EXCEPT

Creating the Foundation for a Sustainable Future

Consulting & Research // Architecture & Planning

Project Sample Booklet - 2010

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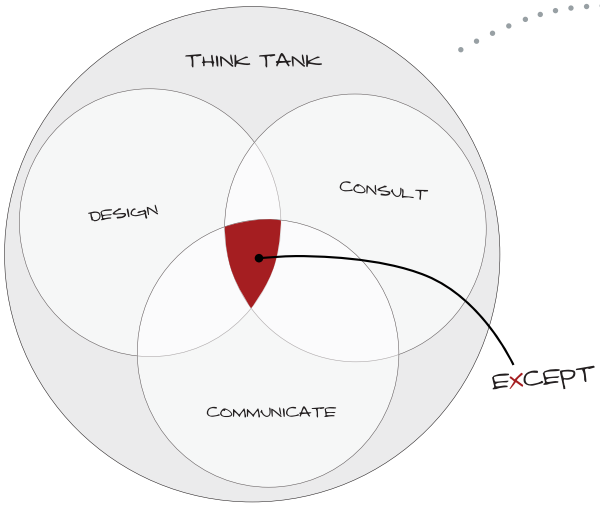
What is Except?

Except is an integrated sustainability consultancy and design firm. Since 1999, Except has provided solutions to complex problems of governments and enterprise using a unique integrated work process and multi-disciplinary approach.

Our aim is to actively help transform our world into a truly sustainable one - where a strong, just, and wealthy society is consistent with a clean environment, healthy eco-systems, and a beautiful planet.



Process

The foundation of all of our work is scientific research. From this solid base, we create inspiring designs and devise practical, executable solutions to the research and design challenges we take on.

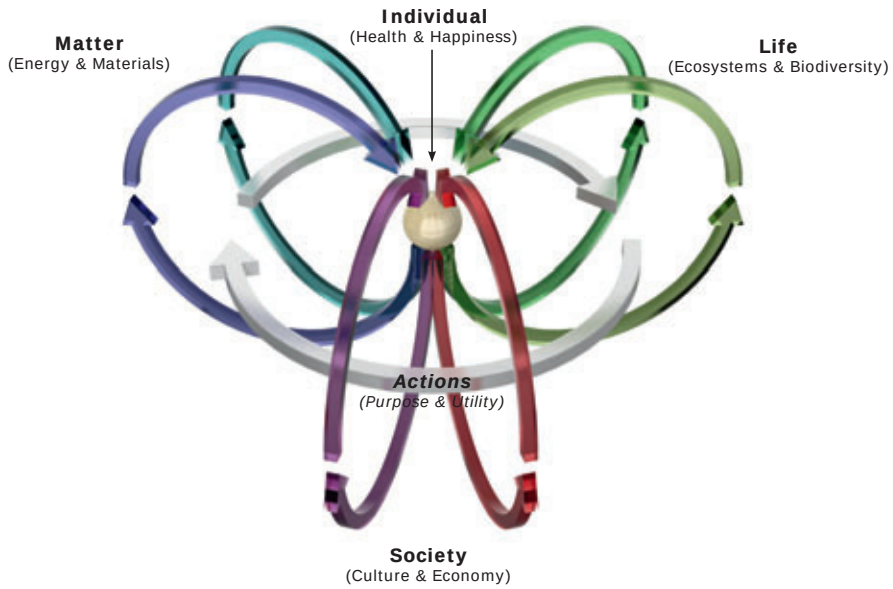
Drawing on our network of associates and partner organizations, we assemble a customized team of experts for every project. Regardless of the team or assignment, we always rely on systems-thinking methodologies in our work.

Method

Symbiosis in Design (SiD) is a new methodology developed in-house by Except for solving complex, multifaceted problems. It enables the integration of knowledge from a wide variety of disciplines, effective sorting, makes new relationships visible, and allows solution implementations that optimize the system in question. The method combines a philosophy and a work process that quickly results in comprehensive and satisfying solutions.

Read more about Symbiosis in Design on our website: www.except.nl

Symbiosis in Design (SiD)



Architects
Biologists
Designers
Ecologists
Economists
Engineers
Planners
Programmers
Scientists
Sociologists
Logistics experts
Managers
Agriculturalists
IT Developers

Collaboration and Open Source

Except works closely with clients, partners, and stakeholders in a collaborative setting. In order to assist with this objective, Except co-founded the Rotterdam Collective, a collaborative workspace, which also houses Except's main offices. Some of our partners are co-sited with us within the Collective, while many others are scattered across four continents, providing valuable global expertise.

This booklet contains a sampling of our projects from the last 10 years of Except's operation.

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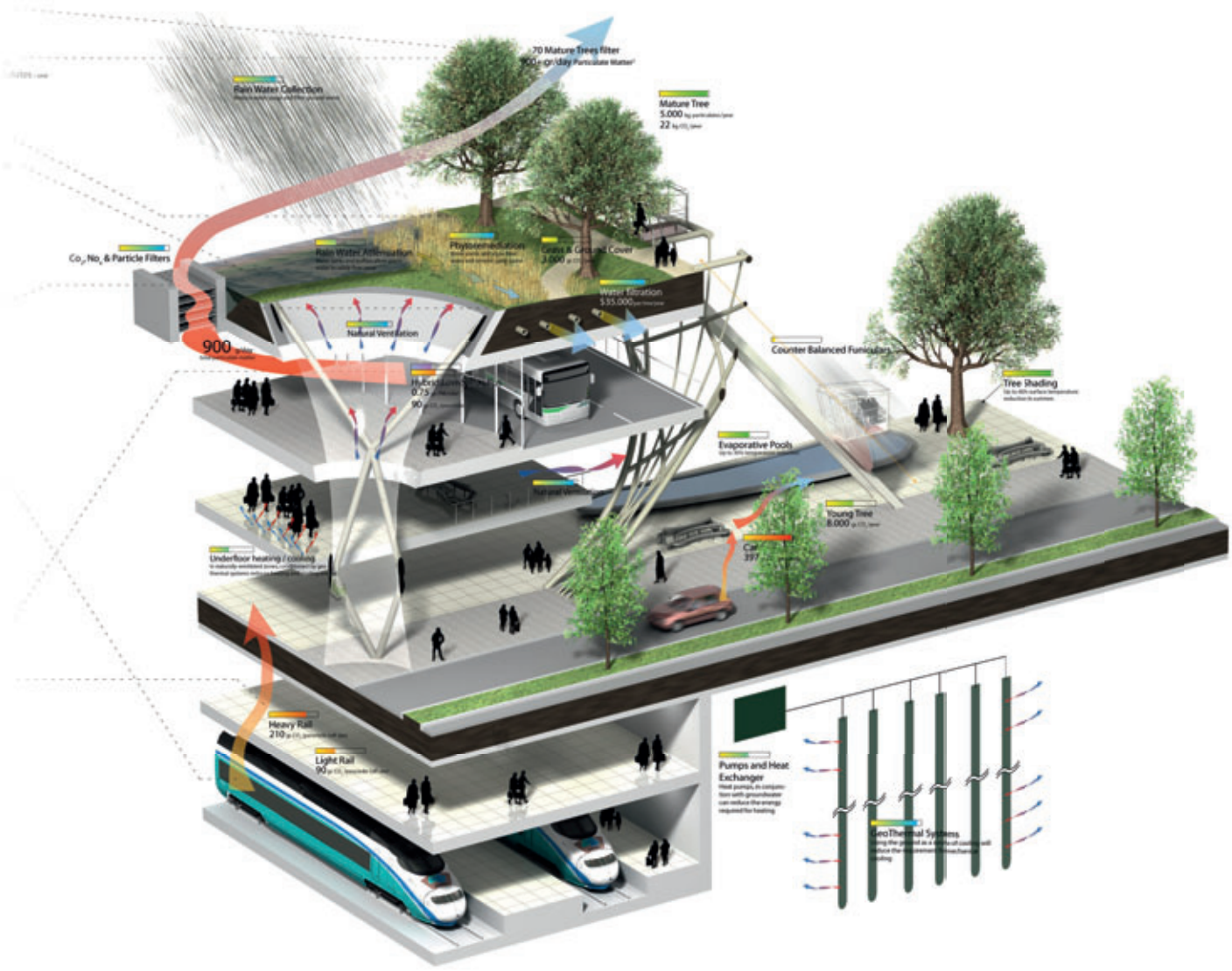
San Francisco Transbay Terminal

Transportation Terminal + City Park, San Francisco, USA - 2007



Except helped Pelli Clarke Pelli Architects win the decade's largest architectural contest - the Transbay Terminal competition. The winning design features a city park integrated with comprehensive ecological and user interaction systems.

The park is sited in a dense inner city area, on top of one of the largest transportation terminals in the US. Natural ventilation systems remove fine particulates from the underground air, while the landscape above helps sequester other forms of air pollution, including CO_2. All rainwater is captured and filtered for use on site.

Construction of the terminal is scheduled to be complete in 2015.

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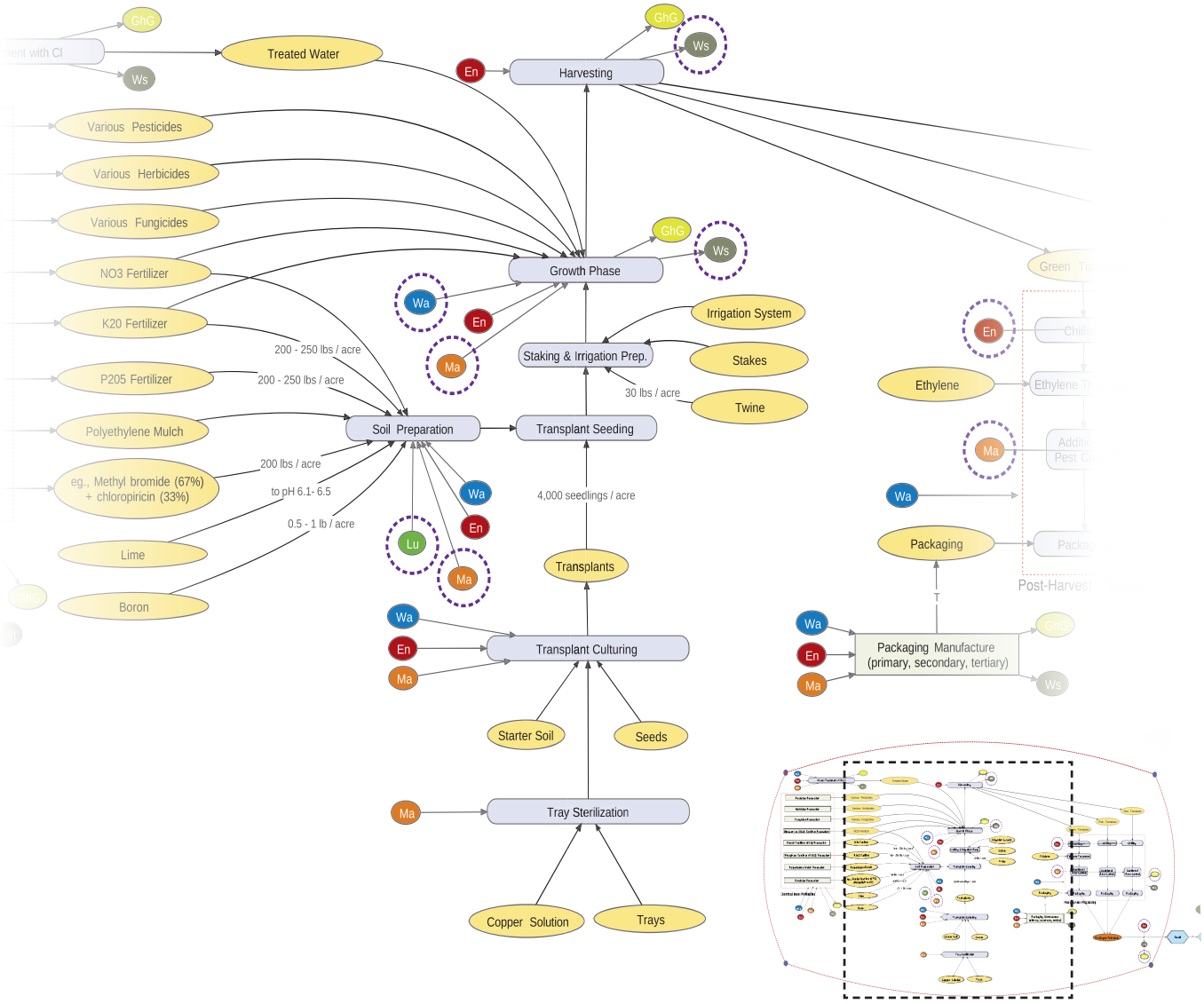
Life Cycle Consulting

Applying life cycle thinking to company strategy and product design

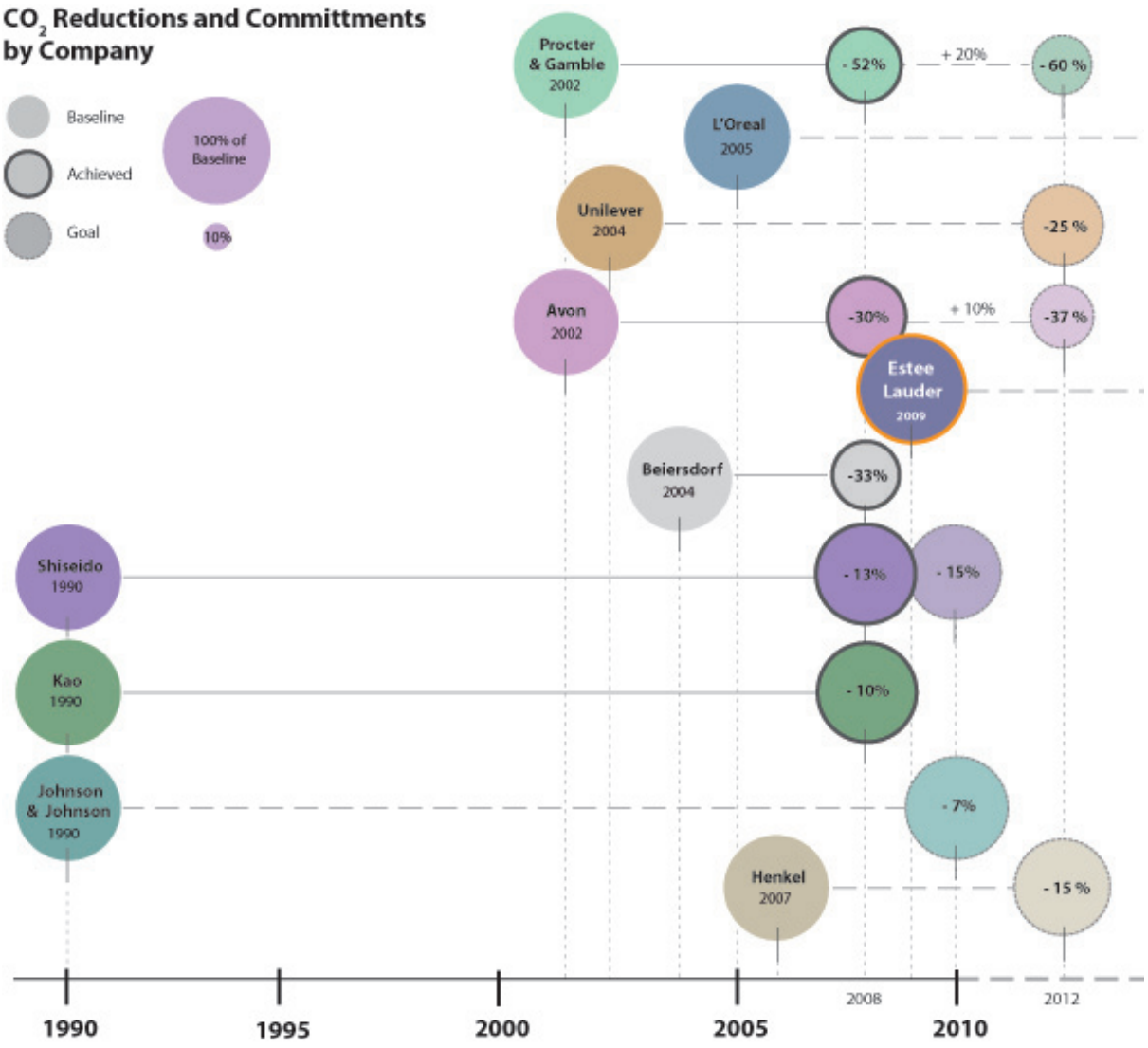


This sketch of the life cycle of a tomato was developed as part of the design for a sustainable food tool. Once complete, this tool will allow our client to factor in environmental impact criteria when making company food purchases.

Life cycle thinking can be used in almost every aspect of decision making for sustainability. From picking construction materials for a new building to selecting supply chain partners, this mental approach can provide key insights on the impact of our choices. In addition to consulting on life cycle thinking, we are also experts in Life Cycle Assessment (LCA), the formal impact analysis tool for product chains.

Corporate Social Responsibility

Developing management and communication strategies for companies



Corporate Social Responsibility (CSR) is a new field of management and strategy for companies wishing to become part of the larger social transition to sustainability. The graphic above was developed for a corporate client who needed insight on how to set sustainability goals for the next decade.

We help companies develop personal visions and strategies for moving towards sustainability. Every company is different, and our first priority is to really understand each company's culture and specific needs. Our work ranges from conducting background research to devising comprehensive communication strategies to writing annual CSR reports.

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Greenhouse Planning & Design

Venlo, the Netherlands - 2010

Venlo is one of the gateways to the Netherlands. In this border town, the current scattered and inaccessible greenhouse sector is preparing itself for a creative rebirth. In the near future, this area may well be regarded as the national hub of inspiring and sustainable greenhouse agriculture.

The plan emerging from our preliminary research and consulting work in Venlo would result in a greenhouse industry that adds to biodiversity, is a beautiful and enjoyable asset to the landscape, cares for water, can generate its own energy, and close nutrient cycles. No doubt, it would also be a spectacular place to go for a picnic.

Sustainable Building Conversion

Various projects 1999 - 2010

Converting our existing building stock into the sustainable built environment of the future is one of the most exciting challenges of this era. Building upon old structures rather than following a cycle of demolition and newbuild has many advantages. It allows us to retain the value and culture of existing stock, maximize the material and economic utility of existing structures, preserve the Genus-Loci of each area, and make smarter phasing possible. Huge environmental gains are made by simultaneously converting existing structures into zero-impact designs.

Except has deverloped a variety of building conversion designs and strategies on structures including: single family houses, prisons, 60s office blocks, and old factories and warehouses. These can usually be made entirely energy-neutral, water-neutral, as well as redesigned into highly attractive urban architectural spaces.

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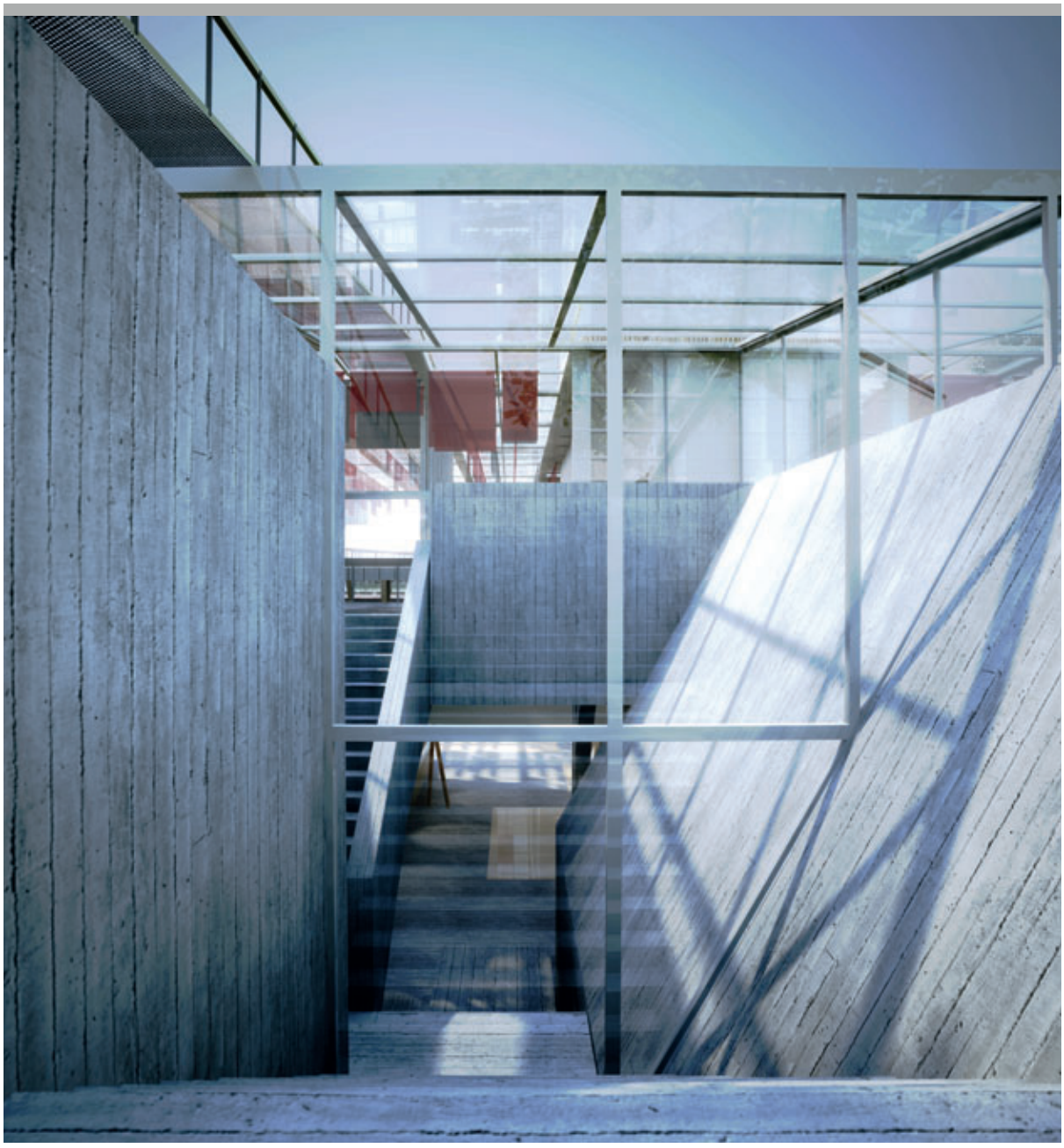
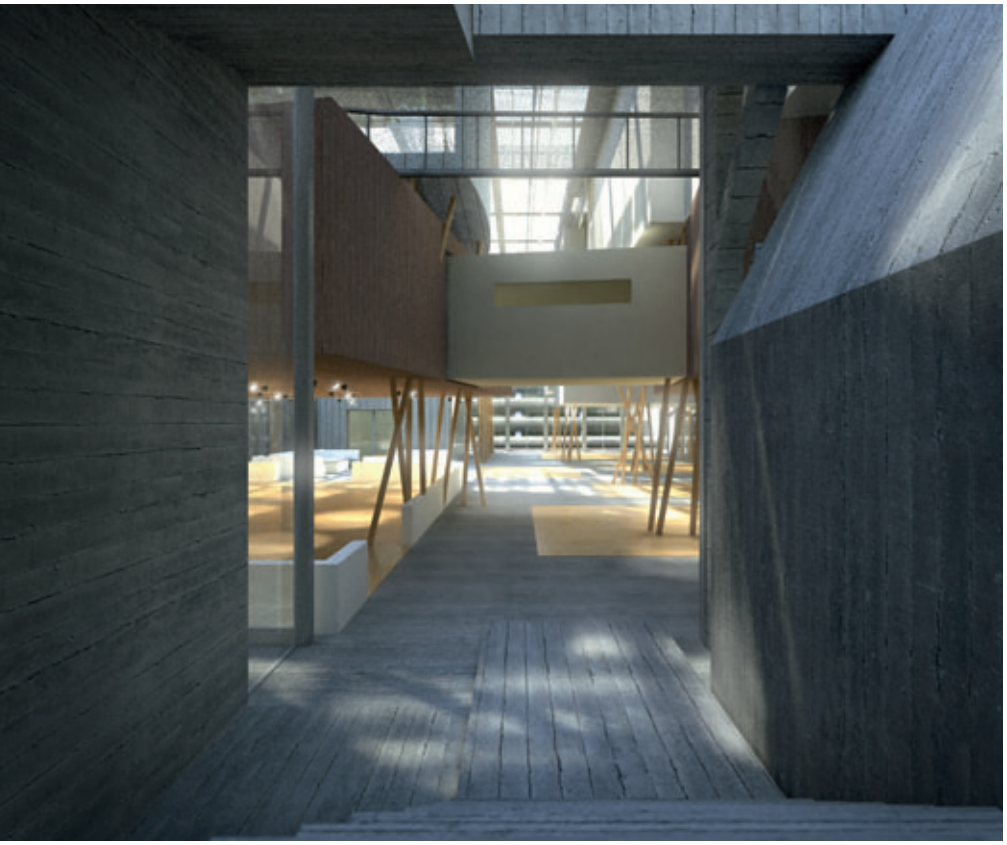
Wesleyan Teaching Museum

Sustainable Educational Museum, Middeltown, CT, USA - 2007



This project for Weslyan University resulted in a new typology, a unique environment, and several new approaches to sustainable design. The Wesleyan Museum design demonstrates that buildings constructed for extreme durability can, in fact, elegantly support the need for flexible programming. The structure integrates the latest science, an innovative use of materials, and world-class architecture.

The museum sets new standards for zero-energy buildings. It is designed as much for the present as for the future, with flexible layouts, precise controls for lighting and climate, and expressive gallery spaces. Ancient Egyptian building techniques are combined with the latest innovations to achieve both the flexibility that changing collections require, an open and pleasant space for visitors, and zero net energy requirements.




ESLEYAN
EACHING
USEUM

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Centrum Ecological Chapel

Cultural Center, Toronto, Canada - 2008

On the steep slope of a ravine system in Toronto, Canada, Except planned and designed a non-religious place for contemplation, introspection, and shared spiritual expression. This ecological chapel, where humans and nature are invited to coexist, is exemplary of a non-technologically-focused way of building sustainably.

The chapel is designed to engage visitors on a variety of levels by weaving together light, water, music, and nature. The strong symbolism of the chapel's structure, depicted through the broken concentric pattern of the paths and wall structures, is continued in the material selection and the building's functional operations. Adding further to its ecological credentials, the chapel has been designed for natural ventilation, self-contained water treatment, and as an anti-erosion structure that preserves local topsoil.

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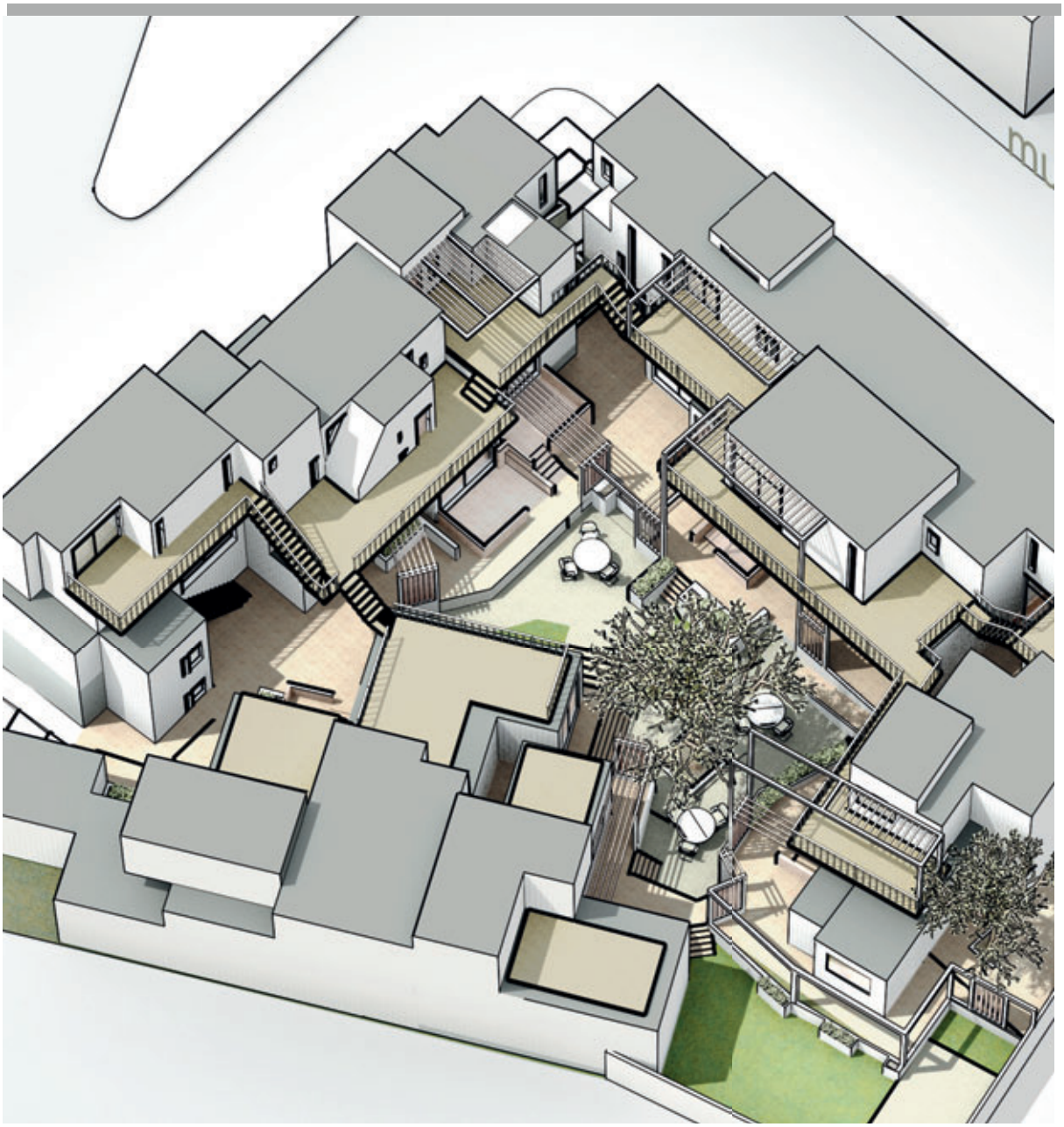
Research: New Housing Typologies

Innovative Typology Research & Design for Sustainbale Urban Development

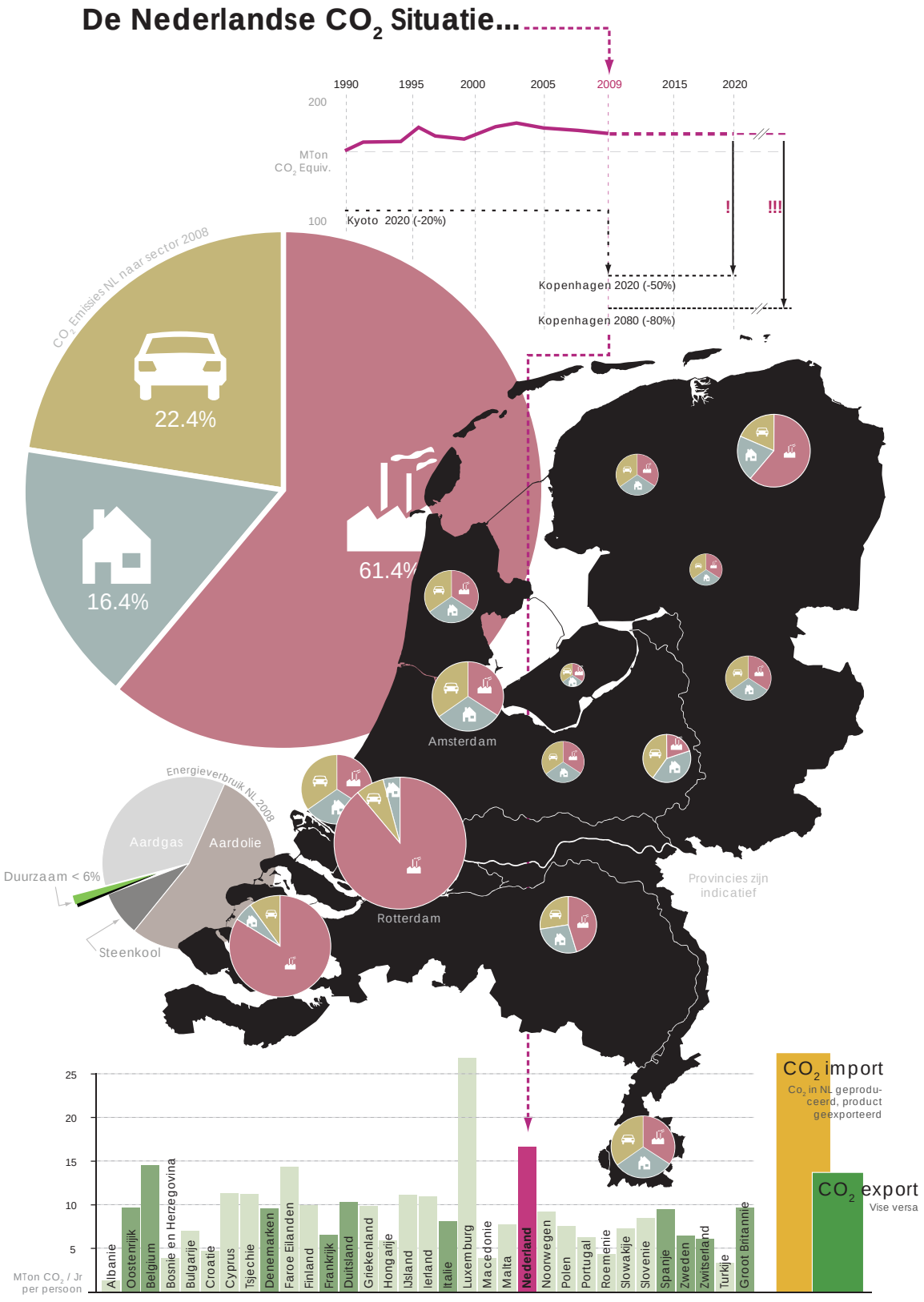


Co-locating the places we work, live, play, and run errands leads to lively and exciting cities. This co-location also reduces the need for transportation outside the area, which can strengthen local communities and cut environmental impacts. Except creates new typologies that combine smart programming with attractive architecture to help make these next generation habitats a reality.

In 2006, Except designed a New Haven apartment complex for refugees of Hurricane Katrina. The complex was designed for people of diverse backgrounds and incomes and was structured to foster community, employment opportunities, and provide most necessary amenities in a high-density environment.

Research: Environmental Policy

Scientific analysis in areas from international policy to new technologies



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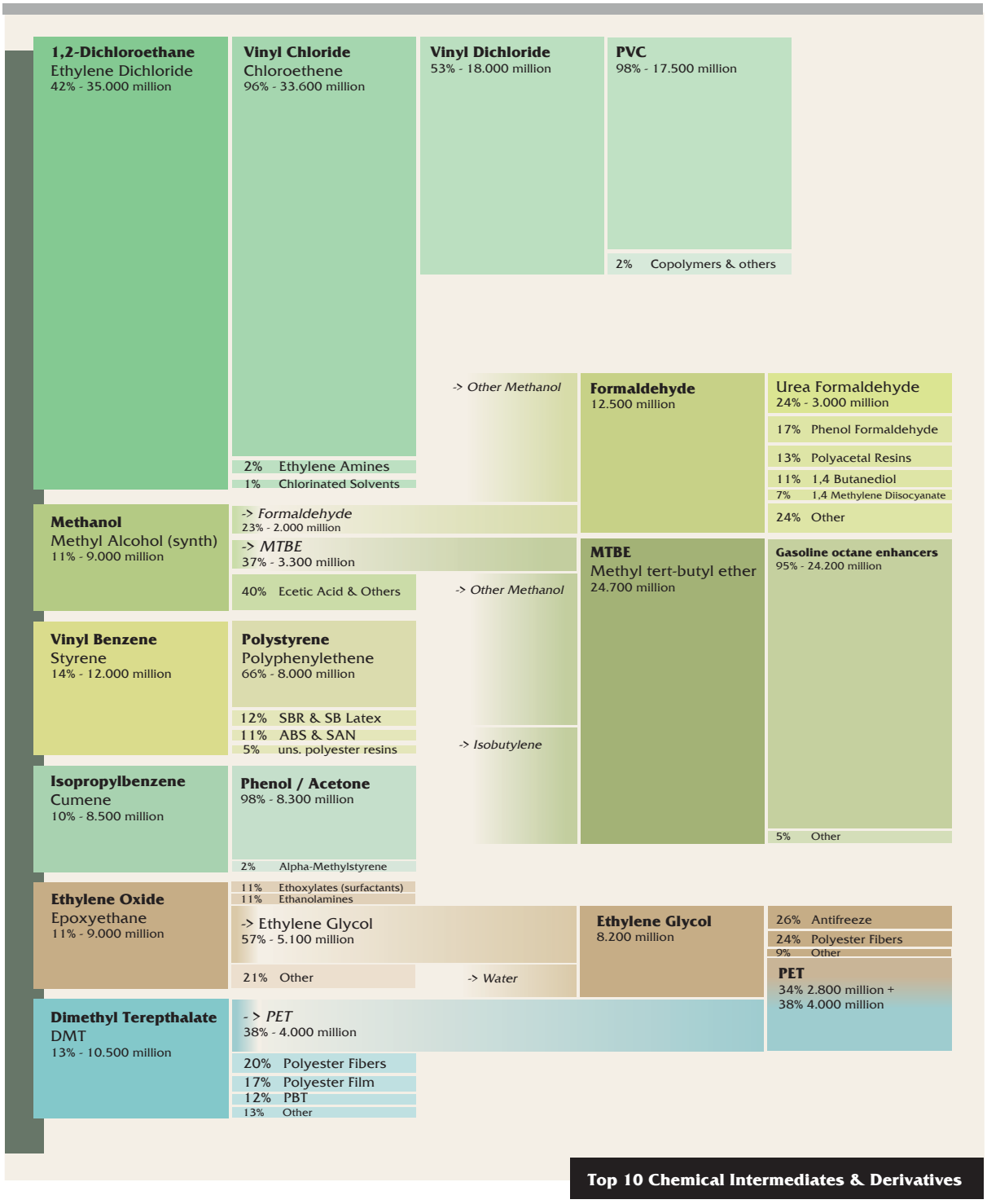
Research: Industry & Materials

Scientific analysis in areas from international policy to new technologies



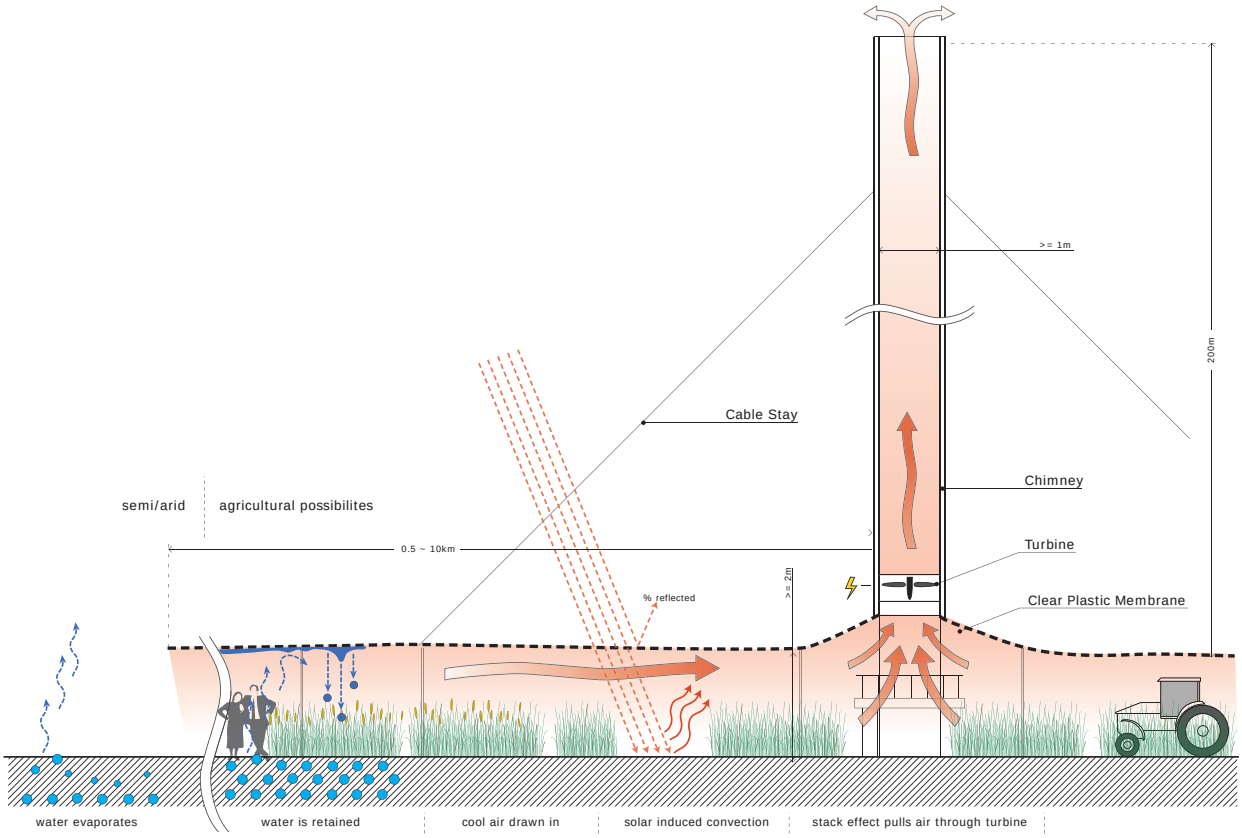
Top 10 Chemical Intermediates & Derivatives

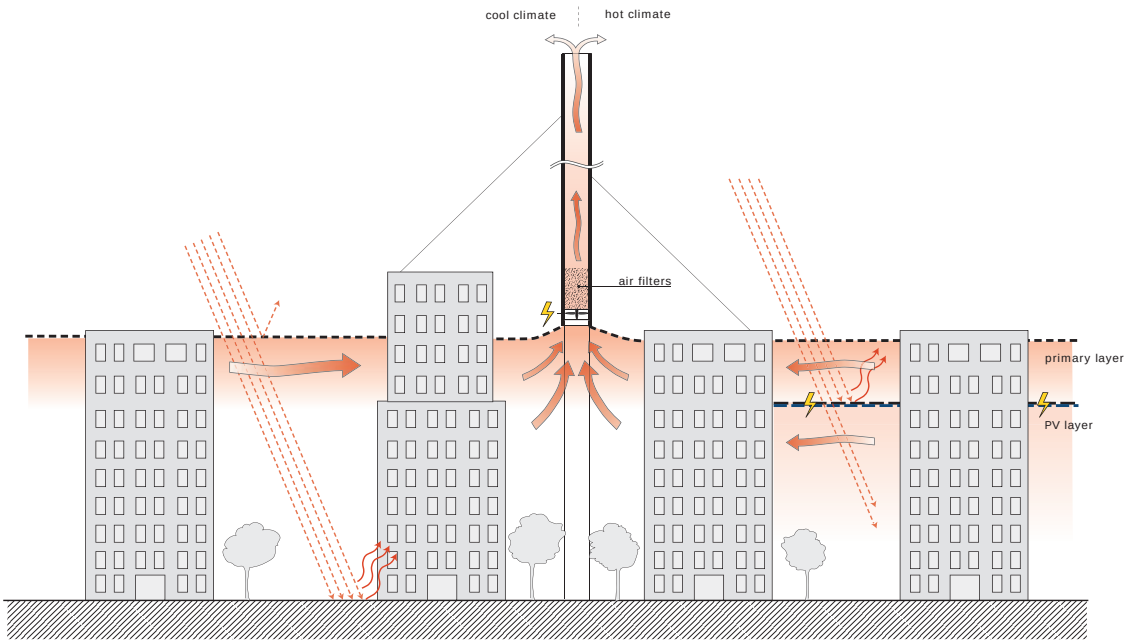
The diagram above shows the top ten global flows of chemicals and their derivatives. It was developed during a feasibility study for a green chemistry program in the cleaning products sector.

We produce peer-review-quality research on a large range of topics. Some of this work is done directly for clients who are looking for basic data and some is done as part of our project work with specific designs in mind. We also do research to keep our own knowledge base sharp and up-to-date. All of our work at Except is based on a solid understanding of the state of our societies, economies, and our planet.

Research: Energy & Technology

Scientific analysis in areas from international policy to new technologies





Research, Development & Design of effective renewable energy sources such as Solar Updraft Towers in combination with Agricultural functions, Urban Use and Co-Generation

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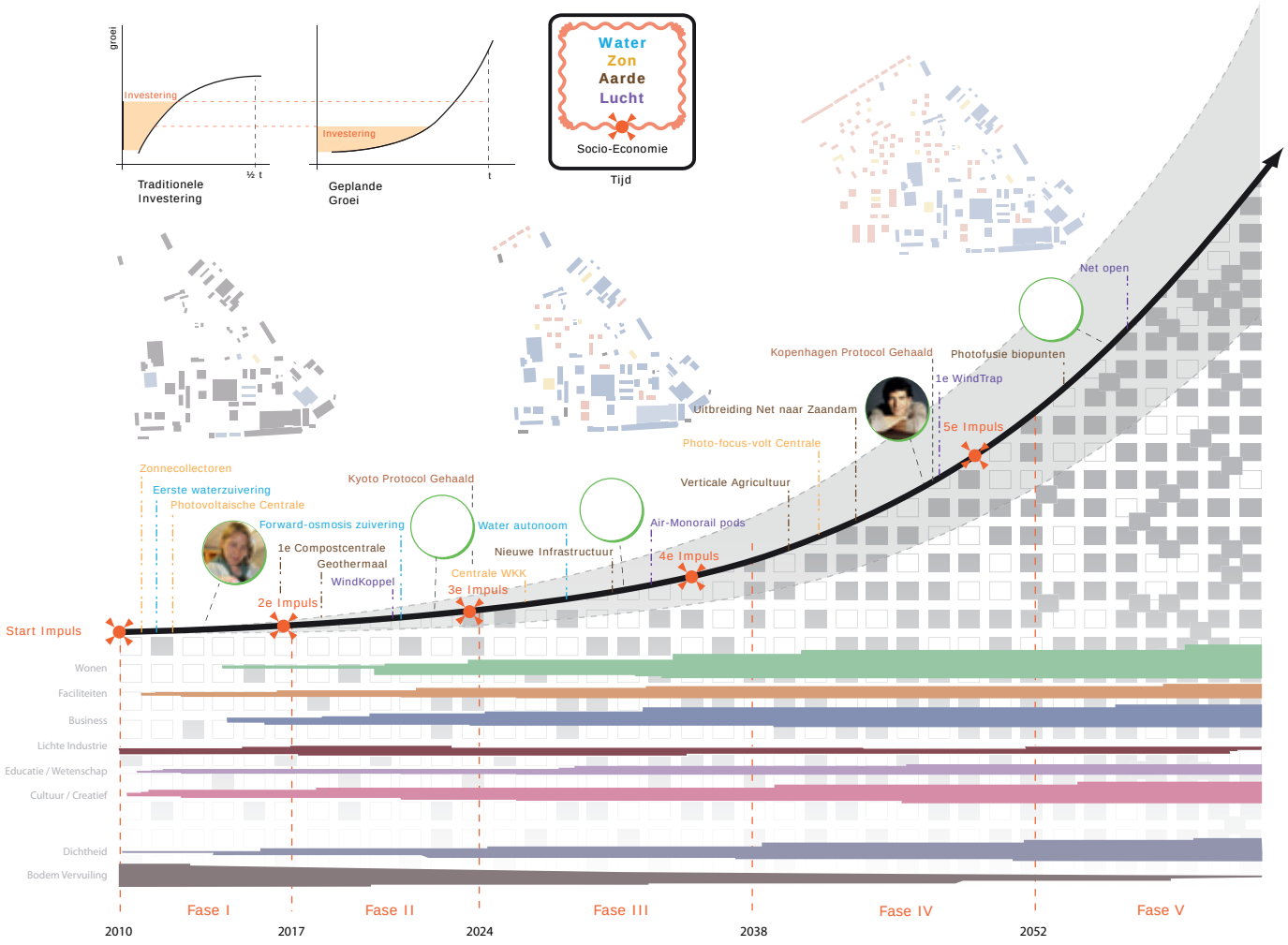
Growth Planning 2.0

Next Generation Sustainable City Planning - 2008

Growth Planning 2.0 is a strategy for area development and city planning based on next generation systemic investment and design models. It allows for sustainable development to take place in a realistic framework of growth, while maximizing quality, value, and user participation over a long-term planning period.

Traditional city planning has largely failed at accurately foreseeing the needs of future communities. Most city plans take their final shape 10 to 50 years from the moment they are launched, a sufficiently long time span for the world to have become an entirely different place.

Moreover, recent observations of area planning projects have revealed that no matter how creative or insightful the initial plan, standard planning generally results in communities lacking strong economic motors - insufficiently adaptable to changing conditions and often possessing limited urban quality. This project introduces an entirely new approach to planning. Rather than defining specific programmatic requirements, Growth Planning instead applies socio-economic impulses to the area within certain performance edge conditions. It revolutionzes the task of city design by requiring the urban fabric to organically respond to market stimuli, and allows for increased value, quality, and development over time.



Growth Planning vs. Investment Planning

The core of traditional investment planning is to assign various programs to portions of a map. Housing, offices, commercial zones, services, and open space are combined by designers into a mix that is to result in the "ideal" neighborhood or city for a certain location. A great deal of knowledge is available on how to plan properly, but most of this knowledge is abstract and has little to do with observed growth and development patterns.

Using the growth planning approach, we avoid pre-determining an area's program, and instead allow it to evolve on its own in response to local needs. To achieve this, we apply planned socio-economic stimuli to the region in order to encourage investment and growth in the area. These stimuli can take almost any form other than the construction of physical structures. For example: the creation of land co-ops, festivals or gatherings, educational programs, etc. Community participation is encouraged in this phase.

These stimuli are directed and managed over time to let the area grow and develop. While the stimuli are a planned component, the exact physical manifestation of the area is not. Personal initiative as well as corporate investment are both encouraged.

Performance targets rather than regulations

A secondary essential component of this kind of planning is the establishment of strict performance goals and boundary constraints. For example, one such requirement adopted in the case of one of our projects is that no energy be imported - in any form, which includes electricity - across the border of the development. These edge conditions are intended to push the area aggressively in the direction of sustainability, by requiring cutting edge and creative solutions from those who choose to develop in the area, without predescribing specific technical solutions.

Sustainable Growth Development

This kind of performance-oriented approach to sustainability, with a focus on preserving monuments, safety, and other concerns, allows us to discard a great number of unnecessary regulations. Locally-tailored solutions can be developed using the knowledge of the local population and stakeholders. Another example of a boundary condition for sustainability is to place prevent waste from leaving the site. It does not matter what solutions are sought to these preconditions, or how the agents within the area resolve their needs for resources. As long as these conditions are met, the area will be an exemplary development. Because technology evolves much faster than rules and laws can keep up with, it is likely that a situation much closer to optimal sustainable development than seen in traditionally planned areas.

City Design 2.0

A large area in the north of the Netherlands presented a unique opportunity for this radically new approach to city planning. Various parties worked together to restructure an abandoned area with many monument-status buildings. Except partnered with social housing corporations, local government officials, and developers to develop the growth planning concept and apply it in this unusual location.

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Shanghai Sustainable Masterplan

Integrated Renovation, Urban Agriculture & Renewal Plan - 2007

Shanghai currently faces a number of pressing problems, including pollution, high traffic, the need for housing, the loss of agricultural land, and runaway development. This urban masterplan integrates solutions to all of these key issues. It also reconnects the Lilongs, historical social housing districts, with a new urban metabolism. The focus on urban agriculture creates new opportunities for the local inhabitants, most of whom are poor agricultural migrants.

The masterplan uses vertical farming as a central component of an integrated solution that addresses infrastructure, water supply. energy generation, groundwater cleaning, community building, economic development, mixed use city development, and traffic infrastructure. The plan allows for the distribution of many "seeds" of sustainable growth within the area, which contain all of the aforementioned components, and which give the local inhabitants all they need to grow and recreate the city from within.


Major Traffic Artery
Restaurant
Exhibit
Headquarters
Food Court
Roof Gardens
Food Street
Hotel
Retail
Café
Retail
Markets
Restaurant
Restaurant
Food Processing
Retail
Communal Gardens
Office
Office
Retail
Internet Café
Cultural Center
School
Library
Retail
Cinema / Theatre
Residential
Event Square
Retail
Cafés
Retail
Major Traffic Artery
Roof Gardens
Cafés
Retail
Residential

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