City4coEN report #1. Preliminary assessment of sustainability contributions of the sharing economy

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# Introduction

The literature review presented in this report aims at a preliminary impact assessment based on a comparison with initiatives abroad reported in impact analysis publications. The preliminary data gathered from published fieldwork allows already identifying types of initiatives with no clear sustainability impact (peer to peer car sharing, delivery of meals, etc.) as compared to others with major impact (wasted food re-use, car sharing from a fleet of shared vehicles, car pooling etc.). The assessment was used in the project to select 80 initiatives in the Region of Brussels-Capital for comparative analaysis.

Scope of the “collaborative economy” as defined in the city4coEN project text : ICT/organisational means for more efficient use of underutilized or easy to share assets.

Collaborative economy can be defined in a broad manner as a mode of consumption and production of goods where **actors share under-utilised or easy to share goods and services** (cf. amongst others: Belk, 2013; Botsman & Rogers, 2010; Dedeurwaerdere et al., 2016). Providers and users of the goods and services usually find each other on “**platforms**” which are created by “**coordinators**” and are often empowered by digital network tools. These coordinators organise the sharing through a broad variety of mechanisms, ranging from for-profit to social profit objectives.

Main components of the 4 year project

1. Mapping and impact assessment (impact assessment: mainly through a summary of detailed assessment data from existing studies in various cities and “transfer” of the results to the context of Brussels)
2. Policy options and their impact on the future trends
3. Tools and strategies to improve the environmental/social sustainability of mobility/housing/food initiatives in the collaborative economy in Brussels Region
   1. Training priorities defined based on a transdisciplinary methodology, to be elaborated in combination with the WISD project on transdisciplinary sustainability research
   2. Such tools and strategies are needed, as a lot of collaborative economy/smart economy initiatives are socially/environmentally unsustainable and just extend the dominant unsustainable technological and economic development model by other means (cf. literature review and analysis below)

A recent review of the design methods of collaborative platforms allows to illustrate the ambiguity in basic understanding of the collaborative economy, ranging from imitating the aggressive economic model of the Silicon Valley start-ups such as Uber to the open and collaborative platforms as envisioned and promoted in Trebor Scholz’ platform cooperativism. Table 1 illustrates some of the differences between these models[[1]](#footnote-1).

|  |  |  |  |
| --- | --- | --- | --- |
|  | Start-ups which can rapidly develop into **unicorns** (valued at over $1 billion) | **Positive Platforms** (M. Gorbis and D. Fidler) | **Platform cooperativism** (T. Scholz) |
| Mode of production | Collaborative peer to peer production, supported (consumer to user) by platforms | IDEM | IDEM |
| Investment/ownership | Supported through heavy investment of venture capital/private equity | Social enterprise type model, supported by user fees and a network of supporting stakeholders | Collectively owned (by those who generate most of the value on those platforms) |
| Labour protection | Not the key concern: consider themselves only as software designers/platform coordinators, not as employers of the producers/users | Fair labour conditions, social protections and benefits also for temporary workers | Fair labour conditions, social protections and benefits also for temporary workers |
| Technology | Closed software platforms, no access to data/information | Transparency and co-ownership of algorithms and archived data | Based on free software and open standards |
| Human resources | Capacity to hire aggressively top researchers from universities | Attract highly motivated platform designers from various backgrounds through practices of participatory platform development | Attract highly motivated platform designers from various backgrounds through practices of participatory platform development |

# Mobility

## General sustainability objective

Important sustainability objective recognised in Brussels, evolving towards increased multi-modality : combining walking, cycling, car and public transport

## Literature review of the impact on sustainable mobility

Core argument from empirical studies:

(1) Cost-structure of round-trip or point-to-point car sharing favours multi-modality: average cost pricing used in car sharing (includes all costs), instead low marginal costs of use of a privately owned car (users often calculates only the fuel costs), which has an impact on a more realistic assessment of the choice between car use or public transport[[2]](#footnote-2). As a result car sharers tend to more often consider public transport as an alternative to car use.

(2) to be found : studies on positive impact of bike sharing and car pooling

|  |  |
| --- | --- |
| **Type of mobility service in Brussels** | **Quantitative studies on mobility impact of similar initiatives internationally** |
| **Car Sharing** |  |
| Round-trip car sharing (rental service by an organisation) | Strong decrease in driving km’s per month (compared to car ownership)[[3]](#footnote-3); a car sharing vehicle replaces 4 to 10 private cars[[4]](#footnote-4). |
| Point-to-point car sharing (rental service by an organisation) | Weak decrease in driving km’s per month[[5]](#footnote-5); |
| Peer-to-peer car sharing (rental of personally owned vehicles) | No major change in driving km’s per month[[6]](#footnote-6); |
| **Ride Sharing** |  |
| Internet application based taxi service | Replaces other regular taxi services, mobility impact likely to be slightly positive as there is less “driving around” for passengers[[7]](#footnote-7) |
| Car pooling (filling in empty seats in personal vehicle with given destination) | (quantitative study do be found)[[8]](#footnote-8) : very positive sustainability impact likely |
| **Bike sharing** |  |
| Point-to-point bike sharing (rental service by an organisation) | (quantitative study do be found)[[9]](#footnote-9) : very positive sustainability impact likely |
| **Parking spot sharing** |  |
| Private owners can rent private driveways |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Business/organisational model | Labour conditions/societal mission | Economic/fiscal impact |
| **Round-trip or point to point car sharing (rental service by an organisation)** |  |  |  |
| Many for profit oriented enterprises (Tesla, BMW-Sixt, Daimler AG, Ubeeqo, Wibee (Suzuki)) | “In-house” for-profit investment by car companies/car rental companies |  |  |
| Non-profit provider: Cambio/e-cambio | Asbl; partnership with the Brussels authorities (initiative of taxistop); profitable[[10]](#footnote-10) | Mission driven organisation; can be compared to “Mobility” (Switzerland) who offers also electric cars and cars in areas with less users[[11]](#footnote-11) |  |
| For profit oriented enterprise provider of electric cars only : Zen car | Subsidy from the Brussels Region (to check); seems to become profitable now[[12]](#footnote-12) |  |  |
| For profit oriented enterprise provider of electric scooters : Scooty |  |  |  |
| **Peer-to-peer car sharing** |  |  |  |
| Cozycar | Not for profit (asbl), initiative of taxistop |  |  |
| Tapazz | Cooperative enterprise with one share, one vote (cvba)[[13]](#footnote-13); all personal car providers need to be shareholder (100 euro)[[14]](#footnote-14) | Mission driven company; looking at mobility in general even if at lower profit | Belgian company (Antwerp) |
| Many platforms by for profit oriented enterprises (CarAmigo, Drivy (BlablaCar)) | Mainly venture capital firms |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Business model | Labour conditions/societal mission | Taxes/regulatory compliance |
| **Internet application based taxi service** |  |  |  |
| Uber taxi service (Uber X) | For profit oriented enterprise (SPRL) ; 20% commission on each ride | Uber sets the price as a regular employer, but offers no minimum wage, no unemployment benefits, no social insurance (which allows Uber to pay higher earnings per hour[[15]](#footnote-15)) | Massive tax evasion[[16]](#footnote-16), so unfair competition  Uber Pop drivers do not need a regular licence, so unfair competition ; Uber X ok |
| Taxi Vert (nom commercial de « Radio Taxi Bruxellois » | For profit oriented enterprise (Societé Anonyme), with accredited drivers |  | Belgian Company |
| **Car pooling** |  |  |  |
| Many non-profits (Eventpool, Carpool, Djengo) | Carpool/eventpool: initiative of Taxistop |  | Carpoolers have decreased income tax if accredited by their employer[[17]](#footnote-17) ; major impact of Carpool (138.000 users) |
| Many for profit oriented enterprises (BlaBlaCar, Uber Carpooling App) |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Business model | Labour conditions/societal mission | Taxes/regulatory compliance |
| **Bike** |  |  |  |
| Mainly public initiatives (blue-bike, villo!) |  |  |  |

## Innovation life cycle analysis

### Analysis of historical innovation dynamics

From non-profit to for profit oriented enterprise:

* Covoiturage.fr (non payant) to BlaBlaCar (société anonyme)
* Couchsurfing : change in legal status (check when, specify)

A non-profit creating other non-profit or social enterprise subsidiaries/new autonomous organisations)

* Taxistop asbl/vzw creating Carpool vzw, CozyCar, Cambio

### Analysis of interaction dynamics between social enterprises and for profit oriented enterprises

**Stratified markets** with social enterprise and profit oriented enterprises for similar services

(some services can be provided by both, even though the social enterprise adds additional societal benefits with lower profit margin)

|  |  |  |
| --- | --- | --- |
|  | Social enterprises | For profit oriented enterprises |
| Peer to peer car sharing | Tappazz/cozy car | Car amigo |
| Car pooling | Carpool | BlaBlaCar |

**Defended social enterprise markets** (higher societal impact of social enterprise organisations, but need to protect them from market competition, to give them extra government support, etc.)

< need of governmental regulation of the for-profit sector

|  |  |  |
| --- | --- | --- |
|  | Social enterprises | For profit oriented enterprises |
| Point to point car sharing | Cambio (invests also in electric cars, broader mobility solutions, etc.) | Tesla, BMW-Sixt, Daimler AG |

**Displaced markets** (similar societal impact between social enterprises and profit oriented enterprises, historically initiated by social enterprise, but massive market uptake gives advantage to for-profit solution)

## Mobility POLICY

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Examples in Brussels Region** | **Impact on the collaborative economy** | **Efficiency in regards to sustainability objectives** |
| **Specific collaborative economy measures** |  |  |  |
| Fiscal policies for car sharing |  |  |  |
| free/discounted parking for car-sharing |  |  |  |
| ride-share pick-up spots |  |  |  |
| fiscal incentives for company car pool program | Yes: in various municipalities, given only to specific companies/organisations |  |  |
| **General measures with impact on collaborative economy** | Yes: federal measure |  |  |
| Km-based toll for all vehicles in city (congestion taxing) |  | Could replace lost revenue from less car acquisition in case of increased multi-modality, manage traffic and prevent big rebound effects[[18]](#footnote-18) | Could work if alternative mobility solutions exist that are time efficient (example for families bringing children to school and then go to work); it can incentive change, but only in the context of a broader policy (infrastructure, etc.) |
| Higher CO2 limits in cities/advantages for electric cars |  | Would favour the use of fuel efficient / electric cars in the collaborative economy | Highly efficient in a scenario of increased production of energy through renewables; however seen the limit on amount of renewables needs to be combined with less car use as well |
|  |  |  |  |

**Detailed description of the measures**

***Fiscal policies for carsharing***

Policymakers should use codified definitions or certification processes to distinguish between traditional car rental companies and carsharing organizations and ensure that only organizations generating significant public benefits would receive reduced taxation. At the very least, cities should make carsharing tax exempt in lower income urban areas with disadvantaged populations and high unemployment; foregoing tax revenue in these areas may be a small price to pay for the mobility benefits that sharing vehicles provides underserved residents.

Examples:

Chicago, IL, Boston, MA, and Portland, OR – These cities have made noteworthy efforts to lower carsharing tax rates with political success. They make distinctions between carsharing and traditional car rental in their municipal codes.”

References:

Bieszczat, Alice, Schwieterman, Joe, “My Car, Your Car,” Magazine of the American Planning Association pp. 37-40 (May/June 2012).

Bieszczat, Alice and Joseph Schwieterman, “Are Taxes on Car-Sharing Too High? A Review of the Public Benefits and Tax Burden of an Expanding Transportation Sector,” Chaddick Institute for Metropolitan Development, DePaul University (28 June 2011).

***free/discounted parking for car-sharing***

***ride-share pick-up spots***

***fiscal incentives for company car pool program***

In Belgium: higher tax deductibility of home-work transport for carpoolers and 75% deductibility of extra km’s to drive to pick someone up (in 2014: 15.000 persons)

## Improving the environmental/social sustainability impact of organisational tools and strategies under various future scenarios

**Definition of future scenarios in the Brussels Region**

* Mobility aspects of the Regional Sustainable Development Plan for Brussels
  + There is an ongoing consultation: so a good moment for gathering “Brussels-specific perspectives”
* Participatory foresight study with the main collaborative economy “sustainability fore-runners”
  + Taxistop, etc. (to be defined)

**Role of organisational tools and strategies**

In general “strong need for support and external assistance especially in areas such as idea idea generation, gaining visibility on the marketplace, being part of a larger network of peers, or recruiting new talent”[[19]](#footnote-19).

* Process and interpret big data
  + Closed data
  + Collaborative use of data
* Collaborative design with the users/platform co-owners
  + Example of the cooperative Tappaz car sharing in Belgium : uses Connect & Create events with the members of the co-operative to bring new ideas to the organisation

**Role of incubation / financing**

* Coopcity[[20]](#footnote-20) : Centre dédié à l'entrepreneuriat social, collaboratif et coopératif à Bruxelles
  + Often with strong environmental/social sustainability perspective
* MyMicroInvest[[21]](#footnote-21): est une plateforme de crowdfunding pour start-ups, scale-ups et investisseurs en Europe.
  + However : no environmental/social sustainability perspective

# Food

## General sustainability objective

General environmental sustainability objective: to be developed (In any case, in the context of Brussels, major challenge is to diminish food waste and increase access to / knowledge of diversified nutrition to all income groups ; in a more general context it is not total “re-localization” that is important in Belgium but sustainable production in a context of “faire and sustainable global specialisation of production”)

## Literature review of impact on sustainable food systems

|  |  |
| --- | --- |
| Type of initiative in Brussels | Quantitative study on impact on evolution to more sustainable food systems of similar initiatives internationally |
| **Sharing of discarded food** |  |
| Recovering wasted food | (quantitative study do be found) : very positive sustainability impact likely[[22]](#footnote-22) |
| Cooking with recovered food | (quantitative study do be found) : positive sustainability impact likely |
| **Personal vehicle/bike sharing for food delivery** |  |
| Meals delivery | (studies to be found) Not clear: impact depends on the origin of the food; does not create social contacts; no mobility difference with regular delivery services |
| **Shared cooking** |  |
| Collaborative use of kitchens | (studies to be found) not clear/no major sustainability impact |
| **Sharing in food production** |  |
| Land sharing for urban gardening | Low sustainability impact: very low land productivity, asks some economic investment with no return |
| Deposit space sharing for farmers’ food baskets | Medium sustainability impact: high food logistics costs in most cases, as compared for example to a cooperative organic/sustainable food supermarket ; mostly for upper middle class consumers[[23]](#footnote-23) |

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| --- | --- | --- | --- |
|  | **Business/organisational model** | **Labour conditions/societal mission** | **Economic/fiscal impact** |
| **Recovering wasted food** |  |  |  |
| Various non-profit organisations (Foodbank) |  |  |  |
| **Cooking with recovered food** |  |  |  |
| Various non-profit organisations (Disco-soup, Degustation du Bon sens, Recup’Kitchen, Collectactif, Poissonerie, Commmuna, Woningen) | Mostly runs by volunteers and through gifts |  |  |
| **Personal vehicle/bike sharing for food delivery** |  |  |  |
| For profit oriented enterprises providing personal bike/car delivery of meals ordered at restaurant (UberEats, Restoathome, Take Eat Easy, Deliveroo) | Mostly based on venture capital : to be checked | Extremely bad reputation, for instance Deliveroo fixes the prices as a regular employer, but gives no social security and very bad wages | In London, the authorities have forebidden certain practices of Deliveroo such as payment per delivery, instead of hourly wages. |
| **Collaborative use of kitchens** |  |  |  |
| Cooking meals for take away by neighbours, for profit oriented enterprises (Menu Next Door, Flavr) | Mostly based on venture capital : to be checked |  |  |
| Cooking meals for take away by neighbours, non-profit (Thuisafgehaald.be) |  |  |  |
| Rent use of kitchen, for profit oriented enterprises (Co-oking) |  |  |  |
| Share kitchen/lunch at home, non-profit (Open Kitchen : non-profit status to be checked) |  |  |  |
| **Land sharing for urban gardening** |  |  |  |
| Shared gardens, non-profit (Deeltuin, Pretersonjardin, samentuinen |  |  |  |
| **Deposit space sharing for farmers’ food baskets** |  |  |  |
| Shared deposit space for farmers’ food baskets, non-profit (Gasap/Sagal/ Gac) |  |  |  |
| Shared deposit space for farmers’ food baskets, cooperative (Agricovert) |  | Better conditions: to be checked which one’s (farmers are member of the cooperative) |  |
| Shared deposit space for farmers’ food baskets, social enterprises with commercial legal status (La Ruche) |  | No guaranteed income for the farmers |  |

## Food POLICY

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|  | **Examples in Brussels Region** | **Impact on the collaborative economy** | **Efficiency in regards to sustainability objectives** |
| **Specific collaborative economy measures** |  |  |  |
| Tax credit to property owners who allow community to farm vacant or under-utilized lots |  |  |  |
| Support food recovery initiatives |  | Major impact: a lot of food recovery happens in semi-illegal sphere (to be checked) |  |
| Allow home-cooking | Afsca had controlled MenNextDoor and Thuisafgehaald.be, no irregularities found (hygienic rules are part of the code of conduct of these organisations) |  |  |
|  |  |  |  |
| **General measures with impact on collaborative economy** |  |  |  |
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|  |  |  |  |
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**Detailed description of the measures**

***Fiscal policies for land use for urban agriculture***

Cities can provide a tax credit to property owners who farm vacant or under-utilized lots, as such activities create food sources, economic opportunity, and civic engagement in otherwise blighted areas.

A study from the University of Pennsylvania School of Medicine showed that community gardens contribute to an increased sense of safety in neighborhoods, and are associated with a decrease in crime in surrounding areas. Tax credits create an attractive incentive for property owners to open their land to community gardening or urban farming uses, with desirable public health and safety outcomes for cities.

Examples:

Maryland – Maryland passed a bill allowing municipalities to provide a tax credit for real properties used for urban agriculture. To be eligible for the tax credit, urban real property in a “Priority Funding Area,” between one-eighth of an acre and two acres in size, must be used exclusively for agriculture.

Philadelphia, PA –Philadelphia utilizes a carrot and stick approach for owners of vacant and abandoned lots – assessing a yearly vacant lot registry fee, which is reduced if the land is cultivated

References

Garvin, Eugenia C. et al., “Greening vacant lots to reduce violent crime: a randomised controlled trial,” Journal of Injury Prevention University of Pennsylvania (2012),

Calfee, Corinne, Weissman, Eve, “Permission to Transition: Zoning and the Transition Movement,” Planning & Environmental Law: Issues and decisions that impact the built and natural environments 64:5 (2012)

***Support non-commercially viable food redistribution to people in need***

***Promote/allow food production activities as home occupation***

Example:

California Homemade Food Act – The state recently adopted a law that places a mandate on cities and counties to issue home business permits to individuals engaged in cottage food production (jams, baked goods, cereals, spices, and dried fruits)

***Shared commercial kitchens***

Local commercial kitchens that can be economic incubators for budding food enterprise

Example

New York, NY – Entrepreneur Space is a city-sponsored business incubator in Queens that helps food-related and general business start-ups across New York City.72 It is open 24 hours a day, and serves more than 100 entrepreneurs working to establish their businesses in New York. In its first two years, the incubator contributed an estimated $5 million to the local economy.

# Shared housing/offices/deposit space

## General sustainability objective

Global objective: realization of “compact” city areas (to be cross-checked, is the key concept of the three urban planning documents realized by urban planning consultants for the future of the Brussels Region)

< The compact city or city of short distances is an urban planning and urban design concept, which promotes relatively high residential density with mixed land uses. It is based on an efficient public transport system and has an urban layout which – according to its advocates – encourages walking and cycling, low energy consumption and reduced pollution.

## Literature review of impact on sustainable regional development

Key categories (cf. excel sheet): co-housing, co-working, common infrastructure for cooking/wood work/fablabs etc., parking spot, garden sharing, house sharing, short rentals

|  |  |
| --- | --- |
| Type of initiative in Brussels | Quantitative study on impact on sustainable built infrastructure of similar initiatives internationally |
| Share a sleeping place | Positive environmental impact (less energy use as compared to hotel guests; more use of local public transport options)[[24]](#footnote-24) |
| Holiday home swap | (Studies to be found) Less new holiday infrastructure needed |
| Shared fabrication resources in common space | (Studies to be found) Positive impact on less use of resources |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Business/organisational model** | **Labour conditions/societal mission** | **Economic/fiscal impact** |
| **Share a sleeping place** |  |  |  |
| Temporary offering of place in personal housing, for profit oriented enterprises (Airbnb, Couch Surfing) |  | If unregulated creates negative neighbourhood impact (needs to remain “temporary”) | Airbnb tax evasion policy to be checked (cf. footnote above on practices of Uber) |
| Temporary offering of place in personal housing, non-profit (Warm showers, Bewelcome) |  |  |  |
| **Holiday home swap** |  |  |  |
| Various non-profits (HomeExchange, Homelink, Woningoppas) | Woningoppas, Homelink: created by taxistop |  |  |
| Various for profit oriented enterprises (Homeaway, Flipkey) |  |  | Tax evasion policy to be checked |
| **Shared fabrication resources in common space** |  |  |  |
| Micro factory |  |  |  |

## Innovation life cycle analysis

From pure non-profit oriented to pure for-profit

case of Couchsurfing

## Houses/offices POLICY

Remove barriers to various shared housing models, including accessory dwelling units (also known as granny or in-law flats and second units), clustered tiny homes and micro-apartments, short-term stays for travelers, cohousing communities, and eco-villages – all of which harness the power of sharing to increase affordability and decrease our environmental footprints

Reference: Kushner, James A. “Affordable Housing as Infrastructure in the Time of Global Warming,” 42/43 Urb. Law. 179, 197 (Fall 2010/Winter 2011).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Examples in Brussels Region** | **Impact on the collaborative economy** | **Efficiency in regards to sustainability objectives** |
| **Specific collaborative economy measures** |  |  |  |
| Allow regulated short-term rentals in residential areas | Brussel Region will change the rules from April 2017 on: providers need to make a prior declaration and a registration. Then they receive an accommodation number, to be put clearly visible in the house. |  |  |
| Policy on construction of accessory dwelling units | US examples, relevance to be checked for Brussels |  |  |
| **General measures with impact on collaborative economy** |  |  |  |
|  |  |  |  |

**Detailed description of the measures**

***Facilitate the construction of accessory dwelling units***

Additional housing units on parcels located in single-family residential and simi­lar zones can provide relatively low-cost housing options and facilitate sharing of space and amenities. However, building ADUs is often cost-prohibitive due to high fees for zoning permits, connecting to essential utilities, or creating space for required parking under city zoning codes. Current permitting and fee struc­tures typically incentivize the construction of large dwellings by charging based on the number of living units added instead of the square footage added or the ecological footprint of the addition. As a result, it is generally less expensive to build a new parlour than to turn the same space into a small studio apartment.

Examples

Portland, OR - ADUs are permitted in every residential zone in the city and may be constructed on lots containing single-family homes if the ADU is smaller than the primary residence and under 800 square feet. The city does not impose additional parking requirements for the construction of ADUs. ADUs meeting the city’s applicable zoning requirements are permitted as-of-right without land use review, and the city provides a guide that describes ways to bring non-conforming ADUs into regulatory compliance.

Other examples – See Santa Cruz, California79 and Barnstable, Massachusetts

***Allow regulated short-term rentals in residential areas***

To prevent residential units from becoming too hotel-like, cities adopt policies that limit the number of paid houseguests per year, limit the number of guest nights, or cap each household’s gross income from short-term rentals. These provisions recognize that the purpose of sharing is not necessarily to profit, but, rather, to offset the cost of housing.

1. Adapted from : Cicero, S., Agamennone, Ch., Battaglia, E., 2016. A review of Methodologies for the Design and Incubation of Collaborative Platforms [↑](#footnote-ref-1)
2. ACEA report, 2014 (data from UK, Paris and US);

   <https://www.acea.be/uploads/publications/SAG_Report_-_Car_Sharing.pdf> [↑](#footnote-ref-2)
3. ACEA report, 2014 (data from UK, Paris and US) [↑](#footnote-ref-3)
4. Data at <https://www.changemakers.com/discussions/entries/cambio-missing-link> and others [↑](#footnote-ref-4)
5. ACEA report, 2014 (data from UK, Paris and US) [↑](#footnote-ref-5)
6. ACEA report, 2014 (data from UK, Paris and US) [↑](#footnote-ref-6)
7. <https://fivethirtyeight.com/datalab/the-debate-on-ubers-impact-is-far-from-over/> [↑](#footnote-ref-7)
8. Data to asked from project by <http://www.tmleuven.be/expertise/mobiliteit/home.htm> [↑](#footnote-ref-8)
9. Data to asked from project by <http://www.tmleuven.be/expertise/mobiliteit/home.htm> [↑](#footnote-ref-9)
10. Article in Trends : « Le break even après trois ans. Mais les bénéfices sont loin d'être plantureux : 24.164 euros en Wallonie, 148.440 euros à Bruxelles et 178.776 en Flandre en 2013, selon les chiffres publiés à la Banque nationale. "Nous ne sommes pas dans un business qui permet de faire de grosses marges, répète Frédéric Van Malleghem. Mais notre finalité n'est pas là, mais bien dans la diminution de la pression automobile en ville » ; <http://trends.levif.be/economie/entreprises/carsharing-un-business-florissant-mais-fragile/article-normal-324173.html> [↑](#footnote-ref-10)
11. “Mobility”, Switzerland: Co-operative with 2650 vehicles for round-trip car sharing mainly (Source: ACEA report). 47% of the users are members of the co-operative (in exchange of discount rate): 1% of the fleet fully electric (which leads to less profits), 16% of the locations do not cover costs (social commitment), resulting profit margin of 5%. (+ scheme making cars available for use by learner drivers prior to acquiring the full driving license; Cambio in Belgium is only from 25 or driving licence for at least two years) [↑](#footnote-ref-11)
12. Article in trends: http://trends.levif.be/economie/entreprises/carsharing-un-business-florissant-mais-fragile/article-normal-324173.html [↑](#footnote-ref-12)
13. Rules of the national council of cooperatives: max 6% of dividend (with 180 euros tax exempted) ; one shareholder can have max 10% of the total number of votes [↑](#footnote-ref-13)
14. Het grote voordeel van de coöperatieve is dat je als community de controle behoudt en de missie kunt waarborgen. Een nadeel is dat je bij de start niet zo snel het kapitaal hebt om al je ambities waar te maken. Een Franse collega in het autodelen haalde recent bij venture capitalists  10 miljoen euro op. Dat doet me soms wel dromen, maar dan realiseer ik me dat we na de eerste ronde al een groot deel van de controle kwijt zouden zijn. <http://www.socialeeconomie.be/node/8386> ; de bedoeling om de leden van het kernteam zo snel mogelijk een deftig loon uit te betalen. Maar we worden wel op een andere manier rijk: we doen zinnig werk en beleven volop het plezier om het initiatief te zien groeien [↑](#footnote-ref-14)
15. Ref <http://bruegel.org/2016/02/uber-and-the-economic-impact-of-sharing-economy-platforms/> [↑](#footnote-ref-15)
16. All non US drivers fees to Uber are sent to an ad hoc created Dutch company situated in Amsterdam (but with headquarter in Bermuda, where there is no corporate income tax), who bills 99% of it to another ad hoc created Dutch company, saying it is for the use of the royalties on Uber’s software. As there is NO TAX on royalty payments in the Netherlands this leads to a 1% taxable income on the drivers fees paid to Uber (similar to schemes of digital companies such as Google, Amazon, Facebook, Starbucks, Microsoft, Apple).

    http://fortune.com/2015/10/22/uber-tax-shell/ [↑](#footnote-ref-16)
17. Manual available at <http://www.carpool.be/brussels/individuals/taxes/index> [↑](#footnote-ref-17)
18. http://www.euractiv.com/section/digital/opinion/can-google-uber-blablacar-and-zipcar-make-mobility-cleaner/ [↑](#footnote-ref-18)
19. Cicero, S., Agamennone, Ch., Battaglia, E., 2016. A review of Methodologies for the Design and Incubation of Collaborative Platforms, p. 27 (available on line) [↑](#footnote-ref-19)
20. <http://coopcity.be/> [↑](#footnote-ref-20)
21. <https://www.mymicroinvest.com/fr> [↑](#footnote-ref-21)
22. Assessment done in Working Paper 2 of the Sharecity Project (ERC project, text on project website) [↑](#footnote-ref-22)
23. Cf. Geographical mapping of collaborative food initiatives in Dublin : Fig8, p29: Dissertation Ben Murphy (Sharecity ERC project) [↑](#footnote-ref-23)
24. Cleantech Group assessed environmental impact of Airbnb (Airbnb guests use 78% less energy than hotel guests + use 10-15% more likely public transport, walk or bicycle) [↑](#footnote-ref-24)