



CircoLab

June 2021



A lush green forest with tall trees and sunlight filtering through the canopy.

**1. The context**

**2. Circular economy**

**3. Circolab**



## The linear risks



1. Procurement Risk
2. Regulatory risk
3. Disruptive innovation risk

# The context

## Real estate and the environment!

At the EU level, the construction and use of buildings are responsible for **50%** of total raw material extraction.

Source: European Commission

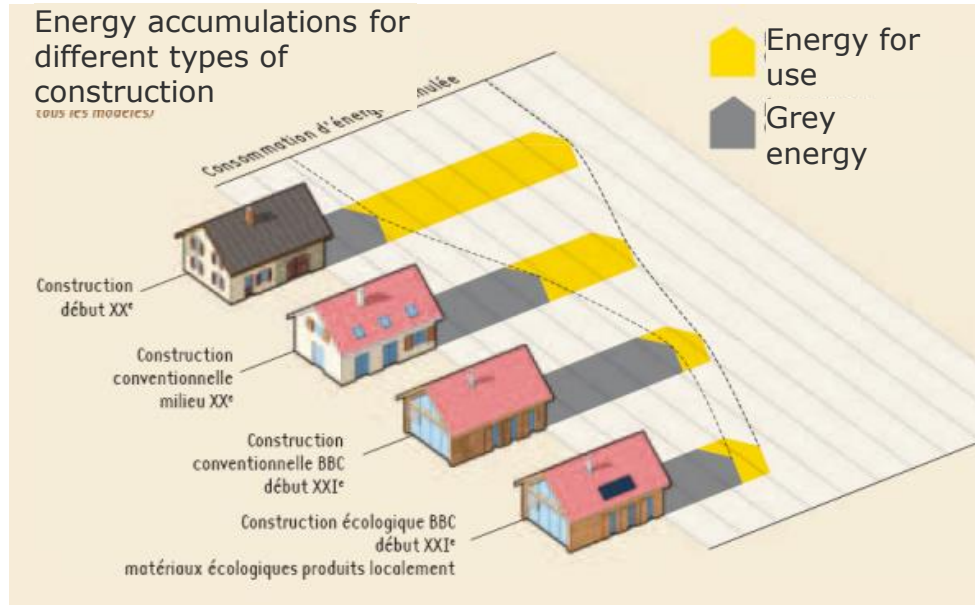
The building sector is responsible in France of:

- **22% of CO2 emissions**, 3rd position after industry, (ADEME)
- **34% CO**, 2nd largest emitter (ADEME)
- 38% VOC, 1st emitter (ADEME)
- **About 30% of suspended particulates**, 2nd source after transport (Airparif 2012)
- **13% of waste**, 2nd source after public works



# The context

## Diagnosis



**The embodied energy of construction is largely in the majority whereas it is not taken into account at all today!**

# The context

## Future of cities



Demography: 10 billion in 2050

Urbanization: +1.4 million inhabitants/week

Construction: 1 billion additional homes by 2060

# The proposal: the circular economy

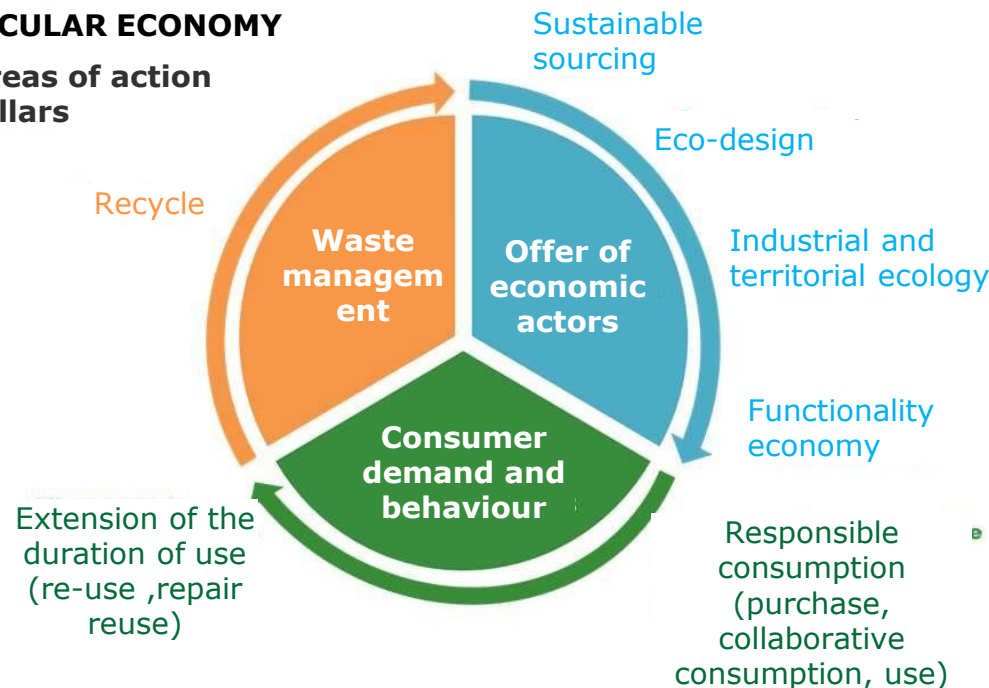
## The principles of the circular economy :

*"The circular economy is an economic concept that is part of sustainable development and whose objective is to produce goods and services while limiting the consumption and waste of raw materials, water and energy sources. It is about deploying, a new economy, circular, and no longer linear, based on the principle of "closing the life cycle" of products, services, waste, materials, water and energy. " ADEME*

### CIRCULAR ECONOMY

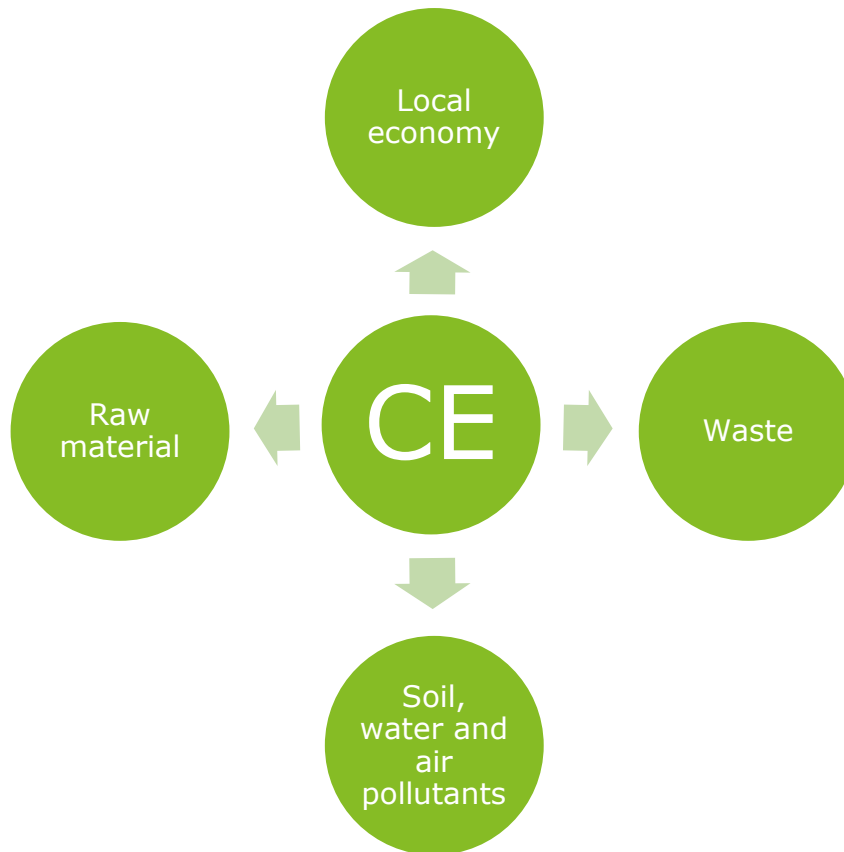
**3 areas of action**  
**7 pillars**

ADEME



# The proposal: the circular economy

## Interest



A benefit:

- Immediate
- Real
- Irreversible



# The role of the real estate players

## A difficult but essential task

- The public authorities
- A complex industry
- An archaic project organization
- A digitization in progress



# The role of the real estate players: Circolab

1. Started in late 2016, creation of the association in February 2018, 12 founding members
2. Currently more than 80 members companies: public and private contractors, construction companies, design or control offices, manufacturers, architects, consultants, AMO, associations, operators, professional organizations, etc...
3. Plenary sessions every 2 months with the intervention of professionals working in the field of circular economy
4. Circolab portfolio value: more than 170 billion €.
5. More than 20 Working Groups!





# The role of the real estate players

## Members:





The super powers of a community of real estate companies that are both suppliers and prescribers of reused materials!



# CIRCOLAB

## Timeline



<b>2016</b>	<ul style="list-style-type: none"> <li>Beginning of reflections: obstacles to reuse, vocabulary, methods</li> </ul>
<b>2017</b>	<ul style="list-style-type: none"> <li>Process: drafting of a framework document (completed)</li> <li>Marketing: sales pitch and documentation (completed)</li> <li>Technical referential: specifications of the re-use diagnosis (completed)</li> <li>Legal aspects: guarantee/insurance of participants (completed)</li> <li>Fiscal aspects: analysis according to the cases of public, private, donation... (completed)</li> </ul>
<b>2018</b>	<ul style="list-style-type: none"> <li>Structures: association (Feb 2018)</li> <li>Working group with FFA on guarantees (completed)</li> <li>Creation of indicators with CSTB (completed)</li> <li>Methodology (completed)</li> <li>Web platform (2018- )</li> </ul>
<b>2019</b>	<ul style="list-style-type: none"> <li>Pilot Operations (2019- )</li> <li>Clausier (completed)</li> <li>Research with Fondation Bâtiment Energie/CSTB (completed 2021)</li> <li>Work with manufacturers (2020- )</li> <li>Work with operators (2020- )</li> </ul>
<b>2020-2021</b>	<ul style="list-style-type: none"> <li>Reuse label (completed 2021)</li> <li>BIM (completed 2021)</li> <li>Survival (2019- )</li> <li>Traceability (2020- )</li> <li>EC Trophy (completed 2020)</li> </ul>

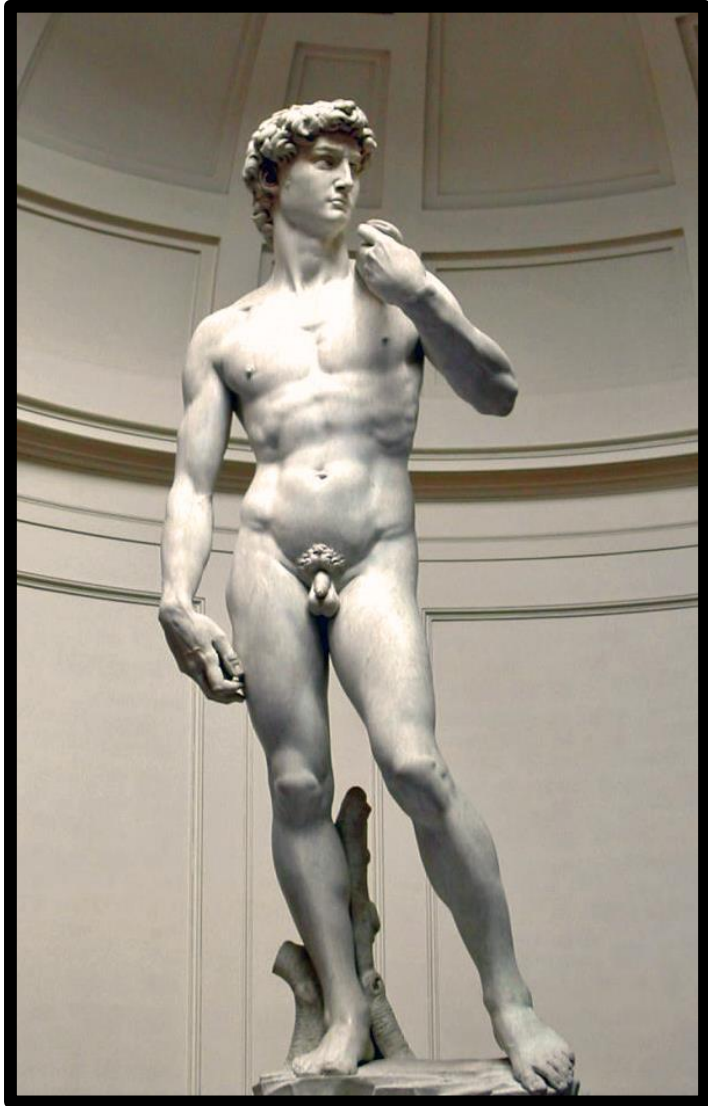
# CIRCOLAB

## Commitment Charter

Commitments	Nature
<ul style="list-style-type: none"> <li>• Form a community of actors committed to the circular economy</li> <li>• Promote a spirit of collaboration between different actors, both private and public</li> <li>• Collaborate with actors of the solidarity economy</li> <li>• Involve all project stakeholders</li> </ul>	Federate
<ul style="list-style-type: none"> <li>• Communicate the benefits of the circular economy,</li> <li>• Encourage the real estate industry at all levels to integrate the principles of the circular economy into its actions,</li> <li>• Contribute to the evolution of regulations to accelerate the development of a real estate circular economy</li> <li>• Promote best practices and exemplary achievements</li> <li>• Contribute to the development of the skills of the various players</li> </ul>	Influence
<ul style="list-style-type: none"> <li>• Develop a circular economy methodological framework for demolition and construction projects</li> <li>• Develop common tools and use them in our projects</li> <li>• Provide a dedicated digital platform for a range of reused products and materials</li> <li>• Contribute to the improvement of tools and processes by making available data from operations</li> </ul>	Tooling
<ul style="list-style-type: none"> <li>• Set clear objectives for each operation upstream in terms of reuse and recycling</li> <li>• Define relevant indicators of project circularity</li> <li>• Monitor these indicators throughout our deconstruction/demolition or renovation/construction projects,</li> <li>• To carry out assessments on the recovery of materials from our operations</li> <li>• Recover as much as possible of the materials resulting from deconstruction, giving priority to reuse</li> <li>• Reduce the burial of our construction waste</li> <li>• Ensure the traceability of our actions</li> <li>• Strive to measure the environmental and socio-economic benefits of circular management of operations</li> </ul>	Measure



1. Form an ecosystem
2. Have a common language: method, guides
3. Remove obstacles: insurance, taxation, BIM
4. Create confidence: resource diagnosis, traceability
5. Valuing actions: indicators of the benefits of reuse, reuse label, surplus value of circular buildings, trophy
6. Increase competence: REX, label, work with schools, BAMB 2 research, Bât énergie Foundation
7. Raise awareness and federate: EGFBTP, FFA, SEDDRE, Architects, Manufacturers...



Desirability

Label

Territorial anchorage

SSE

Design of furniture  
and buildings

# Conclusion

« We don't have a problem of climate change but a problem of mind change »



“No, you have a bigger purpose !”



# Thanks for your attention!

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**<http://circolab.eu/>**

Linkedin : [Association Circolab](#)