

TRANSITION TO CE / INDUSTRIAL SYMBIOSIS

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COMPANIES TO GROW/CREATE



BUSINESS OPPORTUNITIES

- SERVICE / REPAIR Facilitation in AGRICULTURE / subproduct
- WASTE STREAM
- IND. SYMBIOSIS
 - WASTE HEAT
 - BY PRODUCTS

GREEN JOBS

- Int Org - GOV.
- Immigrants
- Schools
- Industries
- ~~Startups~~
- Green Tourism

②

What type of companies will grow/be created?

SOLUTIONS

- Companies who sell FUNCTIONS instead of PRODUCTS
- intermediary companies to process waste; info to bridge technological gaps (facilitators)
- platforms to share stuff
- connect ppl (eg. food waste)
- formal + informal education facilities → awareness raising

⑤

What business opps can you see in region?

1. Importance of understanding resources that exist in region.
2. Regions are v. different.
3. What businesses are already there? What are the key priorities / sectors?
4. Maximise waste streams - how can regulation / deregulation help.
5. Put actors / businesses in adjoining industrial areas in contact with each other - they might not know opportunities. Don't know how / if links can be made / what they are.

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③ GREEN JOBS

- social enterprises
- developers, start-ups (APPS etc.)
- TECHNİKA WORKSHOP → teach ppl how to fix stuff
- BIKE KITCHEN → fixing bikes
- tech. development for problematic materials
- awareness raising
- design for remanufacture

⑤

What role should different actors play?

1. Importance of sharing ideas and good practice.
2. Local governments can support change + help gather data from citizens
3. Support / incubation activity - freedom to try new things
4. Role of regulation - "stick" as well as "carrot"
5. Local / regional actors can act as facilitators
6. Industry and business needs to be central to discussion.
7. Research and innovation - can bring new ideas to business + how things can be reused.
8. All actors need to join up in a more consistent way.
9. Hold workshops / events to bring the different actors together.

Change Mindset
teachers
consultants

"MATCHMAKERS"
SYNERGY CO
helping other
companies

Mowing
Service
CAMPUS

education program
on O E
start with the
children

CE-consultants
who can assist SMEs
with new business models

all sectors of business
can create new jobs by
the help of C.E.-

- CE is part of business
development
- CE is good business

Energy consumption
"consult"

(behaviour "watcher")

Furniture
IKEA-Repair

Housing-sector
Renewal towards
Sustainable Solutions
(energy efficiency)

- repairing business
- fostering services rather than investments ("drill")

→ co-ownership

- improvement of waste management → improving waste collection

(taxation → change)

• infrastructure needs to be improved

• Software sector

• construction mtr (resources)

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FOOD WASTE

Restaurants

→ Agriculture
manure

- Reduce the waste amounts by selecting biowaste from the source.

- Composting the solution from your garden...



oils
bikes
wood

Avoidance of food waste ①

- improved ways of food sharing necessary
- reduces the amount of organic waste ~~that needs to be~~ in general

① Use Low temperature district heat to heat/use to fish plant

① FORESTRY WASTE
→ GLASS PRODUCTION
RECYCLING GLASS

② GAS INDUSTRY

B

①

B

WASTE COLLECTION ON DEMAND ①

- Customers demand collection when their containers are full
- Reduces collection times
- Improves logistics
- Effective planning
- Eco-friendly waste collection
↳ cost reduction

Social bus

extract ^{metal} from disposed electric equipment, as a start more possible

② Aquaponic (fishplams)

③ ALTERNATIVE ENERGY SUPPLIERS

⑤ food industry

Removing power cables from pylons (unsightly, heating the atmosphere...) by 'undergrounding' cables, capturing waste heat & using it for small rural (probably agricultural) business opportunities
- multiple benefits

FOOD WASTE

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① FORESTRY WASTE
→ GLASS PRODUCTION
Recycling glass

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extract ^{air} ~~metal~~ from disposed electric equipment, as a start more possible

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① Use Low temperature district heat to heat/use to fish plant

① Forestry waste
→ GLASS PRODUCTION
Recycling glass

② GAS INDUSTRY

B

B

①

WASTE COLLECTION ON DEMAND ①

- Customers demand collection when their containers are full
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extract ^{materials} from disposed electric equipment, as a start more possible

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G2/Q1

① The government encourages entrepreneurship for growth and ~~but~~ who focus on it and they pay more
3R.

Zhejiang ①
No one and nothing on the street

Transition in the agricultural business
restoring consumer-producer relations

Shanghai
~~Shanghai~~ new citizens
- integrate
- learn from their knowledge / needs

recycle rubbish in China.

good constructions
↳ with the use of biomass and nature

digital platforms
↳ (Tencent)
share information to help recycle waste

efficient energy use
↳ light is switched on all the time

Peer to peer companies
→ eye for cohesion
Collaborative knowledge.

companies focus on common goods welfare (human capital)

business opportunities
- cradle to cradle
- modularity (phone blocks)

- heating from paper industry
- glass masses used in restaurants for cooking, etc.

- Create conditions so that people can do what they are good at rather than what the established system of employment demands

- Create conditions for Peer-to-peer transactions

Create value from waste

Market transparency tools!

G2/Q2

② ~~education~~
public ~~transport~~
transportation
new energy
transportation

②
Only corporations
who are ready
to work together
will survive

Government-supported
recycling companies

paper industries
glass industry

Kronberg

Service
HR
Health

growing companies

service companies
companies that
focus on sharing

hand can wash
↳ steam
instead of
water
↳
reduced use of
water!

③
agriculture.

↓
Food industry

LINKED
WITH



The waste
industry

architecture
- landscape.
(material base)

Transportation
- infrastructure

E2/Q2

Kronberg
- Meat production ~~→ forest~~
- Forest
- University - knowledge
- Transport
- Make countryside more popular

Urban
Crowded
Cities in an
neverending
development

green jobs
• manual work
(repair)

G2/Q4

government has to
facilitate and
support by giving
space and responsibility
back to people
and entrepreneurs

rules solves the
problems of yesterday
and makes innovation
and change difficult

Government: Don't
stand in the way