# Title: Boosting Collaborative, Sharing and Circular Cities

Subject: Circular Economy

* Circular Economy

Abstract:

The rise of the collaborative economy brings significant opportunities to cities as it boosts a sharing ecosystem, often with a circular vision to preserve natural capital. Yet there are a number of aspects of this new way of delivering services that conflict with existing industries, consumers and contradict existing laws. What principles should be adopted to become sharing and circular cities and foster a new urban economy favoring innovation and social inclusion?

Speakers:

#### James Pennington

#### Sladjana Mijatović

#### Felipe Urbano de Saleta

#### Álvaro Porro Gonzalez

#### Clémentine Malgras

Conference:

good afternoon everyone and welcome to

our final session of day Ron at Congress

now before we start the session I just

want to say if you do want a translator

headset it's currently being all our

sessions being translated in Spanish

Chinese and English and you can just

collect them if you go out of the main

auditorium and turn right and for this

session as well we're also going to have

a sign translation up on the far screen

to the left there so this plenary

session is called boosting collaborative

sharing and circular cities and we're

going to hear from a series of speakers

who'll be talking about the benefits of

adopting a circular economy

how can circular adopters change

outdated ways of thinking and

manufacturing so to chair this session

I'm delighted to announce that we have

James Pennington here James works on the

World Economic Forum circular economy

initiative looking at policy engagements

and merging markets with a key focus on

a China and Africa prior to the forum

James worked for a london-based

think-tank and consulted for the British

Foreign and Commonwealth Office so

please give a very warm welcome to James

Pennington thank you very much thank you

for that introduction and

so I welcome the speakers to the stage

and I'll just give a quick overview of

the topic and maybe set a little bit

what we're going to speak about today

and some of the questions and some of

the challenges they want to give to the

speakers and the audience I just want to

remind you all as well that if you want

to ask questions it's all done through

the app so the asking vote app just go

to this address here smart cities Expo

com ask and vote and put some questions

in and start asking questions now

because the more questions the better

and we'll have a much richer

conversation if we have questions from

the audience so the circular sharing

collaborative economy is quite a broad

set of set of terms we're talking about

today and I really want to unpack that

in the conversation but just to talk a

little bit about some of the background

and what we're facing here and some of

the trends which are really leading that

with why we need to think about this in

cities so firstly I resource constraints

we're extracting huge amounts of

resources the in in 1970 we extracted 22

billion tons per year of resources in

2010 this reached 70 billion and then by

2030 this will reach a hundred billion

so a really a massive X a massive

massive rise in the amount of things

we're digging up out the ground and also

what's more we're actually using more

resources per unit of economic growth

than we did do in the past as well so

we're going in the wrong direction in

terms of resource use so we need to

start thinking differently about

resources and that's where the circular

economy comes in the sharing economy

comes in normally at a very linear

economy we dig these resources out of

the ground in a very pure state we then

we played with them and made them into

great products like we're all holding

like everything in this room like this

this that I'm holding in my hand as well

and then we use them for a few years and

we put them back in the ground but in a

form which you can't use at all so

there's something that doesn't make

sense there so you need to think about

the circular economy there's also huge

amounts of waste in our cities and

everywhere if you look at the global

food system as as most people I'm sure

know one third of all food is wasted I

mean this is this is not marginal this

is a huge section of the global food

chain food

system so we really need to look at some

of these areas we have increasing demand

three billion middle-class consumers

were into the market by 2030 globally

environmental degradation we just heard

last week in cop that emissions were up

nicked last year after having plateaued

for the last couple of years so is it we

need real action on that as well and

also in terms of the collaborative

economy we're seeing a lot of social

dislocation and unrest a rising

population people feeling they're being

left out by globalism and capitalism and

that the system is not in their favor so

we need a new way to connect with people

and for people to connect with their

local communities and we need smarter

more agile governance as well and of

course as I'm sure you've heard a

thousand times today massive

urbanization people moving to cities you

know all of the statistics already I

won't repeat them so with that with that

out the way I'd like to introduce our

speakers so I'm going to go I'm gonna go

actually in the order they'll be

speaking first so first I'd like to

introduce mr. Oliver Alberto Gonzales

who is a councillor of social economy

local development and consumption for

Barcelona City Council sorry and then

also my closest here we have Sladjana

Milosevic who is the circular innovation

officer in Amsterdam we have mr. Felipe

Alabama salata who is the director and

head of business development and

communications and external affairs for

SEC environment which is a large

recycling construction and water

management company and then down the end

last but not least we have miss Clement

malacara who is an explorer which we'll

be hearing more about for Shara Tories

and also part of we share who are

holding a festival at the moment and

it's a collective of people working on

the sharing economy so I'd like to a

round of applause for the speakers and

then we'll we'll get started with the

conversation

[Applause]

so álvaro I did introduce you first

because we decided that you would be the

first person to speak about this because

you're from Barcelona you're hosting us

today thank you very much and also

because you have an interesting

perspective on the sharing economy which

is an important part today's

conversation

Barcelona's obviously had had a lot of

disruption a lot of benefits from the

sharing economy but the Barcelona

government is really working on a very

very precise strategy around how this

will go forward can you tell us a little

bit about what you're doing that okay

thank you much James for the

introduction and thank you very poor

visit in our city in the name of the

well I must feel like Explorer like a

Clementine

even if I'm with an institution I would

say first that I have to start one good

news and one bad news is tougher the bad

news the bad news is that silk rural

economy which at the end of the day is

about sustainability it's not just about

technological change but it's about

about economic social cultural

consumption patterns change so it's a

much broader change than just

technological but of course we need the

technological part in that change that's

the bad news

so it's not just about technology that

would make a lot easier and the good

news is that this already some changes

going on in all these fields and I would

say there is a very broad phenomenon

happening there is a lot of people

companies project communities

experimenting innovating with new

alternative economic practices and that

means maybe understanding property or

patents or licences in a different way

understanding democratic or collective

governance in a different way

understanding profitability or

efficiency in a different way and

basically with linking with with mazing

history we have co-operativism of

collective action of commons governance

in

our societies in our cities so that's

already happening and that's the good

news so it's not only about

technological change but part of the

change that we need is already happening

and I think Barcelona is a key city in

that sense I think there's we have an

amazing ecosystem of communities and

peoples and companies practicing this

alternative economics it's not just

circular seven economies social

solidarity economy is community

grassroot innovations is a third sector

is co-operativism is a lot of different

different practices and what I would say

is like and especially now I'm focusing

more in saving economy there's two sides

of this coin when there is change going

on there's different ways of doing

things to normal but then sometimes you

do the things in the same way but with a

different name with different label and

trying to get take advantage of these

new contexts so for us our approaches

Council with seven economies a

double-double approach

challenge and opportunity we think there

is an amazing opportunity over there for

the common interest for for innovation

for collective action in terms of

innovation in terms of democracy in

terms of access to knowledge access to

technology in terms of use of of

resources but at the same time there is

a challenge over there and I think there

is also platforms that are you doing

business as usual which is not

necessarily bad but trying to use the

label of collaborative economy or seven

economy to practice to do economics in

an unregulated context and that's

creating a lot of impacts not just in

terms of fair competition for our

economic actors but also in terms of

housing market in terms of urban

planning in terms of workers and see and

consumers rights so we have to both have

this double approach take the message of

opportunity and be alert with the with

the risks and I think one of the main

elements and we hope we can talk later

about it is to understand the difference

it's not everything the same and we all

have to be able to differentiate when

it's really a sarena collaborative

practice happening or when it's just

business as usual and they have to

follow the same rules of us everyone so

it's a huge opportunity but we're moving

fast and that creates challenges I mean

this is really this is really disrupting

things quite quickly and we need to use

to be working a lot between government

between everyone to see what's happening

there thanks that's very interesting

Felipe Senora so you're working in the

environment space in the waste

management space waste water in

construction this is really the hard

edge of the circular economy this is

where a lot of it's happening how are

you seeing this happening now how is

this playing out across across Europe in

Spain and elsewhere thank you for giving

me the chance of being here firstly and

saying circular economy is about

sustainability is not a fashionable

thing is moral philosophy

I mean circular economy can be applied

to all aspects in your daily life from

our point of view we are a waste

management and environmental services

company try to maximize and the

resources we recover every day is real

job today the situation about waste

recycling is very different among the 28

countries that belong to the European

Union we will say that there are three

different groups with big gaps among

them let's say that there is and with

northern and Scandinavian countries high

rate of recycling roughly between 40 and

70

there is no landfill dependence

practically below 10% so they are almost

meeting the requirements that are marked

for 2030 there is a second group that

will be Central European countries and

Mediterranean countries imodium Spain

where the rates of recycling a bit lower

but still landfill is something

necessary the reliance on landfill is

between 10 and 60 percent and and in the

first world by the way recovering energy

by big waste of energy plants is his his

is a way to avoid in life in landfill

and there is a group mainly Eastern

European countries maybe Greece and some

other countries that with low rates of

recovery between ten and twenty five

percent and with high dependence on

landfills between having over sixty

percent in in the future these gaps need

to be closed even not we never reached

the common goals for 2030 which are

quite demanding by the way mmm

as interesting is we see very different

pictures so that needs to be a bit of

harmonization and some quite serious

investment in specific markets as well

yeah exactly that's fair interesting so

I want to come - come on team next

so come on team we had a conversation

before and I think everyone in this room

knows the importance of small and

medium-sized enterprises when you're

talking about that with the economy the

global economy but also what you're

looking at and what your report is

focusing on is small and medium-sized

cities and how they're often neglected

and how they are also vital for the

economy and also some of the sharing

practices they can use so can you tell

us some more about that sure thank you

very much for inviting me

I think yeah it's just when we talk

about sharing cities or when we talk

about smart cities

it's just concepts I mean it's it

doesn't have one reality and and there

is as many sharing cities as there are

cities actually so I'm a member of a

collective it's called we share and we

study the sharing economy and we produce

knowledge around it and I've been

working the past six months on the study

that's called share Ataris that explores

the sharing economy at the service of

medium-sized cities so it's one way to

see that innovation and and the new

forms the new models that the sharing

economy is carrying are not only

happening in in metropolises but for

example when we say sharing cities we

think about sale which is one of the

pioneer of the Shang City approach and

the way that they implemented sharing

sharing city programs was really

different was to answer different type

of challenges that other cities are

facing

for example the mayor of stable he said

that sharing cities was a way for them

to help grow the sharing services within

the city but also to face the feeling of

loneliness that people were feeling

within the cities and that translates in

for example a high suicide rate so they

were trying to tackle those kind of

issues and when you look at other side

other kind of cities like for example

medium-sized cities so in Europe it

would be cities between twenty to a

hundred thousand inhabitants those

cities they are facing a lot of

economical issues and for them and I

agree with you the sharing economy is an

opportunity and I think there's three

aspects on which the sharing city model

is helping those cities the first one is

that it helps the Racal is a realization

of value when you talk about

crowdfunding when you talk about

short-circuits when you talk about

energy cooperatives for example you see

that money is being released within the

city and that's something that's really

different from

additional economical development

approach that those cities are having

because most of the time they are

waiting for businesses for people to

come from from the outside through the

city to produce value and with the

sharing economy or the collaborative

practices if we can call it that way we

are trying to relocate value and produce

value from within the second aspect is

the aspect of a diversity of economical

practices and economical source of of

activity because we know that the cities

that have the most diverse economical

fabric are the cities are that are more

resilient and are the city that are

struggling less so the sharing city

model it can help us also to try to for

example empower people to start their

own businesses so it's in this way it's

this idea of saying one city with a

hundred or a thousand small businesses

is stronger than a city that has one or

two being employers and it has been the

case in one of the city that we studied

in Belgium so we explored eight cities

in Europe and one would say Belgium and

they were relying on one big corporation

to provide for most jobs and when this

when this plant was closed in 2014 they

had no choice but to turn to other kind

of initiatives to create value and to

provide jobs for the inhabitants and

they used sharing sharing services like

for example renting space in a

collaborative way for people to test

their products to help them become

intrapreneurs more easily and so so

that's really one of the way you can

help a city to gain more resilience from

the economical point of view and the

third one and you mention it and I think

it's the it's the social and the

environmental impact because we know

that the sharing services the the

sharing economy and the sharing models

are

don't trust their based on community

building their based on a peer-to-peer

relationship and I think that those

models can help also they have a strong

impact on the social fabric of the city

but also they they help us to gain more

awareness on the on the pollution and on

the waste issues so I think it's just

one way of seeing that there's not one

model of the sharing cities but the

sharing cities practices the

collaborative practices they have a huge

impact and they have a huge value for

medium and even small cities thank you

so it's I like that so it's really about

the economic fabric and the social

fabric really working together to create

this sharing city idea together I think

coming to Amsterdam and you're really

going to tie this all together for us

because we have a lot of constant oh

yeah and coming to Amsterdam we know I'm

Saddam is a pioneer in the circular

economy you know Amsterdam is a pioneer

in the sharing economy bringing both

these concepts in the collaboration side

so you know how do you collaborate

within the city to get there and what

kind of collaboration is needed yeah

maybe to clarify I don't think that MCM

is the pioneer in circular economy but

we truly want to be but the interesting

thing is what we are now working for a

few years on the circular economy and

what we find found out is that it is not

that easy to realize this system change

because that is really what you need you

have to shift from an existing system to

totally new one otherwise you will not

be operating really circular but the big

challenge is how do we do that in an

existing city where all these different

flows and systems are connected to each

other so we came up like one solution is

to smash down the whole city and rebuild

everything from scratch well that didn't

work very well they didn't agree with

that solution so they said okay you

should you have to do it with the

existing city so we were like okay

that's means we have to repurpose the

existing instruments that we have in the

city and one of the most powerful

instruments are

actually your citizens and also all the

communities that you have in your city

so we see now a big development within

the circular economy tradish transition

in relation to the collaborative economy

that they really strengthen each other

it starts at the design phase where you

see more and more code design

developments we are building 65,000

houses in amsterdam for the next ten

years because our city is growing with

11,000 people a year and these code

design projects are very interesting we

implement serious gaming for example as

a tool to involve different kinds of

people

in design process other thing is we see

a lot of changes in the consumption part

as well

mobility as a service is I think one of

the most promising solutions for the

next years because our city is growing

with more people so this means more

traffic more congestion so we are

experimenting now how can we share our

assets our cars for example and that we

try to implement these kind of solutions

other thing where you see the

collaborative economy in Amsterdam is

under financing Department

so crowds crowdfunding is for everyone I

think something familiar but we try to

involve it also in our city procurement

when we want to procure a solution we

don't write exactly what kind of

solution do businesses or citizens have

to bring us but we explain why we need

the solution and what does it have to

solve but we don't ask specifically how

they should do that so we try to make

these processes as open as possible

and the last one is also about education

you see that our knowledge Institute's

are more and more offering MOOCs so this

massive open online courses and it's

being very much used by companies but

also

by citizens to really get to understand

the big challenges and what kind of

innovations and solutions can help them

to solve it together in the city thanks

very much that's really interesting and

I think you know that really is a very

very good example very concrete examples

of collaboration and actually I want to

come back to Killington in that case as

well because I think what we heard there

is a good example of very grassroots

approach to collaboration in the city as

well continue our from a grassroots

organization but you're working with a

number of cities what's the kind of

advice you can you give you know from

your experience from as a grassroots

organization to cities and these kind of

things that we've heard about in

Amsterdam yeah I think the approach that

you have which I recognize as a

facilitator approach I think it's the

good one yeah because we've talked about

it before that mainly the fact is that

because we're talking about innovative

projects and because they have such

resonance on on on the city branding on

the image of the city and the way it can

attract businesses or it can attract

inhabitants a lot of cities are doing it

without thinking about the way that they

can empower inhabitants through those

process so for example we see a lot of

in the study we've seen a trend for

building co-working space or fab labs or

what we call third space because this

sounds so cool and this sounds so great

but the problem is most of the time it's

done without thinking about the

community that's going to live in the

Indus base that's going to inhabit it

that's going to create value within

within the space and most of the time

it's also done by the city so by in a

very top-down approach while at the same

time there are community within the city

that are struggling to make their

project happen to make their project

being being listened to or get funded

for example so I think the kind of

approach that Amsterdam has and and I

believe that Barcelona is also in the

same in the same mindset is really to

say how can we just be like operate as a

platform that inhabitants can use to

create their own projects and to create

their own value like for example I want

to be an entrepreneur or I want to be

able to

share some of the assets that I have to

other people to gain some revenue how

can the city help me to do that without

without being prejudicial to my workers

rights or the policy the police issues

but just just how can we empower people

to to create value on their own because

they will produce it for the economic

development of the city average

oh yeah I just want to contribute on

Dean's line and for us as our council we

completely agree with this with this

role of facilitation that's why I start

my story talking about what's going

already there what is going on it's not

that we have to create anything it's

happening but we as public institution

we have to be able to understand it and

be able to put the tools and the

resources so we can promote it we can we

can support it somehow and and that's

more or less what we are trying to do

like at least in our for summer services

- for interpreters of our companies that

people cannabis can get to know other

models not just the mainstream models in

terms of saving in terms of circular so

put all that knowledge and other tools

on the table and I would say in terms of

grassroots innovations of grassroots

projects - sometimes they start in in

that level but they can scale up because

sometimes they really they really hit on

the underneath ICT and on the way of

doing it I can give two examples from

from Catalonia from Barcelona one is

giving it is the is the the biggest

internet self-managed community network

in the world it has 35,000 notes all

over Catalunya and some rural regions

and we're really in the lowest positions

in terms of connectivity they jump into

the highest positions on the of

connectivity because the technician of

this community network of

telecommunication infrastructure and the

other one is so many ideas are renewable

energy cooperatives

it also started as a group of people

wanted to look for alternatives in terms

of energy and now it has 60,000

contracts and 40,000 cooperative members

and it's really an alternative for a lot

of people in terms of energy but it's

owned by all the people are

participating and they take the decision

together so I would say grassroot

innovation is just sometimes the seed of

bigger scale responses and opportunities

thanks thanks very much and also I want

to take that concept of the city as a

platform and I want to take that to

Felipe because the city is the platform

obviously for citizens but it's also the

platform for the private sector for

private companies in waste management

you know you need to look at the value

chain you need to look at different

actors in the value chain including the

city so how does that work from your

perspective well actually we have quite

the challenge in target for 2030 I

explained before the different

situations that the 28 countries

European Union countries are now and and

to close those gaps as I was saying we

have challenges but also opportunities

for development and innovation we have

to consider different factors the

secondary raw materials that we obtain

from this increase of recycling need to

be marketable I need to be self

sustainable in the market ground but

today this is a very complicated matter

because the secondary raw material

market is not at all balanced or steady

[Music]

80% of the production of recycling

material in in Europe is acquired by

China so China is the customer for all

the recycling production in Europe only

20% are consumed locally

in sued that for some materials like

glass glass is self sustainable as you

know mostly nineteen ninety-four percent

of the glass that we consume is is

recycled okay and paper on cap or we

have quite a good rate of recycling is

around seventy four percent but it's

quite condition by the Chinese customer

there is a group of materials which are

plastics that and there's a lot of job

to be done only seven percent of the

plastic goods that we consume today are

made of secondary raw material and it is

a long way to to go through so what

needs to be done by different agents and

stakeholders in these markets first of

all I think though the actions needs to

be done not only at the end of the value

chain mm-hmm also at level of

manufacturers also consumers and we need

to promote lean production lean

packaging production this is very

important then to increase the rate of

recyclable or reusable components and

and and and from the point of view of of

waste of of improving the recycling we

when we need some quietness some balance

for this market increase the

self-conception especially increase the

quality of the secondary raw materials

we produce and we need to decrease them

their dependence on on China mm-hmm

this only can be done with innovation

and technology development

with pool and push neo leases and really

aligning as well yeah in plastics having

similar materials being used across the

value chain for the way we have to to

give rewards to the manufacturers that

use reusable components and we have to

make penalties too

yeah and and also for the consumers this

pushing toilets regulation is lots of

different there's lots of different

things

thank you that's incredibly interesting

I just think and also just just one more

question and I want to build on some of

the points we've heard as well so I want

to go back a bit to some of the the

grassroots thing and the idea that

citizens are going to be collaborating

in this change to a circular to a

sharing economy so Janet just to just to

play devil's advocate so you're saying

you're getting all of the citizens

involved they're all helping in terms of

planning what Amsterdam's going to do

who are these citizens are they are they

everyone is my grandma on there is she

involved or is it just is it just people

like maybe maybe on this panel maybe in

this room how would you make sure you

can really involve the whole city in

this yeah so that is that is a very good

question and also maybe one of the most

important challenges because funny thing

is we have been special hub in the city

of Amsterdam where every night around

400 or 500 citizens come gather with

each other and talk about urban

challenges and urban topics that we have

in the city and this is a very great

place to have this conversation also

with your council members and your

citizens but to be honest at these kinds

of meetups most of the people that are

coming I started to see the same faces

so this means that there is always this

active group of citizens that are very

much connected to the challenges and to

the city and really want to be part of

this change and that is good and you

should definitely always start with them

because that is where the energy is and

and where you should really

starts to accelerate these kind of

transitions but the big challenge is how

do we involve also your grandmother and

all the other people I think that can

the best way to do this is to think

about incentives that are really

understandable and tangible for them I

gave an example this morning but I will

repeat it also now that is we have great

startup programs where one of them is

called recycle and what they do and the

other one is called wasters and what

they do is they collect plastic waste in

the neighborhood or invite citizens to

help them collect plastic waste so they

can make new products out of it and the

citizens that bring waste to them get a

coin in the reward and with this coin

they can get discount at their shops at

their restaurants and cafes in the

neighborhoods so this started to create

a very good incentives for also citizens

that don't have much money to spend and

never have possibilities to go to cafes

for example so they really got involved

and they started to see that ways became

a resource so this is a very nice way

where you can be part of this

collaborative economy but it brings also

something directly back to you and we

are now even experimenting can we use

this plastic waste to 3d print furniture

public space furniture to give it back

to the neighborhoods that collected this

the waste so this kind of waste is I

think the best way to involve all your

citizens in the collaborative economy

yeah that's great so I think as we as we

look at this we need to think about a

collaborative shared circular inclusive

economy may be interesting to share last

year we have been chosen as Amsterdam by

the European Commission as the European

capital of innovation and we actually

didn't expect to win the prize because

we thought we are not that smart of a

smart city with a lot of technological

solution

and everything being organized

technologically but the funny thing is

they gave us this prize because of our

social innovations and that we really

see this as an important part of your

whole innovation strategy so I think

that is something to give back as well

because inclusiveness is about the

happiness of your citizens and this

makes your city healthy and functioning

well so that's definitely one of the

most important things yes so maybe we're

getting to the core of what it means to

be a smart city yeah a very very deep

philosophical level thank you very much

I want to go to a couple of questions

from the audience as well and please

everyone do ask questions on the app as

well we've got some time some questions

now and have a few already but we'll be

but please do go on there and ask some

questions so the first one I think we've

pretty much covered but I just want to

see if anyone else has anything else to

add on this as well so you can can you

give any examples of tools used to

involve the community and decision

making process we just heard this from

Amsterdam but I just wonder if any of

the other speakers would like to talk

about any examples that they've had as

well or can you repeat the question yeah

can you give examples of tools used to

involve the community in the decision

making process so in policy setting

these kind of dialogues well yeah

Barcelona is a very important work

working line we have we are creating

metal sv which is like a whole platform

for citizens to contribute to

participate in political decisions to

assess and contribute with ideas and

hopefully it's going to be developing

and as working with develop but the

participatory body elements an open

government

in general and that's basically like the

main resource we are we're putting on

the on the let's say on the on the on

the website to work with us but it's in

general is something we are fully doing

in from the very small scale in the

neighborhood for small decisions and we

we have a different we are a kind of

gradual democratic system people

participate can participate in our

neighborhood in decisions for law

related to mobility related to organism

etc to the bigger scale which is the pub

which is called is like the biggest

action plan for the four years of

mandate and that's done also based on

contributions of population both press

physical presence a sessions or online

participation great that's that's really

interesting initiative anyone else have

anything they'd like to comment on that

yeah I think just to involve citizens in

in the decision-making process

you mentioned the co.design and that's

something that we have been studying in

the study is that is the way that you

can involve the citizen at a very micro

scale at a very local scale so you

mentioned for example of participatory

budgets that's something that we have

been exploring also and that's something

that's very like very easy to implement

you can use digital platforms to do it

but you can also like do it in a very

low-tech way and and the co.design

process which is more engaging and and

more it's a much more longer process but

still it's very interesting and

especially in those kind of places where

you have a problem within the

neighborhood like for example we studied

the medium-sized cities which are cities

that are facing a lot of the

vitalization is within the city centre

so they have a high rate of commercial

vacancy by for example they have a lot

of people escaping and and living in the

suburbs of the city so we we afford

those cities those tools of involving

the citizens in the co.design process of

for example could be a park it could be

it could be a street it could

for example how to reuse a former plant

or former mine and those sites this this

rehabilitation of process is very

interesting when it's done in a very

participatory way hmm I will just add

something

forgetting is very interesting for

example the Syrian economic policy of

the council especially related to the

promotion of the commons orientated

Syrian economy the one I really

contributing to the common interest we

are doing in a collaborative way so we

are doing the the we are creating the

policy of collaborative economy sharing

economy in a collaborative way so we

have a working group of around 5060

people which you have entrepreneurs

researchers activists all kinds of

people involved in this in this scene of

collaboration in in Barcelona and that's

what we have since whatsapp chats we can

share really fast information to

physical meetings or we organize some

conferences so we can really test our

ideas or get new ideas or make joint

projects all the time and that for us

for me for example as someone having to

lead that policy in Barcelona Council is

an amazing tool give me so much

resilience mmm that's great I'm just

using the platforms they exist like

what's up these things simple things to

organize people and get them involved

Felipe I think this question is probably

mainly aimed at you as well someone out

there is is obviously in a similar

industry and we'd like to know what are

the improvements what are the big

improvements in terms of waste

management in terms of recycling for

technology data you know the smart city

what we're here what we're talking about

how is that changing waste management

yes well technology for improving always

recycling has a long way to go but today

we could say that a improving efficiency

when recovering energy from the

residual waste that cannot be recycling

it's a must for instance the

conventional ways to energy technologies

in terms of efficiency you could double

and the amount of energy per tonne

incinerated if you use it not only for

producing power but also for producing

heat

which is called combined heat and power

facilities this is a very interesting

line of research order all the lines of

development can come through organic

fraction improvement you need to check

out from the the waste resources the

organic fraction because it polluters

every secondary raw material that is on

the waste so a separate collection in

prove separate relation what it what in

Spain is called the fifth container that

you are carrying out in Barcelona and

now it is being installed in many places

in Spain and around Europe it is very

important to get good quality and

resources from the rest of waste mm-hmm

that's interesting I think that the bio

cycles and bio waste is a huge challenge

and opportunity globally for sure yes I

think that there is

a long way for anaerobic digestion still

is quite expensive technology in

comparison to the cost per megawatt

produced but in in the last times the

technology is improving and an inserted

way as an alternative to compulsion

mmm-hmm

take advantage of the energy contained

in inorganic first fraction that's very

good for greenhouse gas emissions as

well I mean it's a greenhouse gas

emission it really comes in two fitting

all of the boxes

so what other question which i think is

a good question I think it's gonna

challenge the panel especially the

policy makers among them so can you give

some examples where local or national

regulations are hindering the effective

development or implementation of

circular economy initiatives in cities

now maybe in your cases I'm sure you've

got rid of all of those relate roads

regulations which are hindering circular

economy or maybe you haven't but it'd be

great to hear such an and what if you

have any any examples of that yeah I can

think of some of them I think one is

very interesting and that's in the

neighborhood where we said we want to

build this totally circular and it

should be developed this neighborhood

from bottom up so this means that we

really want to facilitate the

development of this area and that

citizens and stakeholders should be able

to do it the way they want but then it

starts to become difficult when they

when these stakeholders want to make

decisions about mobility or when they

want to make decisions about do we want

to park cars in our street or do we want

to have green and and nature in the

streets it starts to become difficult

when

they said for example to us we have a

much better solution for circular public

lighting let us do it let us develop it

and I was like sure why not because I

work at the innovation department and I

really believed in this city operating

system where you can really think

different about public lighting as a

solution but then I came to my

colleagues at other departments and they

said like no that it's not possible

because we as a municipality are

responsible for public lighting and then

I was like okay so this isn't this means

if we want to repurpose our system and

our economy and we want to do that

through collaboration this means also

that we must repurpose our own rules

that we have as a government and you

have to reframe these of you have to ask

yourself these questions like okay so we

are responsible for public lighting but

why why are we responsible and then when

you peel it off it is about safety we

are responsible for safety so if you can

find this solution for offering safety

to this neighborhood in a different kind

of way then why shouldn't citizens be

able to make these kind of decisions

then so it's very hard to stimulate

collaboration between governments and

citizens because we we don't we are

still not that's able of redefining our

own rules and we should really practice

and experiment with that more and more

and we are doing but it's a slow process

governments are operating very slow and

citizens are often impatient and you

have to find this balance between but

it's very interesting and I think that

is really where you realize the impact

and you're able to change these steps

and often it is not about law and

regulation it is really understanding

what you mean with some regulation that

you have or your policies that you have

what do you exactly mean with it so that

is a very important thing to do so click

in size regulation yeah exactly okay I

just

there's another question which I think

leads onto this from this as well you

mentioned you know this is about speed

and going far

so someone in the audience or so

Anonymous wants to know and do only the

questions have to disappeared but they

wanted to know about speed they wanted

to know about how you can push this

along faster how policy can't stand in

the way we've obviously seen in the

sharing economy huge for speed trap

transformations coming into cities and

that's had winners that's had losers as

her difficulties but then in terms of

moving towards the sharing this circular

this collaborative model that we're

talking about today how can we make

things go faster don't seem do you have

any Germany suggestions about how we can

speed this transformation up I think it

would be interesting to know on a public

policy point of view mm-hmm

I mean like we know that the digital

tools are helping just to scale up the

services in a very very exponential way

but at the same time it I think it just

questioned the fact that it's it's just

as you mentioned it's like we're just

moving on different time zone you know

like on one side you have citizens that

really wants to be involved and they

want results very fast and they want to

get rewarded for their involvement in

the life of the city and at the same

time you have people that feel not

frightened but it's just like it just

shakes up what their role are within the

city and and I think I don't like it

would be interesting to know when a

public policy point of view like like

being a city maker what how do you feel

you can just fast in things because I

know that from a citizens perspective

it's always need to be faster and always

like we're always in the need of more

response and more engagement yeah well

it's funny because sometimes I have

failed also the opposite sometimes from

from from this I can kind of alternative

economics scene of Barcelona sometimes

we've been we've been being asked to be

not so not so impatient with him we were

wanting to support and promote and put

resources on the table also so so they

can really scale

or yeah or grow more more initiatives

and also the times for like the human

and social processes behind all these

new practices sometimes I are slow too

so sometimes they got into acceleration

moments but sometimes they need to the

time is not some policies Sanders could

be kind of fast

you you just decide you that's a

priority you put some resources you drop

you make a trough some some objectives

and then you have a kind of the Machine

the public machine to work but then some

of these processes of gradual

innovations of involves community it's

getting to know each other getting to

work with new ideas maybe some some

ideas coming from outside and I need to

kind of get a local version of it so I

just would say that it's not just one

way or the other is like good happen

both ways and for me as a public as

policy maker now I will say it's

important to be able to understand what

is going on because I think what you

cannot try to do is if the water is

going that direction you cannot make the

water go in the opposite direction so

you have to see what is going on and

then how you can facilitate it again and

sometimes you are going to be the first

one sometimes the other one is going to

be the society civil society is gonna be

the first one I think that that's

interesting because that's something

that we have realized it it may seem

very obvious but one of the results of

this study is that we realized that the

sharing and and the collaborative the

the circular initiatives were very well

implemented in cities where you have

connector roles so you have really

people whether you call it community of

liaison officer or you call it

neighborhood managers whatever you call

it but those are the people that belongs

to the City Hall generally but they

really have this connection and so and

sometimes they have even better they

have budgets like for example in in ganc

in one of the city of the study the

neighborhood managers they are in charge

they have a budget for the neighborhood

for all the projects that will be a date

to the life of the neighborhood and so

this really fluid if I the communication

and it helps I think the rhythm to be

the same between the needs of the

citizen and the willing of the

municipality but I definitely think that

this connectors role is very key element

and in fact in our case in Barcelona

there was a very big political change in

the last two years and it's not just my

case in the case of other people but we

were before trying to do these

innovations and now we are within the

institution so that connection is kind

of natural somehow which doesn't mean

everything is done no of course not and

we miss all the connections so but but

that's that's that's important so that's

why let's say the the Democratic quality

at the end helps economy in that sense

and also very having important

connections with no university for

samples in our case working with a

diamonds group from the University an

expert on an economy is in very helpful

in trying to connect with all these

communities all of the available

resources and really bring in everyone

into this it's a it's a real it's a real

group effort from everyone in the city

Felipe before we go to our final remarks

from everyone where do you see the

circular economy moving faster and why

is it moving faster in some places than

others would what if you could draw out

just a couple of very quick lessons what

are they yes sir well what I would say

is that development and wealth has a lot

to be with the rates of recycling and

recovering countries with a high GDP per

capita have in general a bit rate of

recycling and recovery in general

Scandinavian countries so-so and and in

countries with we have below in terms of

development economical development

I need to have a long a long way to be

going through investment in those

countries don't have more difficult that

more difficulties is is a must a top

officer in the European Communion a few

works ago told me that they are

obsessing between 300 and 500 billion

the amount to be invested to reach those

recycling and landfill and target for

2030 well that's interesting I just just

a quick follow-up so you say development

level is hugely important do you see any

examples where countries are say

leapfrog to some extent countries which

are maybe less economically developed

but a really far ahead in the circular

economy you know is there is there any

examples that you've seen of that around

or is it really just the the more money

a country has the better is it circular

economy

well recycling developing a secular

economy is is a question of technology

and sometimes it's a question of

attitude from the consumers and and and

when people people have all the basic

needs Kolbert and they are more aimed to

think about environment in developing

countries not only in Europe especially

in in all developing areas in in in the

world not in America and Africa and they

are more concerned about all other

problems like have a good water quality

that in in maximizing recycling from

from their day-to-day consumption and

and and so I will say that in general

there are countries that have better

practices in terms of recovery in value

from resources are more developed but as

as a general rule I cannot tell you

anything maybe I don't wanna debate make

polemic but I I would also say that

sometimes and maybe that's streaky know

but like sometimes

poverty is it's related to also have how

many I said sometimes in countries where

there is people who lived from getting

use of of things they find in the waste

may creates a set of waste policy and

sometimes as Europeans bring in their

generators stop the living way of these

people like waste pickers in India they

stop finding the living weights because

we from the we we we bring from Europe

incinerators and then we don't recycle

anymore

so under saying that is sometimes is

complex and sometimes the zero waste

countries are the ones who have people

really doing a real economy a circular

economy of what is on an on the waste

this is this is this is really true in a

way I mean when when your possibilities

of consumption are not big you take

advantage of everything yeah that you

got an is true I never make mention

about waste pickers in different

countries especially in Latin America

and all the big cities and metropolitan

areas those waste pickers this is a

social stakeholder that needs to be

borne in mind when you design a waste

management plan okay and a nice term

then in some cases they are maximizing

recycling maybe not enriching and the

best quality in terms of environmental

cleaning the city but it's true that

they maximize recycling in in the way

for instance in in Buenos Aires

this is a city where I have lived in you

can see what they call through has

always speakers tornadoes tornadoes and

in injera for for paper and keyboard and

and they go building by building and

they have arranged with the concierge or

janitor at each building this waste

belongs to me and my family there's a

kind of social organization and they

open the box on the side take out paper

and cardboard and good plastic only good

plastic and something that is Mike a

table okay and after that they need to

close the bags and leave it as it is

because if not the next day they cannot

recycle anymore and this is a social

practice that here in Europe don't

consider but it's a reality here we need

to consider in other parts of the world

it's drawing here in in Barcelona for

example we have a parade with their from

the council which is with some

sub-saharan African people that used to

know that they they work in way speaking

for metal in the streets which because

the variable is a valuable thing in in

Europe is metal melter waste and we help

them to create a comparative four-way

speaking and they already functioning

they are making their living from it

with some help from the ecology

it's called Allen cop if the people

wants to know they already have a

website and they can that you can call

them they go to your house to get

materials you wanna get rid of they are

or started to fix electronic devices so

to sell them back so I think as public

policymakers we have the opportunity in

front of that instead of trying to

substitute by technologies trying to

build up new solutions from different

models now it's very interesting very

interesting conversation I think there

as well and I think it goes back to this

collaborative economy

well that if you're talking about

emerging markets as well and you're

talking about an established waste

picker economy you need to involve them

in the solution as well this is all part

of it as well we have about 30 seconds

left so I just really want to quickly

just go one time down the panel Felipe

talked about targets for 2030 I want

every panelist just to talk about what

their targets are for 2030 in terms and

I'm putting on the spot but in terms of

building this sharing collaborative and

circular economy

well actually I think 2030 is very

ambitious but we want to be hundred

percent circular within 2030 and this

means that being circular cannot be

decided from the top because we cannot

make our city circular it should be

really the ownership should be felt with

our citizens and with our companies so

this big target is actually making this

ownership part of the circular economy

and we should do that as quickly as

possible and I think the only way to do

that is if the initiative is with your

citizens and with your city and that you

facilitate them in it and not tell them

what they should do Felipe same question

well I think that we will achieve those

targets in 2030 basically are between

6570 percent are not yet defined because

some fight between the Commission

parliament and the council's country's

councils in general 65 70 percent of

recycling 10% lanfield a la villain

most and seventy and seventy five

percent of some particular materials

like packaging or paper and keyboard and

and maybe we will improve organic waste

management okay ten seconds ten seconds

then I get for the my announcement it's

not 2030 but 2018 I thought we're gonna

have a track on my hope no we are gonna

have a track on Sharon economy in the

sense we've been talking today we him

the Smart City Expo of 2018 so we are

gonna get be able to get deeper on this

topic and be able to relate it to the

circular economy and our another issues

so you are very welcome next year and we

will think more about 2030 in that time

well he's not talking about 2030 I'm not

either

actually I want to talk about tomorrow

hello

they're getting closer no it's just our

role as we share is to create dialogue

and and that's something that we

mentioned today's just to create a more

fluid dialogue between all the city's

stakeholders and I think actually one of

the way to open the conversation is to

organize meetings and to organize events

when we can all gather and discuss

topics the way that we did it today so

I'd like just to invite you all to come

and check the Wishart fest Barcelona

who's starting to tomorrow for three

days and has as a theme sociated and

beta and really this idea of how can we

all together try to think about what's

going to happen in 2030 very good very

nice very nice thing back there that

knit nearly nearly answered my question

okay so thank you everyone I just really

just quickly to wrap up I mean I think

one of the interesting things that I

found from this conversation is I came

in thinking we'd be speaking about

sharing economy circular economy

resource use as I set up at the

beginning but I think really what I

think is the key message that I take

away from this is actually on the

collaborative

economy at first I thought these

concepts maybe weren't linked quite as

much I don't have two speakers thought

the same but from this conversation

there's really a need for collaboration

with citizens there's a need for

collaboration between the private sector

and cities there's need for

collaboration across the value chain

there's a need for collaboration in

policymaking and that's really that

collaboration sits at the heart in this

transformation towards the circular and

the sharing economy so I think for me

that's a great takeaway from this it's

very interesting

I'd like to thank the panel and I'd like

everyone to give them a big round of

applause okay thank you very much James

okay that does bring us the end of day 1

at Congress brilliant panel discussion I

also just want to give a massive shout

out to our brilliant illustrator Blanco

he's been working tirelessly all day

creating these amazing prints that you

can go and have a look out outside so

please do have a little look at them

over the next couple of days because

they'll keep being additive yes thank

you ok right well I'll see you bright

and early tomorrow morning at 9:45 for

the keynote with Robert mugger

see you then Cheers