

# Metabolic

Amsterdam, the Netherlands

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# what is netabolic?

- a systems consulting and cleantech development firm
- advise industries/ non-profits/ government on the transition towards a circular and sustainable economy
- has three divisions: consulting, technology, ventures

- partners:

 SAMEN SNELLER DUURZAAM			
 AMSTERDAM INSTITUTE FOR ADVANCED METROPOLITAN SOLUTIONS			
			

# projects we've involved in

- Schoonschip

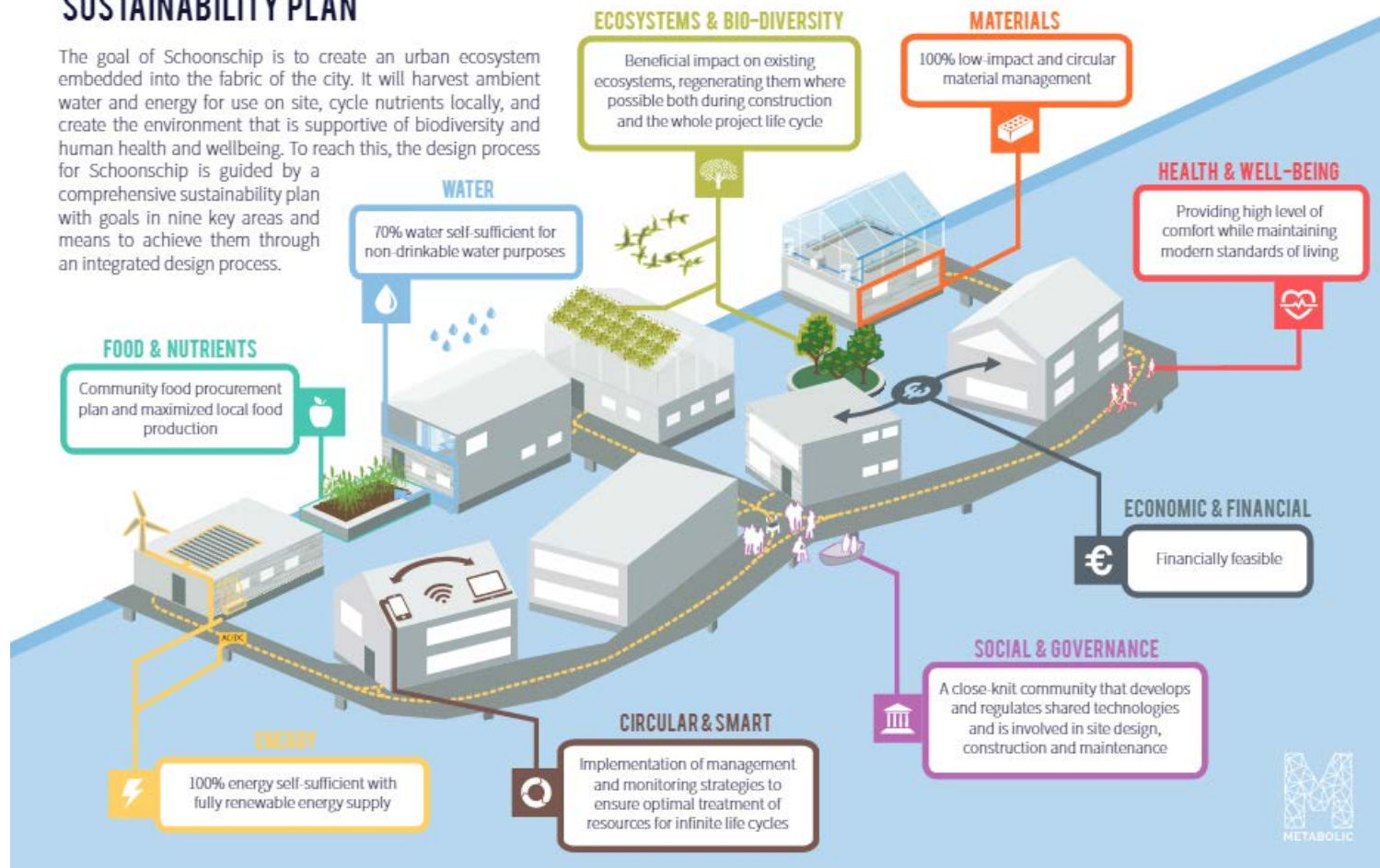
- a sustainable housing project of 30 floating households in Buitenveldert that tests new standards for sustainable urban development

- WWF report

- analysis of the impact of food systems (European and Global) on biodiversity
- assessment of leverage points on consumer behavior

# A COMPREHENSIVE SUSTAINABILITY PLAN

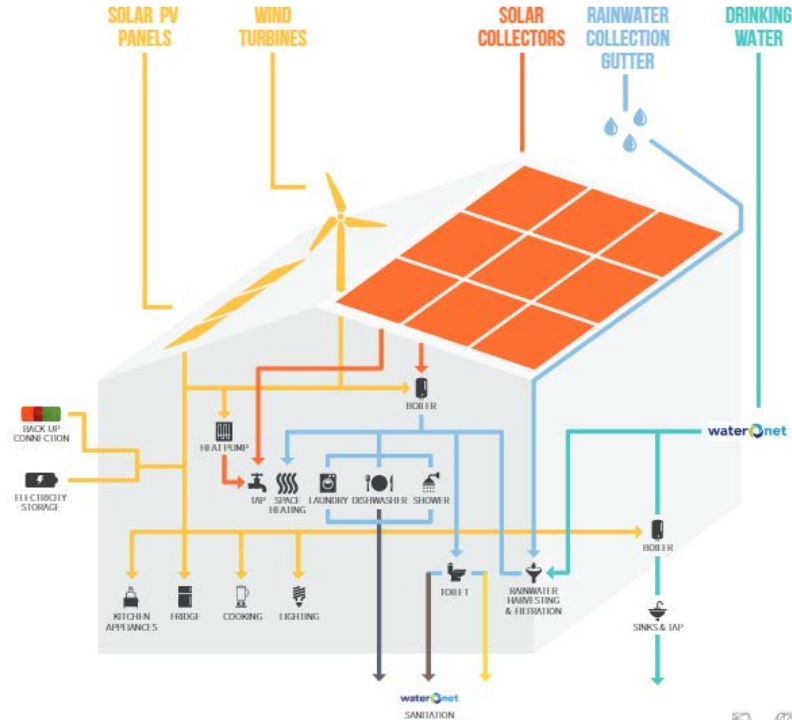
The goal of Schoonschip is to create an urban ecosystem embedded into the fabric of the city. It will harvest ambient water and energy for use on site, cycle nutrients locally, and create the environment that is supportive of biodiversity and human health and wellbeing. To reach this, the design process for Schoonschip is guided by a comprehensive sustainability plan with goals in nine key areas and means to achieve them through an integrated design process.



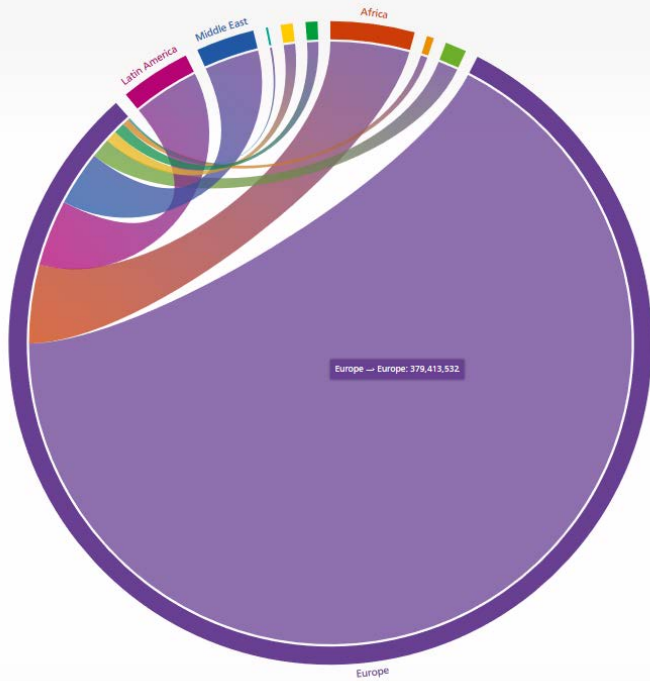
# Work Description

- Designed interactive UI for Cleantech Selection Tool (CST), an online architectural tool for homeowners and designers of Schoonschip
- Did backend modelling for CST that predicted heating, electricity and water demands of individual households based on statistical data and parameters established by clients using MATLAB
- Researched global and European food systems, e.g. consumer behavior and the power of the private sector
- Created interactive data visualizations and infographics

# work sample- InteractiveU



# Work Sample- Data Visualization



### How to read the plot



Regions/countries are represented by the circle's segments and each is assigned a color. Flows have the same color as the surveyed region/country and the width indicates the amount of flow from that region. Click on a segment to switch between country and region view.



There are two offices: de Ceuvel and Sportpark Meteor enweg

de Ceuvel: used for internal/client meetings. It is located on the “Cleantech Playground,” a collection of repurposed houseboats that use experimental heating/plumbing/recycling systems. On top of the office is a greenhouse built and designed entirely by Metabolic.

Sportpark Meteor enweg: the larger office where most of the employees/interns work day-to-day. It has a workshop (it is where the greenhouse was built) and



deCave



# sportparknetterweg



# not rewarding aspects

- learning about Europe's role in developing sustainable technology and pioneering the idea of circular economics
- seeing all different aspects of consulting: the technical side, the report writing...etc.
- seeing the company's experimental technologies first-hand
- assisting with making a real change in the company, e.g. helping build the greenhouse, helping run the opening ceremony of the de Ceudel office space...etc.
- bonding and working with the coworkers, who are all very enthusiastic about their work



- worked closely with the Schoonschip consulting team and the WWF consulting team
- helped develop the Cleantech Selection Tool
- contributed to the data analysis section of the WWF report
- volunteered around the office and helped on whatever needs to be done, even if it was completely unrelated to my official job

# input on academics/career

- Helped me see the application of COS and ORFE in the real world
- I went into the internship knowing nothing about consulting, but am now considering it for a career path

# concluding remarks

Working at Metabolic was very rewarding, and the company was very encouraging and helpful.

- I was able to switch projects whenever I felt like I have learned/contributed all I can
- We had flexible work hours
- Everything was very self-motivated
- Mentorship and office morale was very strong

I recommend working here very highly! It is a fantastic work environment with a strong start-up culture.