SUSTAINABILITY IN BUSINESS

Certificates & DGNB

- working on it, but no certificates
- Having DGNB certificate means you can sell for better prices
- Government funds exist for sustainability that can be applied for
  Problem: Government project rules in terms of how you WISH to build → can't be challenged in any way
- Not necessarily harder, but architects have no free will and are very limited within design
  The funding/grant goes to the client
- Not a lot of grants exist right now
  Can get like barely around 25% or so
- material condition is unknown and
- only certified companies can handle them
- Lots of documentation is needed
- DNGB is timeconsuming
- No info regarding sustainability goals
- UN goals indirectly applied, some more than others.
- Too expensive for smaller companies or the public companies
- Mostly big contractors with a brand who will pay for it

Reasons to sort

- Why sorting?
  - Mainly money
  - also environmental
- Can't avoid it, part of everyday life

Trends

- growing sustainability knowledge/re source team
- Industrial clients are most focused ones on sustainability (yellow certificate)
- Engineers do not require sustainable process from contractors (or partners)
- Tries to choose materials that don't destroy the Earth
- Used to use system like Passive housing and 40 years ago → no wasteside, no mold, no rot, no need to worry about essential drought, avoid added material production
- avoids materials that they know are damaging

Challenges in sustainability

- Too expensive for smaller companies or the public companies
- sustainability that does not affect price was aimed for
- Mostly big contractors with a brand who will pay for it
- still limited by what project owners want
- architects focus on sustainability, but hasn't reached consumers yet
- DGNB is timeconsuming
- Going green often means willingness to lose money
- Private investors don't care because earn more money than what is wasted
  Only municipality really cares, government build apartments, etc.

VALUE FROM WASTE

Intangible Value

- Least amount of waste always important
- Green Homes would only be willing to pay for sustainability right now, but in will blow up
  If they could prove that waste goes to recycling, could be weighed highly on good
- Documenting the waste creates greatest value from the waste
- Largest environment affect happens on the building site!
- Green image always helps with sales
  Going green often means willingness to lose money
  If firm would, let example for sustainability, might want to work with them → strong incentive
- growing sustainability knowledge/re source team
- If they can show that they're doing recycling/going green, etc. which is a good image to show to everyone as advertisement to attract new customers
- a map of containers and rules would help, also explanations about fines
- If you bring bricks to company that reuses, take a picture, get the word out Will probably benefit within a year or so (pseudoarty)
- even just some food as incentive for workers would be enough to sort trash.
- People would follow the rules if there were clear guidelines.

Tangible Value

- Having DGNB certificate means you can sell for better prices
- Costs less overall
- Going green often means willingness to lose money
- Price of waste depends on:
  - Buyer, documentation, quality of materials, toxicity
- When focusing on prefabricated projects means less waste
- waste should be thoroughly sorted
- Sorting is costly
- wood can be recycled only for non-loadbearing
- Electricians get paid to handle cable scraps (copper is recycled)
- For renovation, keep as much of what exists as possible
- Multiple companies collaborating on waste → reduce transportation, sort process and cost of transportation, treatment etc.
- Many other companies sort paper and takes to a place with a paper press and get money from it.

CURRENT WASTE HANDLING PROCCESS (REPETITIVE)

- Kings takes care of transportation, they have their own waste containers, but they use our "recycling" dumpsters
- materials are pretreated before sorting
- Every shipping of material results in lots of plastic, flatrings and cable waste
- Calls Soren Peter everytime the container needs to be emptied
- Container emptying: Once every hour to once a week
- once/ maybe 2 times a week
- Smaller cars drive waste to official waste sites when dealing with smaller amounts.
- All containers are weighed before and after
- ~3000dkk for one with everything
- GH chooses the level of recycling for each project
- a map of containers and rules would help, also explanations about fines
- Electrician trash is lots of paper and plastic
- Main source of trash is packaging from the shipping companies, & let companies know that packaging could be small boxes, timeworthy
- Frederik is sorting paper and "small brandbaer" but having to put it into the same dumpster as everything else
- When working further away they put waste in bags and then someone sorts and scraps it.
- Moving Containers closer would help a lot.
- LIMIT - Not room for more containers on site
- Materials saved for 1-5 years for checkups at buildings
- Material leftovers are collected from the-ess of the sorting trash

OTHER SUSTAINABLE PRACTICES

- logistics to site are not sustainable
- energy use on site

REASONS FOR BAD RECYCLING

Communnication issues

- Each company has their own manager
- 90% of workers know the sorting system. The last 10% is the problem
- Motivation comes from the top. If the foreman doesn't care, neither will the workers
- Everyone is in contact with me
- Expectation that they know how
- Never seen waste handling document
- once a week meeting with them
- Not informed about sorting rules.
- No info regarding sustainability goals
- No general meetings with workers, goes around and individually talks to them
- People would follow the rules if there were clear guidelines.
- Moving Containers closer would help a lot.
- Companies needs to be able to live up to green/sustainable standards to keep jobs
- no branding about it
- Workers have no ownership, workers take personally and don't care much about doing environmentally friendly, because they don't have resources, etc.
- a map of containers and rules would help, also explanations about fines

Human Factor

- Its not hard to recycle
- people will skip sorting because they are lazy
- If people get a choice they wont sort
- Believes most doubt is due to unknown materials
- Better attitude for sorting needed
- Old habits and ingorance are also factors for bad sorting
- employees think containers are too far
- Laziness
- Sorting training is random
- Sorting after the fact often doesn't get done or is half assed.
- They do not think of themselves as waste disposers, they build.
- Amount of waste is an important factor
- Cant place the huge containers nearby working areas
- Can't avoid it, part of everyday life
- nobody wants to be responsible
- Workers tend to be lazy so they dont sort sometimes

External Expectations

- Hasn't had a demand on sorting, other than from municipality
- Private clients ca choose (and will have choose a more expensive material)
- Focus is on the contractor and what they want, rather than sustainability.
- you won't get a job if you're expensive

Company Factor

- Sorting is costly
- Hasn't had a demand on sorting, other than from municipality
- main focus should be the waste sorting
- Many entrepreneurial firms have problems with "small brandpart"

Confusion with materials

- Doesn't know what happens with impregnation materials.
- If doubt, thrown in combustible
- Wall Covering Materials hard to recognize from another
- Main Problem
- Plaster boards
- Many different kinds, difficult to see the difference