

REGIO VENLO

C2C

in

Venlo

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Cradle xO Cradle in Venlo



REGIO VENLO



drs. Hubert M.F. Bruls

Cradle to Cradle is a concept for the development of products based on safe and completely recyclable raw materials. Chemist Michael Braungart and architect William McDonough have been involved in this innovative design principle, which they presented to the world in 2002, since its very inception. In 2007, Venlo and its environs was the first region in the world to completely embrace Cradle to Cradle (C2C). The objective was to show all involved parties throughout the district that the concept of a sustainable world is not a utopian flight of the imagination, but something fast becoming reality.

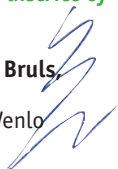
In the district of Venlo, C2C is high on the agenda on many fronts – in the business community, social organisations, educational institutions and government authorities. All in all, an energetic movement is underway comprised of enthusiastic entrepreneurs, administrators, officials, consultants and scientists, opinion leaders and social trendsetters. C2C inspires, stimulates and mobilises!

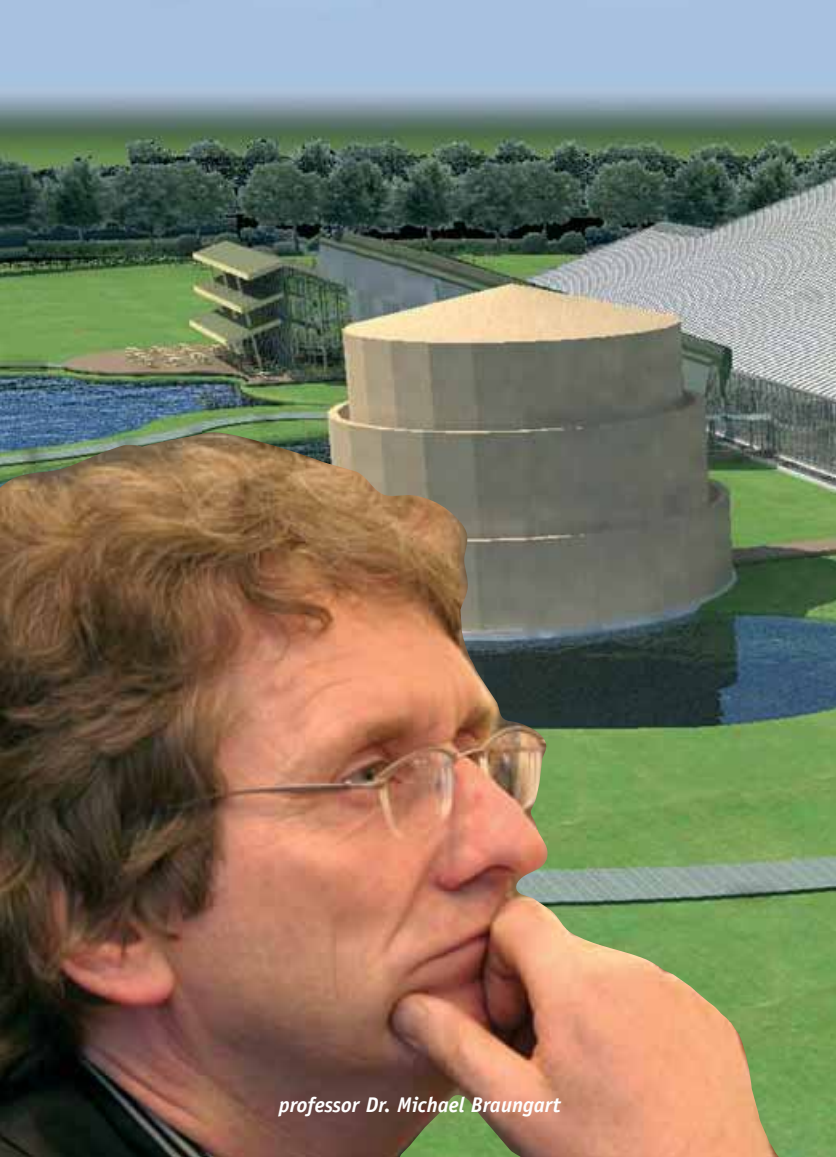
Cradle to Cradle is the ancient concept of stewardship in a modern setting. Based on the conviction that we have a responsibility toward our children and their children. And that, for this reason, we must think in the 'here and now' about the 'there and then', as Prime Minister Balkenende put it in 2005 to explain his interpretation of the concept of sustainability. It is the C2C ambition of the district of Venlo to contribute to an enjoyable, healthy, safe and honest world with clean water, air and energy, where economy, ecology and equality go harmoniously hand in hand.

The numerous C2C initiatives in the district of Venlo demonstrate that the ideas of Braungart and McDonough are an economic reality. This means that Cradle to Cradle is not a theoretical exercise, but a concept that truly functions in practice, such as we will show in this booklet.

Thus C2C is truly on the road to becoming daily practice, beginning in the district of Venlo!

drs. Hubert M.F. Bruls,
mayor Venlo,
president Regio Venlo





professor Dr. Michael Braungart



The district of Venlo is becoming the Mecca for the concept Cradle to Cradle. These were the words of Michael Braungart at the end of January 2009 in reply to an inspiring declaration of intent that the councils of Venlo, Helden, Horst aan de Maas, Venray and Gennep sent to the co-creator of the Cradle to Cradle concept a few months ago.

The declaration of intent bears witness above all to concordance with the joint intention of putting Cradle to Cradle in practice in the district of Venlo, thus being an example for the rest of the world. The five councils pointed out to Braungart that, with the development of Floriade 2012/Venlo GreenPark and Klavertje Vier/Greenport Venlo, a superlative opportunity exists to show the world that ecology and economy can truly go hand in hand. The cities of the district extend a sincere invitation to Braungart and his C2C-colleague McDonough to join the district in setting their shoulders to the wheel. Incidentally, the councils make no secret of the fact that the parties who embrace the ideas of Braungart and McDonough are not simply and solely supporters of the ecological principles behind them, but that they also envisage economic opportunities for the district in the plan.

Braungart, in his turn, feels honoured by the opportunity the Venlo district is offering to McDonough and himself. 'The unique Cradle to Cradle initiatives in the district of Venlo will quite rapidly become a textbook example for other districts and indeed other countries. The Venlo district and the province of Limburg will rapidly become the Mecca for everyone who is seriously thinking about the future availability of ecological and economic sources.

I look forward with enthusiasm to a fascinating era that will change our world', says Michael Braun.



Manifest



New industrial
revolution
commences in Venlo

The district of Venlo is on the precipice of a remarkable revolution. The district is breathing life into a completely new approach to existing economic cornerstones. These cornerstones will be viewed from an entirely new perspective, individually and, above all, in terms of their relationship.

Here, in North Limburg, a new day is nearing in which quality of life is inseparably connected with economic progress. We understand quality of life as a situation in which man profits from healthy air, healthy food and a healthy living environment. The revolution lies in the fact that this will not conflict with economic growth. On the contrary.

Economic growth combined with the creation of sustainability. For many this would seem a paradox. A society is under development that will very soon be just as staggeringly innovative as 19th century society was after the industrial revolution. An entirely new interpretation of the idea of stewardship over

our living environment!
The economic cornerstones of the district of Venlo are agribusiness, the logistical complex, the manufacturing industry and tourism. The district stands at the threshold of giving new, innovative, content to the future of those sectors. Innovation in approach and realisation.

Autonomous thinkers - creators and innovators - have set to work in the district of Venlo. It is their goal to arrive at new insights based on existing developments. And it is they who possess the talent to create something new out of 'nothing'. It is certainly the introduction of Cradle to Cradle (C2C), the design principle of American architect William McDonough and German chemist Michael Braungart, giving North Limburg a leading position within the BV Nederland - that fires the imagination most. Because, after all, this district is the first in the world to apply the C2C principles on a large scale. Not only during the manufacture of products, but also in the development of areas and trendsetting buildings and the organisation of living and working areas.

Cradle to cradle breaks free of the spiral of the depletion of natural raw materials, of waste and of pollution. Braungart and McDonough advocate totally new basic premises for design and development utilising safe and totally recyclable raw materials. Once they have been used, it must be possible to completely biodegrade C2C products so that their elements can be returned to biological or technical cycles. This will turn waste into 'food' in an infinite cycle.

North Limburg; a C2C district that:

- Has a community of companies that apply the C2C premises;
- Applies C2C in tone-setting projects and buildings;
- Gives the knowledge infrastructure an extra C2C dimension, from primary school to university;
- Is constructing a C2C knowledge nerve centre with a campus and linking the originators to the district.

The initiators and planners of these and other projects work with great enthusiasm. The Chamber of Commerce,

the Province of Limburg, the municipalities of Gennep, Helden, Horst aan de Maas, Venlo and Venray, companies and educational institutions and the universities of Eindhoven, Twente, Maastricht, Open University and Wageningen, and Fontys Colleges and the College of Higher Education Zuid have set to work with C2C. Such tone-setting regional projects as Floriade 2012 GreenPark and Klavertje 4 are being developed cradle to cradle.

The C2C initiatives are being linked to one another, accelerated and strengthened. The district is assembling its forces.

Within four years, C2C will be anchored in the district of Venlo. Then the following will have been realised:

- Business community
- C2C knowledge nerve centre
- Establishment of the C2C campus
- C2C sponsor group (September 2009)
- Image campaign Venlo (start 2008)
- Floriade 2012
- Innova complex and Villa Flora
- Greenportlane
- Supervision of Klavertje 4 by William McDonough

The prospects point to remarkable results:

- Within five years, there will be 2000 C2C students throughout the educational chain;
- There will be 50 new C2C companies each year;
- 25 new C2C company headquarters each year;
- And a burgeoning of top quality employment.



F.l.t.r. alderman Mark Verheijen (City of Venlo), William McDonough, Michael Braungart, Paul Beck (General Manager Floriade BV)

The revolution toward which the district of Venlo is headed makes the area most attractive. The C2C principles function as a motor for innovation. We are going into action with all of these concepts. You can call us to account on every one!

The Management Group:

Paul Beck
General Manager Floriade BV

Jos Hessels M Sc
Representative, Province of Limburg

Wil Houben
Director, Chamber of Commerce Limburg

Bert Kersten
Representative, Province of Limburg

Jan Mans M Sc
Foundation District Venlo Floriade 2012

Saskia van Stroe DrEng
Lecturer, Innovation in an International
Perspective Fontys College Venlo

Mark Verheijen M Sc
Chairman, Venlo GreenPark, alderman City of
Venlo



1. Innovate, innovate, innovate

We see the district of Venlo as a pilot project in which experimentation leads to the development of a new order comprised of man, the economy and ecology, side by side and hand in hand. Our focus is on developing and sharing knowledge, creating economic innovations, stimulating free spirit and cultivating new paths.

2. Link location and context

In order to link the city and the district, we secure the authentic values in our identity and anchor our past in the future. Located on the Meuse and sleeping in her bed, we take our cue from her unstoppable strength. We are proud of our identity, celebrate our future with passion, and work energetically to realise the future that we envision.

3. Manage and appreciate food

We use and process our raw materials in such a way that they are never wasted. We produce in perpetual cycles.

4. Enjoy mobility

We design and develop mobility systems that contribute to our economic, ecologic, and social well-being – to realise access for everyone.

5. Let the sun shine

We enjoy being creative, and just like nature, we use the sun as a perpetual source of energy and inspiration.

6. Create clean air, water and soil

We design systems focused on purifying and maintaining our living environment.

7. Design with future generations in mind

We will not burden our children and grandchildren with responsibility for maintaining or monitoring thoughtlessly designed objects or processes. Our designs have their enjoyment in mind and give colour to their future.



The district of Venlo is fast on its way to becoming the number one C2C district in the Netherlands. It positions C2C as part of an integral growth strategy. Based on the link between sustainability, innovation and knowledge development, we give content to C2C via:

- A business community
- A developed environment
- Knowledge infrastructure and development.

We facilitate the acceleration of the C2C application in the district through the use of an active network of ambassadors and directors. These key persons use their extensive international network to put the district on the map. These ambassadors and directors:

- Share their knowledge concerning the C2C initiatives
- Disseminate a joint message throughout our district
- Link existing C2C initiatives and boost new ones.

The directors focus particularly on synergy development in and outside the district. And these are, after all, mainly administrators from the regionally active partners. The ambassadors focus on disseminating the joint message.

They originate in the national business community, universities and other institutions.

For this reason the active partners include predominantly regional administrators (see page 11).

At this stage, the following ambassadors have already committed themselves to collaborating:

Dr. A. W. Veenman
Former Chairman of the Board
Nederlandse Spoorwegen

Prof. Dr. E.M. Vet
Director, Netherlands
Ecological Institute (NIOO-KNAW),
Extraordinary Professor
Evolutionary Ecology (WUR)

The regional booster team, with official representatives from the large regional projects, Venlo Partners and active communities in the district, supports the directors and ambassadors in their activities.

In his closing words in this booklet, Mayor Hubert Bruls makes the statement that Cradle to Cradle is becoming daily practice that it is really happening in the district of Venlo. What, specifically, is happening or on the brink of happening is described briefly on the next few pages on the basis of a number of examples of C2C projects of governments, education, the business community and public-private forms of collaboration in the district.

In practice, these parties are frequently involved in varying composition in several projects. Although C2C cannot be fully realised from one day to the

next, the results of the above mentioned collaboration are not without obligation. Indeed, the district of Venlo wishes to be evaluated on the basis of results. Together with the district, the city of Venlo has made the following choices:

- The realisation of Villa Flora at the Floriade/Venlo GreenPark site;
- The construction of a C2C city office;
- The composition of a C2C knowledge network;
- The start of the C2C lab South Netherlands;
- The redevelopment of the former barracks according to the Venlo Principles;

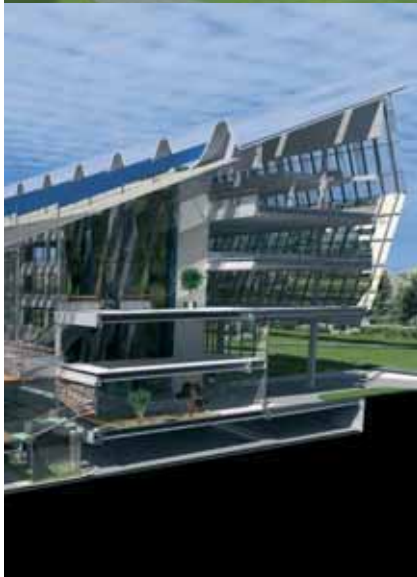


- The formulation of new purchasing conditions for the municipality, bearing in mind the Venlo Principles. This will also involve the millennium goals and Agenda 22;
 - The installation of the 'covered road': the road of the future. Pilot road section A74;
 - Offering healthy education: for future generations, 'Quality of Life' is given form in healthy schools. In 10 years Venlo will have the healthiest schools in the Netherlands. This is manifested in the indoor climate, the materials and school equipment used, teaching programmes, nutrition, physical education, and the school as an energy supplier.
- A number of 'quick wins':
- C2C coffee mugs [of maize] instead of the current plastic mugs in the municipal buildings;
 - A contest among the students for a joint C2C idea. The prize would be a paid traineeship in the municipality;
 - The updating of the current sustainability profile of the creative Centre district Q4 with the Venlo Principles;
 - The establishment of a task force for the concretisation of the Venlo Principles. Make it applicable for projects and organisation.



In October 2006, the broadcast of the episode Afval is voedsel (Waste is Food) in the VPRO series Tegenlicht shook the Netherlands to its foundations for a short time. Chemist Michael Braungart and architect William McDonough introduced Cradle to Cradle, a concept meant to demonstrate that growth and innovation can be good for man, his environment and his wallet. The Netherlands forms a good breeding ground for the ideas of Braungart and McDonough, it has since been realised. With the Floriade 2012 as signboard, the district of Venlo is placing itself on the world map as the first C2C district.

From his office Jan Linssen looks out over the 66 hectare large site where the Floriade will be built. Slowly but surely he watches as the event grounds are given form. 'But it won't be long now', says the director of Venlo GreenPark, the new businesspark that will move into the Floriade buildings after 2012. 'Hopefully we will be moving within a reasonable period of time, along with all the organisations involved in Floriade



creations as the 'breathing window' and a parabolic roof collector that collects water from condensation and converts it into drinking water. 'After the Floriade this 25,000 square metre building will be the workplace of some six hundred people', continues Linsen. 'All that they produce in terms of waste streams will be completely converted into energy in a fermentation plant'.

Ecology, economy and equality To provide for itself as far as possible and to be the least possible burden on its environment. This is one of the thoughts behind Cradle to Cradle or C2C. This will be achieved by already thinking during the design process and the choice of materials for a building or product about its possible rezoning or responsible demolition. A significant difference from 'old-fashioned' recycling, in which this process usually only takes place at the end of the lifecycle. Something else that is new is that C2C offers room for both sustainability and economic growth. This is also precisely the element that had such appeal to Bert Kaumo, programme manager of C2C of the Chamber of

Commerce Limburg, the first time he was confronted with C2C. 'Up to now sustainability has only cost money. C2C is an innovative economic concept that yields sustainability as a result. If it isn't interesting to businesses, it will not work in practice. But companies that handle it cleverly now and are the first on the scene with their C2C products will soon have a tremendous head start and a fantastic export product.' Kaumo and his people had already been searching for a method of district branding with which to place Limburg in general and the Floriade 2012 in particular better on the map for a long time. Inspired by the Tegenlicht broadcast, at the initiative of the Chamber of Commerce a Venlo delegation paid a work visit to McDonough. 'That is where the basis was established for C2C in the district.'

Superlative showcase

The first C2C district in the world: this is what Limburg will be in the future if Kaumo and his colleagues have anything to say about it, starting at the Floriade. 'A superlative showcase with which to show the world in a natural way that we are 100% behind C2C',

agrees Venlo alderman economy and finance Mark Verheijen, one of the participants in the work visit to McDonough. However, until a very short time ago Verheijen had had virtually no experience with sustainability. 'As alderman for economic affairs that is not the first thing in which I am involved. Sustainability actually costs money; that was the general opinion. In addition it always had to do with less consumption: raising a stern finger to say what was not allowed. There was absolutely no inspiring story behind it. In addition, sustainability was the exclusive terrain of such parties as GroenLinks (the Greens). A change in direction has commenced over the last few years. The CDA and the VVD, my party, as well, have

set to work with the concept, and sustainability is no longer focused solely on less consumption. What the consumer wants and how businesses can reinforce their innovation and competitive position is becoming more and more important. It is no longer strange to link sustainability to economic growth and earning money. In fact, I believe that this is the only way that such a concept can succeed.' The broad interest in C2C, believes Verheijen, offers interesting perspectives for the forging of entirely new coalitions between the business community and the government, as well as between political parties.

Entrepreneurs

The C2C ambitions of the Floriade 2012 are asking



quite a lot of the entrepreneurs in the district. C2C production is easier said than done. Material is only C2C if it can be used anew at the end of its operational life or if it can return safely to the biosphere without representing any burden. With regard to products in the technosphere, such as plastic and metal, it is important that materials be re-usable at the same or a higher quality level, or that the original raw materials can be recovered. There are but few materials that meet these requirements. At the same time, the current legislation and regulations stand in the way of the development of C2C materials. For example the recipes for concrete, the most important and – because of the cement – simultaneously

the most CO₂-producing building material, are determined by standards established in part by the cement industry. 'Fortunately there is a concrete laboratory here in the area, B|A|S Beton, managed by probably the greatest concrete expert of Western Europe, who is developing alternate recipes', says Kaumo.

In order to stimulate even more companies in the district to make their production C2C, the Chamber of Commerce regularly organises information meetings and informative lunch sessions under the very apt name of 'broodje Cradle to Cradle'. In addition, the Chamber of Commerce, in collaboration with the Ministry of Economic Affairs and the Limburg Investment and



Development Funds, rewards C2C entrepreneurs with knowledge vouchers. With good results; because in addition to B|A|S Beton, quite a few other companies in the district are now also producing according to the C2C principles.

'The world's first C2C paper factory is located in Swalmen', says the C2C programme manager of the Chamber of Commerce. 'HM Ergonomics supplies the C2C office chair of Herman Miller upon which Prime Minister Balkenende sits in the Trèvezaal. Jalema in Reuver makes C2C file folders and Océ in Venlo is on the right track. The company reclaims its printers once they are written off in order to facilitate the best possible re-use of parts and raw materials. Beer brewery Gulpen uses as many raw materials as possible from the immediate vicinity during its beer production. In Limburg the concept of waste will have disappeared entirely within fifteen years.'

The district of Venlo as experimental garden

The plans in Venlo are ambitious. If the district has anything to say about it, every North Limburger will soon be working in a C2C office, sitting on a C2C chair, printing with a C2C printer, storing his

documents in a C2C file and, after work, he will drink a C2C beer in the garden of his C2C apartment. Doesn't that sound a wee bit like hype? 'Sustainability has become a container concept that has a great deal of similarity to hype', feels Linssen. 'This is above all attributable to the way sustainability is presented to us. According to the Nuon advertising, green leaves grow on buildings. This, however, truly has nothing to do with sustainability. Anyone who pays serious attention to the principles of Braungart and McDonough will see that they truly have something important to offer. C2C is another way to deal with our planet. For example, cars are always becoming a bit thriftier, but they do continue to use fossil fuels. C2C allows economic growth, but only using those resources that do not further pollute the world and that do not gobble up our raw materials.' That a completely C2C world is an ideal that we will not realise within ten years, says Linssen, is clear. 'Nonetheless, we must start somewhere. Even if it is only to state that we are doing things differently. It is not for nothing that Braungart wishes to have his chair here.'

Living nature

**FLORIADE
VENLO**



**VENLO 2012
LIVING NATURE**





Of course it is very important for government authorities that administrate the first C2C district in the world to set a good example themselves when it comes to fulfilling the principles behind Cradle to Cradle. This begins literally at home; that is to say, in the council offices or the city hall.

For this reason the cities in the district of Venlo are taking a look to determine their options with regard to making their own offices C2C. For example the city of Venray is investigating whether it might be possible to renovate its existing facilities according to C2C. Because central municipality Venlo is in any case due for a new council office, here we see a superlative opportunity to take matters more firmly in hand. Which is exactly what Venlo is doing. The plan of requirements for the council offices is based entirely upon the Venlo Principles.

Five architects have been pre-selected for the construction of the new council offices in the plan Maaswaard. Because C2C is indeed an important, but not the sole selection criterion when it comes to the final choice of architect, Michael

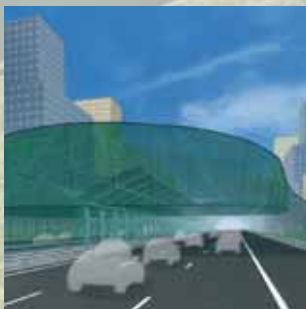
Braungart has personally shown the remaining architects during a workshop what specific factors they should bear in mind during the development of their visions for the new council offices. On the basis of the visions submitted, in the summer of 2009 the city will choose an architect and the design process will commence.

Growth model

According to project leader Michel Weijers, one thing that is certain is that the council offices will not be 100% C2C at their opening. In view of the present state of the art, there is not yet a single building in the entire world that is entirely C2C. Of course that is our objective. So it is above all important that we bear in mind future adaptations in the design of the council offices. So that the offices can constantly develop toward becoming a complete C2C building. That process of stimulating designing in order to make room for a growth model is also something from which architects and other members of the design team can learn something for the future. In this way, we hope that each design will bring us a few steps further in the direction of C2C!

Venlo wishes to cover 715 metres of the A73/A74 in Blerick with a glass roof. The covering of this sustainable road of the future involves an investment of more than 56 million euros. The idea is for the glass cover to solve such problems as noise, odour and dust, but its construction also represents quite a unique picture.

By equipping the cover with solar cells and collecting the heat in the glass tunnel, 1900 nearby apartments can be supplied with energy. High noise screens would also no longer be necessary. All in all, this will yield savings of over 35 million euros.



The glass cover is to be erected between the parish of Boekend and the Zuiderbrug. At that point the long-anticipated A74 is to link to the A73.

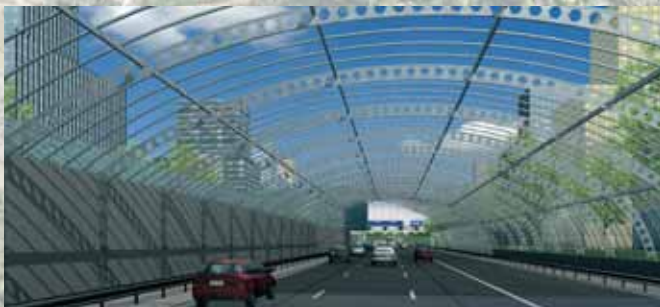
This design will unburden the residents of Blerick and Hout Blerick. Says alderman Twan Beurskens: 'With this concept you're no longer talking about worsening, but about improvement, even in comparison with the present situation. The Sustainable Road fits very well in our Cradle to Cradle ambitions and in our climate policy.'

The Sustainable Road is a concept that was awarded the National Innovation Prize for Air Quality in 2007, as well as the National Noise and Vibration Innovation prize.

Nucleus of the idea is that glass noise screens are curved and lengthened so far that they come together over the road, forming a tunnel. Actually, two tunnels: one for each lane. In this way, the excessive noise and pollution are literally encapsulated. Another element of sustainability is that heat can be obtained. After all, the air heats up under the glass. Via hoses in the surface of the road, the road is cooled as necessary by pumping groundwater. The heated water is also stored in the ground again; in the winter it keeps the road surface frost-free. In this way the road no longer needs to be salted, and the asphalt suffers much less wear. The concept is a solid step toward C2C. To begin with,

both the necessary steel and the glass are easy to recycle. In addition, the glass comes from virtually inexhaustible sources (calcium, sand and soda). In addition, the use of Freeform glass represents tremendous savings in glass and steel. This glass is one-half thinner and therefore also one-half lighter than glass curved when warm, so that the steel structure can also be lighter.

Under the cover, DAB (dense asphalt concrete) can be used in place of ZOAB (very open asphalt concrete). The top layer then lasts three to four times longer. In addition the layer causes the rolling resistance of cars to decrease, so that they require less fuel on the Sustainable Road.



The first C2C recreational park in the world

On the perimeter of the vast nature reserve De Peel, Gonnie Koning-Bakker and At Koning will soon present an “energy-indifferent sustainable recreational facility on an ecological basis” to the world. Fancy words for a recreational park where relaxation and protecting the environment go hand in hand. Uitspanning Zonedauw will be the name of the park in Grashoek where the concept of responsible recreation will be put into practice commencing in 2010.

Manageable energy. Gonnie Bakker and At Koning can talk about it for hours. The jumping-off point for the discussions: it is a sin to throw money out the window. Is good old Dutch thriftiness the basis of recreational park Uitspanning Zonedauw? Gonnie Bakker nods. ‘Perhaps it is. And why not, at that? Why must we use expensive fossil fuel when we could also function in an energy-neutral way? Just call it thriftiness. You can also call it innovative and environmentally friendly. In addition it is fantastic to build a house that costs no fossil fuel, has a better indoor climate and feels very, very comfortable.’

One of the sustainability objectives of Uitspanning Zonedauw is to serve as an example for the renovation of existing dwellings and the construction of future residential neighbourhoods in the broadest sense of the word. These so-called EcoRanch residential neighbourhoods are to be entirely self-sufficient, all the way down to the purification of their own wastewater.

Only techniques with a very high reality quotient will be utilised in the EcoRanch/Uitspanning Zonnedaauw. Over the course of time, these products will also become available to the broader public via specialist retailers and do-it-yourself markets.

What will recreational park Uitspanning Zonnedaauw look like? Between Helenaveen and Grashoek, a hectare of land will be the location of grass-thatched dwellings, four bed & breakfast accommodations, fifteen campsites, and a tea-shop with an educational centre. While enjoying a relaxing holiday, guests of the park can use and learn about sustainable construction and the value of the wind, sun and earth as natural sources of energy.

According to its initiators, many companies have expressed their interest in becoming involved in the project. Says At Koning: 'Recreational Park Uitspanning Zonnedaauw will be a living showcase for the residential neighbourhood of the future. Companies wish to integrate and show their latest products there, the city

of Tilburg wants to participate in terms of knowledge. Companies and educational institutions are curious about the new ecological possibilities. Despite the sustainable, low-energy and ecological materials and technologies available and used at present, sustainable construction is still not popular. But that will absolutely change, particularly once people have the opportunity to experience recreational park Uitspanning Zonnedaauw.'





To make it possible for the ambitions of the district regarding C2C to continue flourishing in the long term, the cooperation of the existing educational institutions is crucial. The managers of the future must already become accustomed to seeing C2C as a 'normal' development today. The possibility of introducing C2C into the curriculum of the sixth form, HAVO and VWO, has already been discussed at an early stage with the Venlo and Environs Educational Community. In a subsequent stage this will continue to the lower school, MBO and VMBO. A programme has already been prepared for the lower school that will introduce the concepts of C2C in a light-hearted manner to the primary students. The HBO (higher professional education) sector also welcomes C2C. Fontys Colleges Venlo have established a lectureship Innovation Management in an International Perspective. Within this lectureship, C2C plays a central role as a holistic design principle.

In cooperation with the Chamber of Commerce Limburg and EPEA of Michael Braungart, the lectureship has developed a 'Summerclass' Cradle to Cradle. This is an evening class for managerial personnel in the business community.

C2C-Lab South Netherlands

Under the influence of the many developments in the realm of C2C taking place in Limburg, at the initiative of centre city Venlo the C2C Lab South Netherlands has been established. All the design and development power from the various C2C projects will be physically bundled here in an open design environment. In this way the physical basis will be laid for the university knowledge nerve centre. In these developments there was close collaboration with various universities and colleges of higher education. This is an initiative of the booster group C2C within the city of Venlo that was picked up by the project manager for new construction of the Venlo council offices in combination with the developers of the Floriade and the municipality of Helden.

Knoops in Venlo:
First 100% green
print shop in the
Netherlands

Print shops have been known as one of the most environmentally burdensome facilities since days of old. Over the last several years, the sector has been working hard to improve that image. A trendsetter in this area is print shop Knoop in Venlo, the first print shop in the Netherlands to earn the designation 100% green.

Print shop Knoop in Venlo is a socially-engaged enterprise that invests in sustainable relationships. Director Marc Geraeds explains: 'The field of environmentally-friendly printed matter and environmentally-sparing printing processes is certainly on the move. We work according to the latest state

of the art when it comes to ink and paper and we are already thrifty with energy and water. And it goes without saying that we print on FSC paper with a certification for responsible forest management.'

The director is aware that, whereas these days entrepreneurs can still stand out on the basis of sustainability, the concept will soon be standard practice. 'An increasing number of customers already opt for sustainable solutions. At our facility they are at the right address. Cradle to Cradle turns our entire company upside down, in a positive sense. The concept is a fantastic source of inspiration. Our entire way of thinking is becoming more and more 'green'. You will encounter this throughout the organisation. To begin with, in our eco-print process accor



ding to strict EPEA standardisation. In addition we pay a great deal of attention to ensuring that our employees work in a clean manner. This means, for example, that our office is furnished entirely Cradle to Cradle with furniture by Herman Miller, but also that we use only Fair Trade coffee, tea, sugar and other products. Together with other pioneers, we also actively project the mental legacy of Cradle to Cradle to the outside world.'

Cradle to Cradle is a significant step into the future, says Geraeds. He believes that a company can only take such a step if its entire team stands behind it. 'That is a requirement, because Cradle to Cradle forces us all to give particular thought to everything we do. That isn't too difficult, though, because it fits

perfectly with our professionalism, our involvement in our work and with developments in that direction. Prosperity is not only financial growth! Prosperity and well-being go hand in hand, for future generations as well. The 3 E's of Economy, Ecology, Equality. Perhaps a small company can effect a turnaround in its policies more easily than a large one. Perhaps a small company can respond more flexibly to new developments and markets. Be that as it may, Cradle to Cradle works for us, to combine enterprise with social engagement and come up with a healthy business result with a social contribution. We hope that the Cradle to Cradle concept will appeal to many people and organisations and that it will stimulate them to have their printing done by our motivated personnel.'



The mental legacy of Braungart and McDonough inspires many entrepreneurs to manufacture their products according to the C2C concept. Then the big question that usually arises is: where do we begin?

In order to offer a platform for entrepreneurs puzzling over practical C2C questions, in collaboration with entrepreneur Wim Fleuren the Limburg Chamber of Commerce has established the Cradle to Cradle Community. This networking organisation, which meets every third Thursday afternoon of the month alternately at the Chambers of Commerce in Venlo and Maastricht, fulfils a quite definite need. At the

moment some 130 consultants, entrepreneurs and educational institutions are associated with the community. Wim Fleuren: 'Above all now that C2C is still in its infancy, it is very important that entrepreneurs and others working in the area are able to consult with one another. In the beginning they often feel a bit isolated and seek something to hold onto and some confidence. What we hope to accomplish by way of the community is for entrepreneurs to point each other in the right direction, to give each other a hand, and share the successes and setbacks they encounter along the way. This makes it possible for everyone to recognize and implement the process for himself.'



De Cradle To C

One of the most important tips: carefully assess the customer of your product, and then make him a tailor-made offer. Whether you're talking about the construction of a house, the supply of tiles for a bathroom or the paper for bathroom tissue: if the customer can see that it can be done cradle to cradle, you're one step ahead of the game. There has to be content; it must be honest. It is not a marketing gimmick.

According to Fleuren, the biggest problem for C2C entrepreneurs is the 'yes, but...' reaction – even within their own organisation – that they frequently encounter at the moment they want to set to work with Cradle to Cradle. 'You cannot imagine the kinds of

problems buyers and production managers can come up with. Understandably, too, because these days many production processes are so complex that many of those involved immediately envisage problems if someone asks them in a friendly manner if it can also be done C2C. In the C2C Community, we focus specifically on providing solutions.'

The Limburg Chamber of Commerce continues to sincerely support the initiative and is one of the sponsors of the website that forms a virtual meeting place, so that parties that want to implement C2C can also make contact with each other between the physical meetings.



An apron made of completely biodegradable starch foil, a lamp of aluminium sheets from the printing industry and a 'lease laptop bag with the intriguing name 'This bag is not mine.' These are but a few of the products that have thus far sprung from the collective imagination of the members of the Qreamteam. This is a group of young entrepreneurs in the creative industry in Venlo that are working according to the principles of Cradle to Cradle.

The Qreamteam has been in existence since October 2007 and operates from Venlo's cultural district Q4. Maarten Kuypers manages the Qreamteam, currently comprised of sixteen creative companies, mostly solo flyers. Approximately half of the collective consists of designers; the other half are graphic designers, market specialists and other creative support personnel.

Tangible results

'No one will be surprised that designers in the creative industry achieve the most tangible results when it comes to the application of Cradle to

Cradle', says Maarten Kuypers. 'At the same time, designers generate spin-off for entrepreneurs in other branches of the creative industry. Webdesigners, marketers and graphic designers reap the profits. Their services or products may not be C2C in the true sense of the word, but they are indeed important when it comes to bringing C2C products to their destination, which is why they certainly do have a significant function in the chain.'

Marketing story

According to Kuypers, it proves to be quite stimulating to work from the approach of various disciplines on the basis of a single point of departure, in this case that of a closed cycle. At the same time, the teamleader acknowledges that embracing the C2C mental legacy is not based exclusively on conviction, but also has its pragmatic aspect. 'It is true that we all entirely support the basic premises, but it is also imperative in terms of the commercial feasibility of Cradle to Cradle design that it be an implementable business model within the broad terrain of sustainability. Cradle to Cradle is a very clear story.



Foto's from up to down:

- CMYK-lamp by Daan de Haan
- Laptop bag "This bag is not mine" by Mieke Ummels and Jannie Schmitz
- Biodegradable apron by Kim van Bakel
- C2C-sofa by Frank Zanders



When it comes to designing products, the key is not just to produce a good design; the story behind it is at least as important. It's all about story telling. In that respect C2C is also a marketing story. A product that tells a story sells better than a product without a story, or one with a story that makes no sense.'

According to Kuypers, the non plus ultra of C2C design are those that are entirely C2C and at the same time have the potential to become design classics. 'With this kind of design you reach a very broad public, not only people that consider sustainability important, but also the design aficionado who couldn't care less about 'green'.

“Sunrise Campus” is the apt name of the open-innovation campus for which a place is being prepared at industrial park Trade Port West in Venlo. Glass and energy play the key roles on this campus.

Everything at Sunrise Campus is based upon energy-saving HR (high-efficiency) glass and energy-producing solar panels. The presence and knowledge of Scheuten Solar Glass at Trade Port West play a significant role in this concept. The company is building new, state-of-the-art headquarters at the campus. This will be closely linked with the Biotope, the beating heart of Sunrise Campus.

Biotope

The Biotope holds a central position in the scenic green heart of the campus. The employees of Scheuten and the other companies can enjoy such communal facilities as a restaurant, fitness area, childcare and conference rooms. This also makes the Biotope the point where people meet and – of the essence when it comes to open innovation – exchange knowledge.

In addition to the fact that the campus as a whole will form one of the visiting cards of Venlo, the Biotope in particular will represent the logotype of the campus. First of all because of the decor of the landscape of which it will



be part, and secondly thanks to a very unique architectonic design in which, once again, glass and energy will play the starring role.

Sunrise Campus provides for the collection and buffering of rainwater. The purification, too, of rain and wastewater takes place on the campus grounds. This is why the campus will not be connected to the drinking water network or the sewer system. The roofs of the buildings on the campus will function as solar fields. For this reason, the companies and institutions on the campus need make only scant use of fossil fuels. Finally, (construction) materials

and residual will be recycled maximally. All in all, Sunrise Campus will be cradle to cradle squared: C2C².



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Colofon

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Photos may not be copied without specific authorisation.

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More info about C2C projects and activities in [the region] Venlo:

www.regiovenlo.nl

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PROJECT MET FINANCIËLE
STEUN VAN DE EUROPESE
UNIE







REGIO VENLO

In 2002 baarden William McDonough en Michael Braungart opzien met hun boek Cradle to Cradle, Remaking the Way We Make Things. Daarin bepleiten zij volledig nieuwe uitgangspunten voor het ontwerpen en ontwikkelen van producten op basis van veilige en volledig herbruikbare grondstoffen. Zo wordt afval voedsel in een oneindige kringloop. Van wieg tot wieg, dus.

Regio Venlo is de eerste regio ter wereld die de principes van Cradle to Cradle – in sms-slang afgekort tot C2C – niet alleen omarmt, maar ze ook volledig in de praktijk wil brengen. In dit handzame boek laat de regio Venlo zien hoe ver het hiermee staat. En wat de vooruitstrevende groeiregio de komende tijd nog voor schoons in petto heeft op dit gebied.

In 2002 William McDonough and Michael Braungart created quite a stir with the publication of their book Cradle to Cradle, Remaking the Way We Make Things. In their book they advocate completely new basic premises for the design and development of products, using only safe and entirely recyclable raw materials. This makes waste food, in a perpetual cycle. From cradle to cradle, as it were.

The district of Venlo is the first district in the world that not only embraces the principles of Cradle to Cradle – abbreviated in sms-slang to C2C – but also plans to put them into practice. In this handy book, the district of Venlo presents the status quo - as well as what other jewels the progressive and constantly developing district still has up its sleeve for us in the realm of 'green'.

Im Jahre 2002 sorgten William McDonough und Michael Braungart mit ihrem Buch Cradle to Cradle, Remaking the Way We Make Things für Aufsehen. Darin plädieren sie für völlig neue Prinzipien beim Entwerfen und Entwickeln von Produkten auf Basis sicherer und vollständig wiederverwendbarer Grundstoffe. Damit wird Müll zu Nahrung, in einem endlosen Kreislauf. Von der Wiege zur Wiege also...

Die Regio Venlo ist der weltweit erste Verbund von Kommunen, der die Prinzipien von Cradle to Cradle oder auch C2C, nicht nur begrüßt, sondern auch vollständig praktisch umsetzen will. In diesem praktischen Büchlein zeigt die Regio Venlo wie weit dieses ambitionierte Projekt bislang gediehen ist und was diese dynamisch wachsende Regio in der Zukunft auf diesem Gebiet noch in petto hat.