing story

of all these regions coming together and

working on the syrup economy what is

next what what is the next step for this

project next the next steps are further

for the moment to complement with more

opportunities and more barriers and to

do it for all the sectors you have seen

on the slides and then the time would be

to pre arise the opportunities in order

to be able to characterize each sector

not four in each region but in the whole

Europe and afterwards to identify

policies in order to overcome barriers

and to hamper the opportunity to find

and finally and as we mentioned the

point is to develop an ambitious roadmap

in order to scale up policies all across

the regions and across Europe and it's

important for us also to mention that we

have been using at the beginning the

methodology of the toolkit for policy

makers which has been developed by the

Lima Castle Foundation which allows you

to quantify benefits of the circular

economy policies but also during the

project we are thinking on complementing

this methodology and adapting to all the

different kind of situations our level

of government so we think this could be

also an important result of the project

I want one thing more one more thing

okay we are we you we use the tool of

the Ellen MacArthur Foundation at what

is important to emphasize in terms of

collaboration among region is that the

methodology we decide to develop

foresees a kind of cross regional

analysis once we have detected well once

we have mapped all the best practices

and all the opportunities in the

different region regions or areas we are

going to do a kind of exchange of

experiences and kind of cross to see if

something that is known well known for

me it's not it's not known from another

region or in another area and so finding

other gaps in another region that

perhaps is not to get for me in long

body but here in Catalonia is a gap so

we produce a kind of adapted to love for

our project helped by our technical

Milano and the CNF that is this national

research center of cross regional

analysis among partners all right thank

you and then James you have talked about

so many things that happening in the

circle economy around the world really

inspiring

what are they friends going forward what

can we keep our eyes open for in the

next couple of years yeah thanks so as I

said I think that the effect the sharing

economy has is going to be massive

especially in China

I mean it's being pushed by the

government hugely there also there's a

lot of innovation and startups around

this so in China if you go to a

basketball court you can rent a

basketball for for 20 minutes for 30

minutes to play basketball if you go to

a mall you can rent an umbrella for five

cents for an hour or something if it's

raining and this is going into every

product category I think also speaking

about China one of the big things is

around ecommerce like I said 20 percent

of global growth

comes from Chinese consumption and a

huge amount of that is online commerce

as well and actually some of the

companies are getting smart too these

circular economy approaches so teeth on

which is a Cool J decom which is one of

the one of the biggest e-commerce firms

after Alibaba they are now starting to

do a service where they'll pick up the

packaging so after they send it to you

they'll come back again and they'll have

a reverse logistics system to pick up

all of the packaging also companies like

Huawei and working with ding dong to

pick up the old phones as well and bring

them back for recycling so actually this

logistics network which is going one way

I think we're starting to see that

playing the other way in China I've but

I think that hasn't necessarily happened

here but maybe someone is to speak to

Amazon about what they can do on those

on those kind of things I mean also just

one more point on the the global aspects

of this I think that it's so important

obviously to look at this from a cities

and regions perspective and see what you

could do within the cities and region if

we're talking about moving to a circular

economy in general we have a global

economy we have global value chains we

have products that come from you know

that have made in China or designed in

the US and then sold in Europe or sold

elsewhere and there does need to be this

link between them so the project we're

working on around a waist we're working

with a series of global manufacturers

who are interested in really helping in

this topic HP Philips Dell Microsoft

companies that are really leading the

way and what it means to be a circular

company and and really care about the

end but they're also thinking about the

design of their products they're also

thinking about the business models we're

also working in China with a number of

number of companies about how they can

have more recycled content into their

products in the first place as well

because that's where products are

manufactured so I think and you know

Ellen MacArthur Foundation does this and

all of their products projects and all

of their thinking as well having that

global perspective even if it's seen as

a regional issue is very important thank

you for that and now after we discussed

all the great opportunities and we have

a challenging question coming from the

audience and that's asking you what are

the challenges of the Scirocco economy

at the moment

well wants to take it first vagina

what I found most challenging Amsterdam

because we are doing now this program

for one half year and some of the

concepts and business models are now

being tested and you want to scale up

but the difficult part is that at this

moment the technological innovations are

developing so quickly that if we now

make some decisions in scaling up how do

we prevent ourselves that will lock

ourselves in and that in five or seven

years the technology is developed so far

that we can maybe even think about more

high value solutions to give you an

example where this is now a big

discussion we are building an area in

the north part of Amsterdam where we

want to implement new type of sanitation

where we can extract more nutrients and

and also energy we can make energy out

of our wastewater so we want to build a

bio refinery in this neighborhood so

that we can give gas back to the

neighborhood but the technologies which

nutrient recovery is developing very

quickly so this means that we can maybe

even think in five or seven years of

much more high value solutions but at

the same time you are now making

decisions for infrastructure under the

ground and even thinking about can be

tested now and five hundred households

but maybe skill up to five thousand etc

but are we should we really do it or is

it maybe not the right moment and should

we have these more options because we

already locked ourselves one time before

in in depth with our incineration

companies we built these incineration

plants in Amsterdam a few years ago but

with the idea we should incinerate waste

and we make energy out of it so that

sounds like a good solution but now we

want to become a circular City

incinerating waste is not that of high

value but we have this these plants in

the

in the city and they have to continue

incinerating because of the business

model that has been calculated once they

have to continue doing that for the next

ten years so at this moment we are

importing waste from the UK and from

Italy to continue incinerating but that

is that is not also not a good message

to our citizens as well so we are very

much searching like what kind of

decisions can you make for scaling up

but to prevent yourself from locking in

and how can we approach this temporary

and flexibility also in our urban plans

and urban development so long answer but

but a good one my answer will be shorter

of course we have a lot of challenges in

my region but we have a lot of best

practices as well so we are quite

beatriz in some activities concerning

circular economy waste management and

and so on but so the first the main

challenge a challenge we have I think is

the lack of strategy the roadmap I don't

know how to call it but in order to tune

and to reduce the effort we have to do

to do to have a step ahead in the

circularity so we really need a common

strategy an overall strategy that can

act on all these sectors and all the

also the social reality of our region so

this is our first challenge I think I

couldn't find both answers and I would

say that scalability is the key point

now to go from innovative really great

the positive projects to to replicate

all over the sector's all over the

territory that's the key point and also

one of the the barriers are the core

coherent maybe having a cross-cutting

strategy it helps it helps to put more

currents in the especially in the

different policies because

sometimes economical policies or

regulation are not aligned with circular

economy model and we have some currents

in our same government or in different

level of Gorgo of government so we

should not work on our own policy from

our own perspective sectoral perspective

but try to introduce your clarity in all

the sectoral policies in each government

thank you yeah I think I definitely

agree with all of the points and I think

especially on the point about scale as

well so I think this there's a real need

to scale just thinking about some of the

contexts that I was speaking about

particularly in some of the countries we

work in in Africa so talking Nigeria

Rwanda some of these places there's a

need for huge huge investment a huge

investment in recycling infrastructure

and you know this and I get there as

well there's a need for the right policy

environment where people feel they can

invest and also to get there you need a

lot of people to act together at the

same time so you need like really mass

coordination of different stakeholders I

think and another collaboration across

these different stakeholders to really

get there I mean I would say that

working in the World Economic Forum but

I do believe that's the case I think so

so investment is one policy is the other

one I mean looking at some of the work

in China there's there's a number of

different policy measures which could be

taken which would incentivize say more

recycled material in products and it's

not always easy and it's and you know

you have to have a dialogue and

understand why certain rules are in

place from policy makers point of view

and why that would also how that could

incentivize companies to do that we had

to have this dialogue and I'm really

work out the right regulatory system and

I think in a lot of countries policy

makers apart from obviously people we

have we have here of course haven't

necessarily been thinking from a

circular perspective for say in the last

30 40 years making some of these these

policies and wastes is also often seen

as waste and something to sort of get

rid of in any any extent and not

necessarily of something which can be a

resource going back into

economy so changing those mindsets are

quite important and then as I mentioned

before as well design issues especially

when you're looking at emerging markets

I mean things like certain materials

such as I don't know sachets for a hair

pair shampoo is something like this or

some of these small format projects the

Ellen MacArthur Foundation new plastics

economy which we we were involved in for

a number of years has looked into this

which are exported to countries without

a functioning waste system are basically

never going to be recycled and probably

never going to even be captured they

have no value that probably end up

they'll probably end up in the ocean at

some point so you know there's there's

certain things when we're when companies

are exported to certain countries need

to think about some of the design of

some of these products as well and what

the countries can manage with and then

you need to have the investment in those

countries as well to have the

infrastructure to deal with some of

their center to capture some of the

value okay thank you any questions from

the audience I think we have time for

one or two questions no all right well

then I think we can maybe ask some of

you just somewhere closing remarks

closing comments what are the next

things you would like to communicate

from encourage people to go forward and

start working on the circular economy

I think it I really believe circular

economy and it's this transition can

also bring a lot of fun and inspiration

and what I see happening a lot in

Amsterdam is when I organize sessions

that very different sectors have similar

challenges and but that they never met

each other and never have been sitting

at the same table I think it is very

interesting to also look behind your

existing behind your the sector that you

are working on and see what you can

learn from other sectors and that can

inspire you to implement it there as

well and other thing is that citizens

have a great energy and a great power if

you if you facilitate them and give them

the right tools and instruments to be

part of the circular economy I think a

lot of what should happen is a cultural

change and I think what we definitely

never forget is to involve our users our

citizens in this transition so that is

definitely my advice otherwise you can

develop a lot of plans top-down but no

one will feel anything

for these plans and it will just fade

away so that's my advice it's not an

easy idea to express in English for me

but I will try sometimes circular

economy seems to be a kind of slogan

that we put on old policies in

particular in European Union policies

that are still alive since the 90s or

the early know 20 years ago but what we

understood and we have to understand I

think everyone here notice is - is that

this new slogan can really help you to

understand that there is something

different from before now today because

this new slogan can stimulate you to

understand that you have to you are

obliged to run an overall approach to

your actions in the different sectors in

a certain in terms of social actions and

economic action so you need to try to

merge all the effort you did in the past

in a common strategy that we are lucky

now in my region for instance but ok so

this is the added value of a common name

for perhaps a group of all the policies

for extreme a certain kind of from a

certain point of view no no I don't know

if I'm clear but ok thank you I would

like to just to point out that there are

plenty of best practices all over the

wall so we should take advantage of

those best practices not to reinvent the

wheel and then to scale up and learn one

from each other try to share information

resources products everything and put it

together and try to that everybody walks

in the same direction maybe through

coherent and cross-cutting strategies or

whatever or like in event like that but

try to move everybody in the same

direction thank you yeah I think it's

sort of like some of the last messages I

think one of the things which I wanted

to get across in the presentation as

well is when thinking about the spare

the circular economy is to really think

about the whole picture and where you

have spare capacity where you can use

spare capacity and you know and just

with some of the China examples you can

see in a country where there's very

dense cities there's a lot of spare

capacity and a lot of that can then be

used and bridged by different

technologies as well and I just want to

I just I heard a really interesting

thing the other day which I just I

wanted to put in the presentation but I

didn't I knew I didn't have time but um

so there's a company electric car

company in China and a number of solar

power companies

southern China as well and they're

working on prototypes and what they'll

do is so as China was responsible for

buying 45% of electric cars last year so

globally it's gonna be a huge market

there it also is responsible for about

the same percentage of renewable energy

coming on the grid but with renewable

energy you need storage right you need

batteries you need something so you can

so when there's not much Sun you can

then use the energy from the batteries

rather than from the renewable energy

and interestingly a company is working

with solar manufacturers to to take the

energy from solar powers into all of

their cars over a whole city and then

when the energy is needed to then bring

that out back to the grid so you start

seeing this huge technology enabled

network of renewable energy and using

the spare capacity in people's cars to

then power the grid at times when

there's less renewable energy so I just

think ideas like this are just

incredibly interesting and incredibly

cool and it's a good idea of someone

seeing an opportunity of some spare

capacity or something isn't being used

and then potentially really transforming

a whole system from just taking that

small piece of a small piece of spare

capacity that people hadn't noticed

before yeah thank you I think we got

some really great advice and if I can

even try to summarize this very rich

discussion then I would say that

approaching the challenges and viewing

them as opportunities and design

solutions that fit for purpose and for

the entire system but are relevant in

the local context with a global

perspective that is that is the way to

go and then build a coalition of people

around you that can support and

collaborate all together and engage the

global value chain to allow scalability

and spread of these ideas beyond the

local context thank you very much for

this really interesting discussion I

hope you enjoy that and I'm looking

forward for the rest of the sessions

today

[Applause]

you