The Cradle to Cradle Network (C2CN) is an Interreg IV C capitalisation project consisting of ten partners from ten European regions which aims to reduce raw materials' utilisation, to generate less waste and less environmental pollution, as well as to enhance innovation and economic development.

Province of Limburg (NL)
www.limburg.nl

Flemish Public Waste Agency (BE)
www.ovam.be

Milano Metropoli Development Agency (IT)
www.milanomet.it

Department for Economics and Tourist Development of the City of Graz (AT)
www.wirtschaft.graz.at

ARDI Regional Agency for Development and Innovation (FR)
www.ardi-rhonealpes.fr

Kainuun Etu Ltd (FI)
www.kainuunetu.fi

West-Transdanubian Regional Development Agency (HU)
www.westpa.hu

Suffolk County Council (UK)
www.suffolk.gov.uk

North-East Regional Development Agency (RO)
www.adrnordest.ro

Government Office for Development and European Affairs (SI)
www.svrez.gov.si

C2C

N E T W O R K

LESSONS LEARNED

European Union
European Regional Development Fund

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

Contact information:
Are you interested in our network?
Would you like to share information?
Please visit our website **www.c2cn.eu**

Table of Content

1   Introduction

An evaluation always has the risk to focus on all the possible improvements, while taking for granted the strengths and positive elements of a given project. However, the quality of the Cradle to Cradle Network (C2CN) and its results has been confirmed in public statements at several occasions underway and at the closing event of the project. The C2CN project has been praised by the European Commission and by the INTERREG secretariat for its strong vision, its profound work on the content of the Cradle to Cradle concept and the applications in industry and product design, built environment, area spatial development, and governance mechanisms and for its dynamic exchanges among and within the different partner regions. At the final event in Maastricht and in Brussels the positive results of the C2CN project were stressed by several speakers.

INTERREG IVC capitalization projects are set up in a certain way, with in this case of the C2C Network an extra focus on speed and a profound approach with practical results which comes with a Fast Track Label. In this respect the ambitions for this project have been met.

This report then is meant as a constructive analysis of how the C2C network has operated and learned and what lessons we can take away from that for future projects. A lot depends on what one is comparing with. Is the frame of reference the decision making power and implementation capacity of a company, or processes of policy making in one's own regional administration? Depending on where one is working, different interpretations will be made of the use of procedures, customs of communication or exchange, management cultures, and proven ways to reach results.

A project with 10 different partner regions about an innovative concept such as C2C is not a routine job. It cannot simply be managed in a traditional way as it is a collective undertaking of self-conscious and independent organizations and regions who search for common ground. It aims for mutual understanding of each other and of the topic at hand, in the hope to come to informed action.
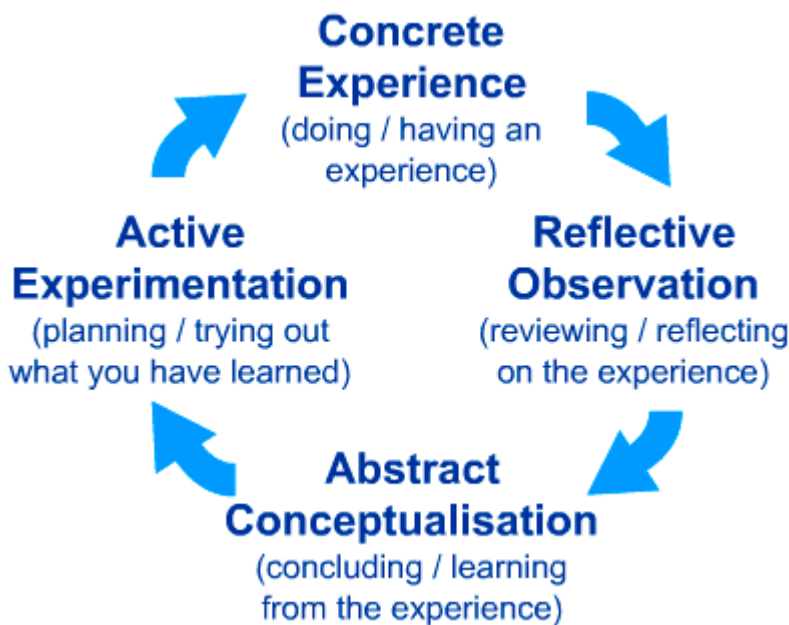
Figure 1: Learning cycle according to Kolb

Exploring together in and as a network means that not only the definition of the content is ongoing among the partners, but also the development of a way of working. After they have signed in, all the partners involved need to take the project further, implement it by themselves locally in their region, and together with the other partners shape a methodology that functions for their particular network. With reference to David Kolb's learning cycle (see figure1) we may state that the C2CN project has resulted in integrated learning. Realizing a circular economy requires several stakeholders working together along the value chain and throughout the whole of a product's life cycle. A network promoting circular economy also requires similar collaboration, not only within partner regions but also among the regions. And if nature serves as a metaphor for the C2C design philosophy, we may refer to a school of fish as an image for the C2C Network, collectively navigating in the new waters of eco-design.

As an INTERREG IVC project, the Cradle to Cradle Network aimed at exchanging good practices and implementing (elements of) those into the local context of the 10 partner regions involved. In order to realize this, in depth study work was undertaken during the first year of the project as well as making an inventory of C2C inspired initiatives within Europe. During the second year the network focused on exchanging experiences and good practices between the regions and on making regional action plans (including budgets), together with local stakeholders, in order to further embed C2C in the different regions.

From these activities, a lot of learning took place, theoretical and practical, about the C2C philosophy, about a number of good practices and about transferring these. Simultaneously all along the project, proficiency was developed in terms of working with stakeholders, working with European colleagues, and getting commitment from managing authorities.

This report discusses the learning processes of the different partners in the network. It does not describe what is learned content related to the Cradle to Cradle concept or to the target areas or specific cases. It describes however how this learning process took place, how the partners have experienced it and how they have experienced their role as focal points. It also describes what we call 'collateral learning issues', things the partners learned about working in a network, apart from their learning about the Cradle to Cradle concept and cases.

This report is based on extensive interviews with the focal points complemented with document analysis of learning reports and action plans produced within the C2C network. The report starts with a chronologic overview of the different steps of the learning process.

2   Different steps in the learning process

The learning process can be sketched in different steps with their respective learning tasks and tools:

- Learning theoretically about the C2C concept in general and about the different applications in the 4 target areas (industry and product design; built environment; area spatial development; and governance). Raising of knowledge and of awareness:
  - Theoretical framework
  - Perspective studies
    - Co-writing for some of the regions
    - Reading
    - Disseminating
  - Expert seminars on the four target areas
    - Organizing the seminars
    - Participating in the seminars
      - Listening and observing
      - Discussing
      - Networking
- Learning about the implementation of C2C in different domains, with the examples of C2C inspired good practices (GP).
  - Initiatives Guide
    - Selecting GP's of the own region to be published in the Initiatives Guide
    - Describing the selected GP's for the Initiatives Guide
    - Disseminating the Initiatives Guide
- Selecting GP's of other regions to transfer them in the own region
  - Selecting interesting GP's from the Initiatives Guide, using it as a catalogue
  - Searching for more information about the selected GP's
  - Searching appropriate regional stakeholders interested in transferring cases
  - Participating at presentations and demonstrations and visits during transfer workshops (stakeholders and focal points)
- Further learning about the selected GP's and how to transfer them
  - Organizing and participating at transfer workshops with presentations, demonstrations and sometimes site visits (stakeholders and focal points)
  - Sometimes focal points organized another workshop back home in which they then passed on the information learned abroad
  - Bilateral contacts between partner regions
  - Occasional direct business-to-business contacts
- Parallel with the buying-process, the partner regions had to fulfill the selling-process
  - Answering questions from other regions that are selecting your GP's (stakeholders mostly via focal points)
  - Organizing presentations, demonstrations, visits, during transfer workshops
- Writing up the Regional Action Plan. Formulating all the lessons learned, intentions and commitments in programs, plans and budgets.

3   Learning issues

3.1   The point of departure for knowledge development about C2C

In a project like the Cradle to Cradle Network, with 10 different partner regions across Europe, one has to take into account regional differences in acquaintance with the subject of study and exchange. How much a region was acquainted with the topic had an impact on communication and on the progress that could be made in mainstreaming C2C inspired ideas and good practices during the time of the project. However this was expected, it still turned out to be an important lesson learned. Underway, focal points had to experience how new C2C really was in their regions, and how fast the project could go given that background. Some regions needed a lot of time for basic explanations and awareness raising. Others could proceed to the specific transfer of cases much faster as the knowledge on the concept already existed in the region and the path of sensitization was already paved.

In the regions of The Netherlands, Belgium, Finland, and also Italy, the C2C concept was already well-known and stakeholders were more or less familiar with it. In the UK, France and Austria the concept was rather new. For Hungary, Slovenia and Romania the concept of Cradle to Cradle was brand new and these regions need(ed) a lot of time for basic awareness raising. This was also an explicit target for the C2CN project, designed with 7 'sending' regions and 10 'receiving' regions in terms of know how on C2C. Two years was quite short to realize this. Several focal points made the remark that the project time of two years was not long enough (Romania, Hungary, Slovenia, Finland, UK, France).

In those regions were the C2C concept was new, it was difficult to engage stakeholders because they were sometimes suspicious or saw the new concept as similar or even competitive to other concepts they were familiar with.

"(…) The C2C concept is quite unknown in France (the book from Braungart was only published in French in February 2011). Concepts like "ecodesign" are more developed and recognized (…). Stakeholders of eco-design didn't like to talk about C2C, because it is quite new. Eco-design is more and more popular. Since the beginning we made a distinction between the concept of C2C and the certifications, because stakeholders immediately associate C2C with certifications and businesses of EPEA and we can't promote certifications by a private company. The fact that C2C is new in the region, gives the opportunity for us to be a pioneer."

"C2C is totally new in the region. This is a difficulty in engaging people. We have a lot of work in awareness raising. Maybe people are overwhelmed with green concepts. For them it's confusing what C2C is. Companies relate it to waste management and they think they already do C2C by recycling."

"It took a lot to explain what it is, C2C and the difference with sustainability. And it is still questioned: do we need a new approach? Or do we need to perfect the old one?"

"C2C is unknown in Hungary. Stakeholders think: "here we have another of these inactive green projects again", and it is difficult to engage people because they are sometimes tired of environmental issues or not that interested in new ideas, even more so if the projects don't bring money with it. It's important then to explain the uniqueness and new perspectives of the project and to disseminate the knowledge. 2 years is not enough."

"For some Flemish and Dutch stakeholders this was nothing new. We are quite advanced in some aspects. Not that we already realized grand things, but the interest and the debate exists, and the concept is present in several political documents."

The different documents of the first stage of the project helped a lot in awareness raising. The theoretical framework and the perspective studies on the theory of the C2C concept and how it can be applied in different sectors were appreciated as very useful. The same was said about the initiatives guide offering concrete examples that show it is possible to realize C2C.

Even if the differences in acquaintance with C2C between the regions was inherent to the project and thus gave an opportunity to give advice and learn from one another, some focal points remarked that this same difference would at times during meetings slow down the learning a bit, both for the more advanced and starting regions altogether. The reality in their respective regions would vary so that the partners had different needs and timing issues to foster C2C. At the same time another focal point explicitly recalls that as a 'sending' region they had the chance to learn a lot too from receiving regions, about other ways to look at things for example.

3.2 The C2C Initiatives Guide

3.2.1 Format and content of the Initiatives Guide

The Initiatives Guide was conceived as a *catalogue* with different rubrics, to present a large amount of C2C inspired good practice (GP) cases with a brief piece of description info per case.

The idea of a catalogue was not an objective in itself because it wasn't known in advance how many cases the focal points would bring in for the guide. It is during the stage of preparing and creating this guide that it has gotten its form. In this conception stage, the lead partner of the project struggled with the question about the optimal quantity of information per case. It had to be enough information to have a good first impression of a case. But not too much information neither, to avoid that stakeholders would lay aside an unread guidebook. Based on the feedback of the informal network of stakeholders in Limburg, they decided to offer short and appealing descriptions as in a catalogue. How did the focal points experience this Initiatives Guide and that they should handle it as a catalogue? Some focal points opine that the information texts of the cases in the guide were too short (Romania, UK, France). They think the learning process would have been quicker if they had more information on the cases from the beginning (less time to spend on learning questions and less time lost with misunderstandings about the nature of some cases). It is a fact that in the preparation for the transfer activities some considerable time was needed to collect more information on the selected cases of interest. Also to inform stakeholders, extra time had to be spent answering their questions when the general description of a case didn't suffice. On the other hand it is probably exactly this personal contact that informed stakeholders learned the most about the good practice cases and that convinced them to participate in transfer activities or engage themselves deeper into the network.

The description of the cases in the guide followed a fixed scheme or template in which the GP owner had to arrange the information. Apparently in practice the structure of this template didn't come out well for all cases, because some focal points (Romania, UK) mentioned they would like to have the information arranged in more clearly structured templates with subheadings.

In terms of quantity, some focal points found there were too many cases in the guide. This idea was mostly connected to the preference for cases that were 100% C2C. The broad focus of the Initiatives Guide resulted however from the fact that there was for instance no framework available for 100% C2C cases in built environment and that certification should be too limiting as a requirement for products to be included in the collection of good practice cases.

3.2.2 C2C inspired examples

For the approval of the cases to be included in the Initiatives Guide, the 'Limburg principles' on C2C were used. Those principles are more extensive than the 'Braungart principles' on Cradle to Cradle. The Floriade-Venlo Principles (Limburg principles) have been developed together with Braungart and Mc Donough. These principles are generative to conceive and set up local actions inspired by C2C. The good practices in the Initiatives Guide are in fact often examples inspired by C2C, they are not necessarily the best or 100 % C2C cases and they've never pretended to be so. The lead partners had also clearly indicated this from the beginning of the project.

Nevertheless this became a learning issue for a lot of partners (Austria, Slovenia, France, Belgium, Romania). They had to experience the level of C2C-ness of the cases in the guide and how their own cases related to this level. Mostly they had been expecting more strict C2C examples, so they had to learn to adjust to this discrepancy and to handle the confusion that it could bring (f.i managing expectations of local stakeholders and audiences).

In some regions (Austria, Belgium) they learned about cases in the guide that would never have been considered as C2C in their own region. They speak about examples that are already self evident or taken for granted or situations in which stakeholders do things unconsciously while in other regions the same thing is considered something innovative.

One of the focal points gave the example of 'Feeding Milan', in which farmers from the Milan region would come to the city of Milan to sell their products. 'In our region farmers did that already many years. We never thought about it, and we never would have thought of describing this as a good example of C2C because we were already used to it.'

How the focal points handled this discrepancy? For some of them (f.i. Austria) the finding that some examples would never have been considered as C2C by them, opened their view and learned them to be more pragmatic than dogmatic in their approach. For selecting their GP's to be in the Guide, they were strict or narrow, but in hindsight they could have found more examples if they had been more broadly oriented and pragmatic from the beginning. Afterwards, the focal point thus opinioned

that "the original theory may be considered dogmatic and you'll never find 100% C2C in practice. 'This is a learning process, by exchanging with other regions'; 'it's better to be tolerant and pragmatic, otherwise we'd never had any achievement if we were too strict." As for the Feeding Milano case, besides the existing practice of a farmer market itself, still learning could occur about the structures and services that 'Feeding Milan' created for short food supply chains. That was the real innovation Italian service designers brought to it.

Some focal points (Slovenia and France) would have had preferred more strict 100 % C2C examples, mainly to avoid confusion between C2C and other concepts. In regions were C2C is not well known yet, it is important to explain very clearly what the new concept is about and what the links and differences are in relation to other concepts.

"The cases were not 100% C2C, this was difficult in the beginning. I thought I'd better do only C2C cases, and not confuse stakeholders with in between solutions. I then tried to present it as GP's with certain C2C characteristics. In a way people could have thought "this is nothing special, we already do this". I would prefer fewer cases that were more C2C"

Another focal point stressed that the cases in the guide helped for a broad audience to understand what C2C inspired practice can be.

So in general several partners discovered more C2C related cases in their region than they first would have thought. The fields from which cases could be drawn were also large and varied. The inventory of local cases in each region was considered good for awareness raising. It also got positive feedback from the companies and industries involved. On a more critical note it was argued that maybe there were too many and too many similar cases identified in the exploration phase. Also it was sensed that for many cases there was a lack of real in depth and detailed information, which often made it difficult to communicate effectively about certain cases and/or to raise an interest for transferring a case. A few voices raised the question whether the C2C initiatives guide was really necessary to convince stakeholders to elaborate on the C2C philosophy and C2C practices. Of course in a European INTERREG project the purpose is precisely that each country can bring in cases in the exchange. Some focal points indicated that through their contacts with stakeholders for the C2CN project they also learned a lot about their own regional companies.

3.3 Shift of paradigm: from full 1-on-1 transfer to cook book metaphor

Major learning surely occurred in how to bring a transfer process into practice. How to go from a long list of interesting cases to a shortlist to implement? Should one rather try to transfer a good practice as a whole, or to combine elements from different cases and brew or stew it into something new? Lovers of breweries and kitchens within the network came to call this the cookbook metaphor for transfer.

Initially the idea was to transfer a GP as a whole. Gradually it became clear that this copy-paste one-on-one transfer of a whole GP was not possible and that it was much more realistic and inspiring to pick some ingredients from some cases and mix these up with each others and with existing situations in the local contexts. Hence the name of the cook book metaphor.

Each focal point experienced or learned about this necessity of a shift in transfer-paradigm in his own way and tempo. Some examples:

"As the cases were presented by our organization, we thought at the beginning that a full transfer would be possible. After the study visits and the participation at transfer workshops we realized that a copy paste transfer is not realistic. Therefore only ideas will be transferred."
"Our stakeholders and companies informed us, that a full transfer is not necessary, because many aspects are already in use and only some details are interesting for a transfer."
"In our RAP there is not a specific GP transferred. There are elements that have inspired us- with which we design our own initiative. We did it because of feedback from stakeholders: 'it is interesting, we did something similar; can we build upon it, by mixing our experience with theirs?'"
How did the focal points look at this shift in paradigm? The reactions diverged. Some focal points saw it as a relief, and as an opening towards more possibilities or more realistic transfer options. They embraced the cook book metaphor to inspire and to be inspired by new ideas. For example, as another focal point phrased it: "A one-on-one transfer was not possible, but transferring the ideas was. This made life easier".

Others experienced the shift towards the cook book metaphor as kind of a degradation, a secondary solution because the ideal transfer type proved not realistic. One focal point of formulated it as

follows: "The ideal 'transfer' was unattainable, so we went over to cook book." For practical reasons he eventually esteems the cook book metaphor as (more) valuable. Another focal point stated that "The cook book is equivalent. When you can learn and make a whole new recipe, the cook book metaphor is as valuable or worthy as the one-on-one transfer". Both metaphors are thus considered as equivalent paradigms. But the bare fact that these statements were explicitly made, reveals that the equivalence of both approaches was questioned or doubted at first and that some adaptation, a shift in mindset (and thus learning) had to take place in this regard.

Neither method for transfer is seen as easier or more efficient or more time consuming as the other. It all depends on the cases you want to learn from and on the needs and contexts of your own region. In terms of project management, monitoring and evaluation, the results of a transfer process along the cook book metaphor are more difficult to measure. Which doesn't mean that the results would be less real or less significant.

Only two focal points said to do a full one-on-one transfer, Finland and Romania. But even then, the transfer is not a matter of a simple copy-paste. "You always have to adapt the case to a tailor-made case for the region", as was also indicated at several occasions by the lead partners of the project. Some focal points opine that the learning and transfer process would have been quicker if this cook book paradigm was premised from the beginning. They esteem the methodology to manage the transfer process was not clear enough in advance. They had to find it out by doing, which slowed down the process. On the other hand this shift in paradigm can be seen as a fundamental part of the learning process – and thus as an important result in itself – of the project as a whole.

3.4   Website as a tool to facilitate the transfer process

At the project website (www.c2cn.eu) focal points, after logging in, had access to the sub-site 'Good Practices Transfer'. This sub-site was meant to facilitate the communication and exchange between the focal points. Focal points could indicate which GP's they wanted to transfer, they could ask and answer questions about a case, they could plan transfer activities and they could upload reports of these activities and other documents that could be of interest for the other focal points to learn from. The focal points had to experience how they could use this web tool. Almost all focal points indicate that they didn't use the website sufficiently.
This was due to:
- A lack of time because of the high workload (Slovenia, Italy, Austria, Belgium).
- The website was or looked complicated and not sufficiently user-friendly (Slovenia, France, Italy, Romania).
- This transfer part of the website came too late to become a habit using it (UK, Romania, Belgium). The focal points had already developed a way of communication via e-mail. It is recognized that working with e-mail communication and address lists is not the most efficient way (UK, Belgium). But changing this habit of using e-mail seemed too difficult at the time tried.

On the other side some focal points found the website quite useful (UK, Finland, Hungary) and important to keep it alive for future exchanges (Italy).
Some suggestions from the focal points regarding the website:
- A well organized project management tool online from the beginning (with appointments, agreements, discussions, documents, etc). Therefore, you need to have such a website built in advance, to use it as a project management and exchange tool from the beginning.
- A central area on the site where we could provide to do lists, with requests for other partners.
- Video presentations of owners talking about their GP's.
- Blogs or discussions.

3.5   Organizing the transfer process

The transfer process itself was perceived as effective to get to know more about cases and the persons behind it. In comparison to the rest of the project some partners experienced the time available for actual transfer as too short. This aspect also explains the overall remark and feeling which was often heard that the project didn't last long enough (although this is of course inherent to the importance of delivering quick results that comes with a 'fast track' label).

It was experienced that good personal contacts made a good practice case come alive. Focal points and other intermediary brokering persons played an important role to establish these good personal contacts to realize exchanges and transfer in the C2C network. At the same time some final transfer decisions were based on direct contacts between companies and what they decided among themselves.

With regard to the transfer process it was also indicated that often (unexpected) two-way transfer and exchange took place. Insights and information from the transfer workshops went back to GP

owners and provided useful feedback to enhance one's own ideas or products.

When we look at the good practices that were finally chosen for transfer in the Regional Action Plan, we can get an idea of the intensity of the exchange and how the different regions exported and imported.

Figure 2 shows the C2C-Network based on the transfer of GP's according to the formal Regional Action Plans. The size of the nodes indicates the number of exported GP's by a partner region to different other regions (the greater the number of exports to different regions, the larger the node). So this is expressing the 'diversity' of the regional 'markets' to where a partner is exporting. The arrows indicate the direction of the export/import between specific partner regions (with the thickness of the arrow sign also indicating the number of cases transferred). The color of the nodes indicates the diversity in the source of the cases imported by a partner region (the more red the color, the more diverse the list of partners from where a region is importing GP's).
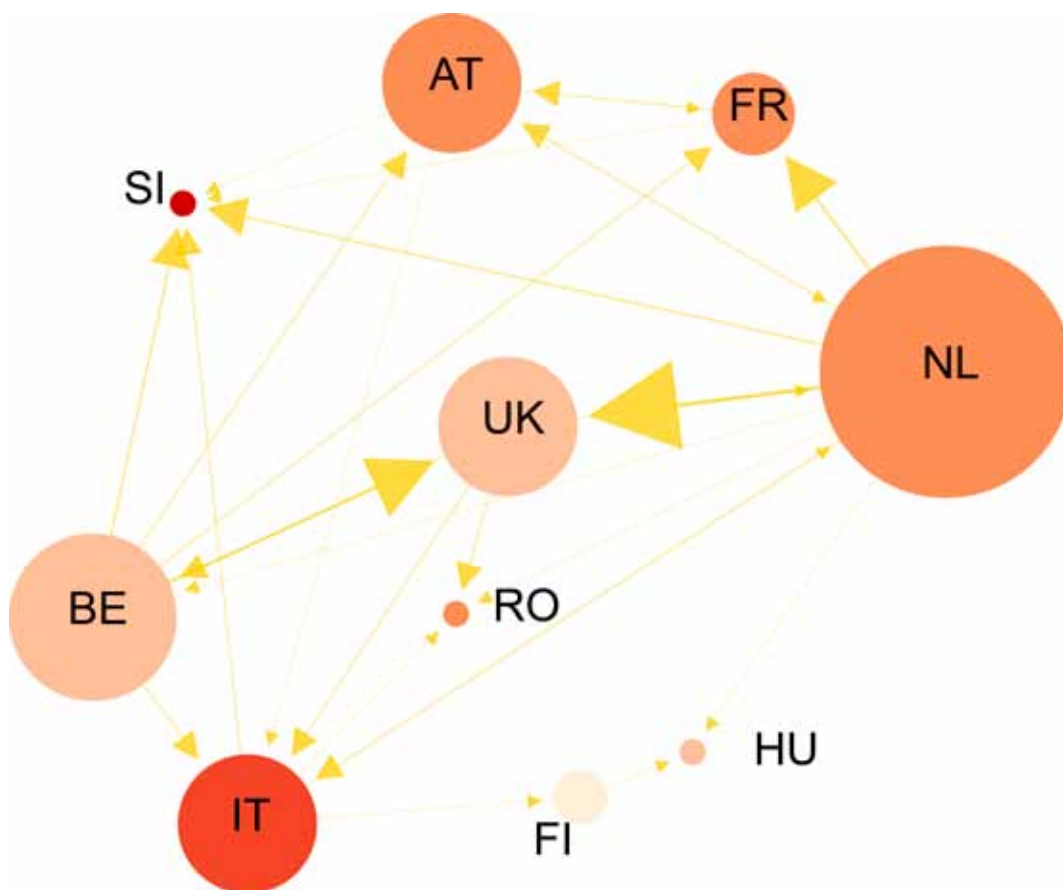
Figure 2: Transfer of good practices based on the regional action plans within C2CN

It is rather difficult to describe or measure all learning and exchange that has taken place within the network, let alone to indicate the (expected) effects of the interactions. Besides the transfer that was formally reported in the Regional Action Plans, surely much more informal transfer and adaptation of cases and good ideas have also taken place. What regional partners have gotten out of their participation in the C2CN project may depend on several elements. As is mentioned with the 'cook book metaphor' for case transfer, often a partner region will learn a lot from a case of another region, without (fully) adopting it for implementation at home. Sometimes merely visiting a case during a field trip, or to hear talk about it at a C2CN workshop could give inspiration that a partner or one of its stakeholders could use in their local context. Often this would be only one element of a case, or a specific approach towards public relations, awareness raising, installing a prize winning competition, or organizing a subsidy system, etc. Learning took place directly between stakeholders who participated in exchange workshops and study trips. Direct contacts among companies on their own terms surely has worked too. The occurrence of such contacts or its effects are hard to capture in a Regional Action Plan or in a learning report, as business has its own way and most often doesn't invest to the extreme in filling in forms to keep statistics. To conclude: there is a lot more to the exchange in the C2CN project than the transfer of cases.

3.6   Involvement of managing authorities

In general it was difficult for the focal points to get active commitment from managing authorities. It is difficult to be heard in the right way (Italy), it is difficult to introduce the angle of C2C in the eligible activity list (Slovenia) or it simply takes a lot of time to communicate and to get real commitment (Romania).

Mostly the managing authorities are supportive in principle, they support the idea (UK, Slovenia, Austria) but there is no money (left) (Slovenia, The Netherlands, Italy, Austria, Hungary) or the criteria for funds are very strict (UK).

Another difficulty is the difference of contexts and ways of working of the different instances. Operational programs and INTERREG projects form different and separate worlds and responsibilities are often divided accordingly. It is not easy to bring them together (The Netherlands). MA's are often not aware of the expectations of involvement in INTERREG and especially IVC projects and it is difficult for them to understand what they are signing up to (UK). In this respect one of the focal points appeals for more involvement of the MA's from the beginning of a project (formulation and proposal stage). and more info is necessary from Brussels to the MA's about the expectations of MA involvement, one says.

3.7   Involvement of Stakeholders

Closely related to the issue of governance and the involvement of governmental bodies is the question of how to involve all relevant stakeholders and not at least the industry - and often specifically SME's -, designers, architects, project developers and all kinds of customers and local users of land, buildings, products or services.

It seems that the good practices themselves and the entrepreneurial spirit and contexts in which these arise are the most attractive to 'people from the field'. Reflection, discussions and debate - how interesting or relevant they can be for others and for societal change at large - are not often the preferred or spontaneous activities in which the more 'hands on' actors engage. Convincing them and bringing them together at network events, often by scheduling testimonials by other colleagues, was an important challenge for the regional focal points.

At times, the focal points had a hard job in involving stakeholders in an active and meaningful way. Some report that they always had to "push and pull", while minding to keep the balance between stimulating GP owners and not asking too much from them.

3.7.1   Involvement of stakeholders during the project

In the different steps of the project, involvement of the stakeholders meant diverse things. In the beginning of the project, focal points asked stakeholders to hand in their cases to be presented in the Initiatives Guide. The reactions of the stakeholders in the different regions diverged. For some regions (Slovenia, Romania, Austria, Hungary) it was quite difficult to convince stakeholders to present their cases, mainly because the C2C concept was new in these regions. Awareness raising had to come first. Two years later, at the end of the project, it would be easier to convince stakeholders because the knowledge about C2C is considerably higher in the meantime. In other regions stimulating stakeholders to hand in their cases was much easier (Finland, The Netherlands, UK, Italy).

Sometimes stakeholders didn't have correct expectations about having their case in the guide. In Slovenia some of the stakeholders were supposedly disappointed when then found out that they wouldn't get additional funds from the project for their cases. In Belgium some of the stakeholders expected to get some kind of certification when their case was mentioned in the guide. Some focal points mentioned that several stakeholders were at first enthusiastic and proud to have their case in the guide, but afterwards seemed not that interested in sharing more information (Romania, Italy). So the importance of expectation management also turns out to be a lesson learned from this project.

When the guide was ready, the process of transfer could begin. All focal points stated that it was difficult to involve the stakeholders in the transfer process. They had to "push to keep the transfer process going" as one focal point phrased it.

Different reasons are mentioned:

- The question of priorities: The C2CN project's priorities do not necessarily match well with the priorities of the stakeholders (companies, educational institutions, municipalities and others) that could be potential GP buyers.
- The question of time: time is mentioned in two different ways: (1) Many regional stakeholders have time frames that are not synchronic with the project's deadlines. For example whether an investment will be done in 2011, 2012 or 2013 depends first of all on the market situation of the companies involved, or on the operational programs of the local authorities, and not on the

Cradle to Cradle network's deadline to have clear results by the end of the project. (2) The project time of two years is very short for all the work. Especially the time available for the transfer process and to establish specific and close working relations was very short, particularly for those regions that had a lot of work to do on awareness raising.

- The question of budget: There was no additional budget available for the GP's from the project. In addition in most regions there was no money (left) from operational programs of local or regional authorities, often because the operational program was in the last phase.

Most of the focal points involved stakeholders or tried to involve them in preparing or writing the Regional Action Plan. The meaning of this "involvement" differs between the different focal points. In some regions there is an active involvement of stakeholders in the writing process of the RAP in that the focal points were seeking input from stakeholders (UK, Belgium). In other regions the RAP was sent to stakeholders to have their feedback (Slovenia, France, Austria). And one focal point (Romania) stated that "All initiatives included in the RAP are agreed with stakeholders that are going to implement them."

As such we can see that stakeholders are in effect involved in most partner regions, but that this involvement can mean different things, with different levels or kinds of commitment and differing according to the project phase.

3.7.2 Involvement of business and industry

Transfer of C2C inspired good practices seems to have taken place more among public sectors than from business to business. Yet it is possible that the focal points don't know about all the contacts that occurred. Also, it is likely that the number of business-to-business contacts will increase later on during the implementation phase.

Some focal points indicate that industry was found to be most difficult to obtain information from. What could be the reasons for this? Sometimes it had to do with intellectual property or a lack of trust to share ideas. The fear for loss of profits or company secrets is real. Yet at the same time, a strange phenomenon is that 'open source cases' that are often clever and interesting, and free of charge, are seldom implemented.

During the whole of the project and especially during the transfer phase, we often heard from company representatives that besides money, time was even a more scarce good to invest. Sometimes companies could simply not allow certain key employees to be absent for a longer of even a short period of time. And as international exchanges also require some travelling, this was also considered as 'currently not necessarily the first priority in time management'.

What companies in general did like a lot was the opportunity to present their products and services and so to use the opportunity to try and sell to potential new markets. Also another basic law seems to be confirmed in the C2CN project: when industry sees benefits, they invest.

3.8 Role of the focal point

Focal Points are crucial in the operation and coordination of an INTERREG program. They can be Government Agencies on a local, regional or national level, or Regional Development Agencies. Their role is to operate as a contact point for the project in their respective region and to function as intermediary between the local stakeholders and the overall project secretariat and coordinating lead partner. As such they organize project activities locally and report their progress centrally, they participate in European activities with other partners, and participate in the International Steering Committee of the project. Regional Development Agencies are well positioned to do matchmaking and brokering for companies. Governmental bodies can themselves also be owner of good practices and take an active role in the transfer process to export or import cases themselves.

An important learning issue each focal point had to go through, was about the definition and clarification of their own role. Which roles and positions were worked out by and for the different focal points in this project and how did they relate to the local stakeholders?

The focal points differed in their position on a scale from being the main actor of the project, to being an intermediary or broker for the stakeholders, facilitating the work of the latter as the main actors in the project. In most regions however, we saw the tendency towards filling in the proactive role of main actor. In terms of governance we could argue that a governmental project like INTERREG, aimed mainly for other governmental agencies is likely to have this effect.

Also in the transfer of GP's between stakeholders, focal points took an active role. For example tasks as selecting GP's from one's own region to suggest to the network, selecting GP's from the Initiatives Guide to 'buy' in the transfer phase, and formulating learning questions for the transfer exchanges, often were fulfilled (partially) by the focal point itself rather than by the stakeholders.

This can be understood as a difference of priorities and lack of time from the part of the stakeholders themselves, partially related to the crisis, which counts especially for SME's. Also it often seemed to be more efficient and less time consuming for the focal points to do these tasks themselves, rather than "pushing and pulling" the stakeholders to do them. As already mentioned above, time scales and priorities of stakeholders don't automatically fit with the time scales and priorities of a (European) project logic. Another reason for the position and role of the stakeholders is the fact that they were not all involved in the project preparation phase. In that sense they did not have the opportunity to co-develop the project and to plan a bit in advance for their involvement.

In general one could say that stakeholders were expecting a lot from the focal points. It seems that by themselves, stakeholders didn't take so much initiative and that their own role in the project was not that (pro)active. Or maybe stakeholders have started some actions, for example business to business activities, that remained out of sight for the focal points? In this regard the question can be asked how far a project must go in the follow up of local stakeholders. In the C2CN project focal points stimulated the stakeholders to be active in connecting and learning from each other, but at the same time they had to follow up and centralize all the information about these connecting and learning processes. At what point does one have to let it go and hand it all over to the stakeholders themselves to continue the process of building knowledge and to take action in their own way and tempo? At such a point it is no longer realistic to expect feedback on every step. This can be experienced as being contradictory to a project logic that asks for direct measurable results. In analogy with the shift in paradigm from a one-on-one transfer to a cook book method for transfer (see above), a one-on-one result (one action – one result) is little realistic. It's more about different small aspects that mix and match and will have mixed-and-matched results, maybe in a (much) later future. This is especially true for an innovative and creative networking and learning project as C2CN. "Small seeds are planted for the longer term" said a focal point, and "it is about an ongoing process" said another one.

The role that a focal point had gotten or taken, and also the intensity of the work it brought with it, was depending on the local context of the region. For almost all focal points, it was hard and intensive work. The workload was considered high and a lot effort had to be given in a short period of time. It surely was not a simple 'side job' that one could easily take on above one's regular work.

The intensity of the project depended much on:
- How new the concept of C2C was in the region, the level of awareness and the need for awareness raising.
- The amount of attention that the C2C philosophy and/or the C2CN project received inside the own organization of the focal point.
- Related to this, and not a detail in terms of literally 'capacity building', is the number of fulltime equivalents employed in the project. Mostly one collaborator was indicated for the C2CN, sometimes surrounded by some colleagues that helped for certain tasks. The collaborator had the authorization to dedicate a certain percentage of his or her working time to the C2CN, but mostly the real time spent for the project was (much) more than this official percentage.
- The role of the organization of the focal point in the region (f.i. a governmental institute, a development or innovation agency, etc.) and the way of working of this organization.

All these elements influenced the overall working process and the speed at which C2C could be set on the agenda and become mainstreamed in the region. At a progress meeting of the International Steering Committee it was phrased as follows by one of the focal points: 'we have to create both market and supply for C2C.'

However most focal points experienced their role as difficult and intensive, they also found it interesting, useful, instructive and energizing. The aspects of networking, creating connections and having contacts with other focal points were highly appreciated.

Another learning point was hidden in the sudden insight that some focal points got that they could sometimes start from their motivation and interest as a regional partner to participate in the C2CN project, rather than to keep thinking of the best possible added value for all other stakeholders, especially when some of these at times were hard to get reaction or motivation from. This insight made that focal points began to import cases themselves with their own organization.

3.9   Multi-actor governance for C2C

From the analysis above we clearly notice the importance of dealing with managing authorities, local stakeholders, and often even several actors in one's own organization as a focal point. It is obvious that this requires a lot of management and steering, which often goes much further than classical project management. One of the elements about which a lot of know how was developed, is govern-

ance for C2C. Through which channels and mechanisms can a transition towards closed loop production take place and what are the roles and positions of the multiple stakeholders involved in such an undertaking? Multi-actor governance became a new way of thinking within the network, building further upon the classical ideas of participation and consultation in policy making.

A domain as C2C also clearly demonstrates that governments cannot do the job alone. Governance beyond government is the way to go for most sustainability challenges and 'problem domains'. Yet governments from the municipal to the provincial level, up to regional or national level, did have an important say in the execution of this INTERREG project and especially in the transfer and implementation of good practices to their respective local contexts. Different policy levels, and several executive offices and administrations thus took part in so called multi-level governance.

In terms of governance, the regional action plans play an important role. They are expected to pinpoint the intentions and actions of the local administrations and communities involved in the region. In themselves the RAP's are also worth mentioning as a driver for learning. Making up these plans made some of the authors of the plan realize that their writings had a formative impact and that once given commitment for what was written black on white, the RAPs could make a powerful policy tool.

The possible weakness of the action plans is the availability of funding or more often the lack of it. This lead to interesting discussions at network meetings about the role of public money and subsidies. Even if actions are directed to the private as well as to the public domain, they are often initiated in the public domain. And potential buyers often seem to ask for money and funding first before they consider taking initiative.

The challenge that focal points find themselves and their action plans now confronted with is to keep the momentum and not lose it after the end of the C2CN project.

4   Overall appraisal of the project by the regional focal points

The project was very much appreciated by the majority of the focal points. They esteem it very successful. It has ended up with real and visible results and not only with official reports that tend to stay unread or unimplemented. Several focal points expressed this opinion (Finland, Romania, Austria). In the words of a very satisfied and enthusiastic focal point:

"This project was the best one I did in twenty years, the most successful. (…) We have a result now: network, good practice handbook. The contacts will last. We have a result that we can touch. We realy learned a lot".

Also the work of the lead partner is praised by the other focal points: 'They did a tremendous and difficult job. And they did it well'; 'The lead partner coordinated and facilitated well, with a professionally organized management team'.
The interest and personal involvement showed by Mathieu Fichter, the responsible from the European Commission for this C2CN project, was also seen as an important factor for the success of this project and was highly appreciated.
On the nature of the project, the remark is made that the innovative process of learning and networking of the C2CN demands a lot of creativity and improvisation and that it doesn't fit or matches very well with the logic of an INTEREGG project, with its strict project management procedures. On the other hand, it was stated by one focal point that the approach of this project would be good also for regional initiative type of projects.
During the interviews the issue of preparation was mentioned repeatedly. Some focal points found that the project, and thus the learning process, would be better and quicker if some aspects were more thoroughly reflected, prepared and ready in advance. For example a detailed list with criteria for selection of cases for the Initiatives Guide (although the existing format from the INTERREG Joint Technical Secretariat was readily available from the beginning), a database with extended information about each case, a more clearly defined methodology for transferring cases, an extended website as a tool for organized communication and common project management, a clear picture from the beginning of the expected final result (Slovenia, UK, France, Belgium, Romania, Finland). The question is how far one can go this way in advance. If one would want to have prepared all those things upfront to start up the project quicker, this would imply a 'project before the project', a (rather long) preparative process before the runtime of the actual project. Besides of time and budgetary concerns, it could be questioned if such a preparative phase is realistic and useful. Is it even possible to prepare all those things before the actual project has started? As has already been indicated several times above, much of the work and decision making in the project is tailor made and driven by specific time and context elements. It is precisely within and through the act of exchanging and by engaging and going through a learning curve that the aspects of the project's management get their form. To a large extent, a project has to find out itself during the project.
One also has to bear in mind that when the project would start with all those things ready and definite, the project partners would probably judge the project little participative. Similar to the expectations about preparation and a well structured approach for the project, a remark was also made about the role of the lead partner. One focal point raised that 'the lead partner might have been giving a firmer hand and push some further (for deadlines etc), of course with a clear balance of pushing but not forcing'. We may notice here that steering in a multi-actor network is not an easy task and that partners can have paradoxical expectations about being given enough autonomy and at the same time requiring strong lead.
In conclusion it is clear that besides the learning about the C2C concept about how to import this concept in different domains of practice, and the learning about specific cases, the project also was a meta-learning process about learning and exchanging in a network.

5 And further

Many focal points expressed explicitly their will to continue the cooperation in sequel or future projects (Finland, Austria, Italy, Romania, Hungary, UK, Slovenia).

During the interviews the following question was asked: "If other regions want to implement (aspects of) the same GP that you are transferring, would it be a good idea to stay in contact and exchange information or experiences with these other buyers?"

All but one focal points were enthusiastic about this idea of further cooperation between buyers of the same GP. They wanted to start smaller networks or sub-networks about a case or about a specific theme. Only one focal point doesn't think there is a benefit in staying in contact with other buyers, as the transfer process could be very different in each region.

Belgium's focal point explained that five project partners had chosen the GP of the Ecolizer (a materials scan tool by OVAM, the Flemish Waste Agency). He suggests to go further than purely exchanging the tool, and to start a mini-network to learn about applying the same instrument. Possibly they can evolve together in developing a new instrument. Another idea that was launched is to start a bigger network, a 'network of networks' on a European level. This would open possibilities to cooperate on a more permanent base, rather than running from project to project.

In terms of dissemination the work of the C2CN project will definitely be carried on within Europe. Many communication products are readily available: perspective studies, good practice initiatives guide, a guide on C2C beyond waste management, a C2CN policy paper with recommendations, a few brochures and a booklet, and various newsletters that lively illustrate the activities, the spirit and the results of the network. So we may say that communication is a job well done and that all partners and others can capitalize on these results. All the material is also available in electronic format on the C2CN website. We note that several partners have translated some of these documents in their own language which surely helps to spread the message widely.

One good practice that is definitely worth mentioning for the future in terms of communication is the use of video reports. At the kick off meeting for the project in Maastricht, European Commissioner for the Environment, Mr. Janez Potočnik, already spoke to the participants through a video message. Such motivational message, as was also used at the end of the project during the closing session of the C2CN, is important to stimulate and thank stakeholders.

The partner region of Flanders has extensively documented all their stakeholder meetings and C2CN activities on film. They systematically planned these video reports throughout the project life time and can now let people that are interested watch the story of C2CN in Flanders online. The example was followed by several other partners and so the city of Graz took video reports of their C2CN launch and of the mid term review meeting, and we then also interviewed Michael Braungart after his keynote speech. In Ljubljana interviews and conference sessions were documented, also in Iasi elements of the progress workshop were filmed. At the closing session in Maastricht the lead partner made a compilation of the content and atmosphere of the day. All these images of video reports and video interviews that have been made during the project and were posted on the website are very helpful to spread the C2C message in today's multimedia world.

Good practice transfer is considered a long term process and if C2CN partners, case owners and stakeholders can keep in touch, they can bring mutual learning and probably also the C2C- inspired cases themselves a significant step further. Considerable follow up can be expected after the project from companies and cluster organizations. When a certain C2C-inspired topic, case, product or practice is or interest to them, they will go after it. These follow up actions and initiatives may not become visible to be pinpointed as immediate and tangible results, but they surely will work through on the long and mid-long term. It was suggested that a follow-up of the C2CN initiatives guide in 5 years time would be very interesting to learn from and see how cases will have developed by then. As already mentioned above, the challenge now is to implement the Action Plans locally with the different stakeholders involved in the regions. The seeds of C2C can then start to blossom, like the Sakura or Japanese cherry blossom that Michael Braungart refers to with regard to the abundance principle in nature.