

## Two logics of innovation

Innovation origin	Technology push: R&D or technology breakthrough drives the launch of new products.	Market pull: The market demand for a solution to a problem or a need initiate the development of a new product.
Innovation policies	Supply-side oriented	Demand-side oriented
Innovation process	Linear diffusion process	Complex and systems-oriented.
Innovation type	Technology Product (good or service) Process	Social innovation Organizational method

Question? What type of information system for innovation system?



## Proposal for characteristic of innovations and projects

Various combination of characteristics

Define an common ontology for various platforms

#### Type of innovation

- 1. Technology, Product, Process
- 2. Marketing and organization
- 3. Social innovation
- 4. Eco innovation
- Community and territorial
- 5. Digital and information..

#### Type of bearer

- 1. Big business
- 2. SMEs
- 3. Innovative start up
- Social enterprise
- 5. Association
- 6. Community
- 7. Individual...

#### **Innovation network**

- 1. Business ecosystem (private)
- 2. Public/Private Network (innovation ecosystem)
- 3. Community of Practice (knowledge ecosystem)

#### **Targets and customers**

- 1. Base of the pyramid
- 2. Individual consumer
- 3. Citizen
- 4. Business
- 5. Community ...

#### Maturity

- 1. Maturity of Technology (TR)
- 2. Maturity of the innovation system
- 3. Level of formalization
- 4. Maturity of the bearer and its organization

#### **Knowledge base**

- 1. Scientific knowledge
- 2. Patents (source of knowledge)
- 3. Standards and norms
- 4. Training
- 5. Experiences
- 6. Tacit knowledge

#### **Finance**

- Green funds
- 2. Crowd funding
- 3. Angel investors
- 4. Venture capitalist
- 5. Assurance
- 6. Private banks

#### **Intellectual property**

- . Patent
- 2. Marketing
- 3. Franchise
- 4. Open and free
- 5. Informal...







案例 ~ 年度评奖 ~ 论坛 ~ 培训 ~ 会员 ~



新闻

# www.construction21.org





绿色建筑技术与建筑造型设 计探讨

专访|同济校长眼中的绿色

建筑是什么?

コ<del>ルナ</del> 20 No. 2047

北上浙试水告知承诺审批 **实际**情况与承**诺**内容不符的 将被列入建筑市**场"**黑名**单"** 



#### 其他信息

前三季度绝热节能材料行业运行稳中向好

已发布 28 Nov 2017 - 06:49

紧紧扭住标准创新提升的两个支撑点促进行业转型升级

已发布 27 Nov 2017 - 02:36

7 45 to 0 0 - - 2017

## A local AND global approach

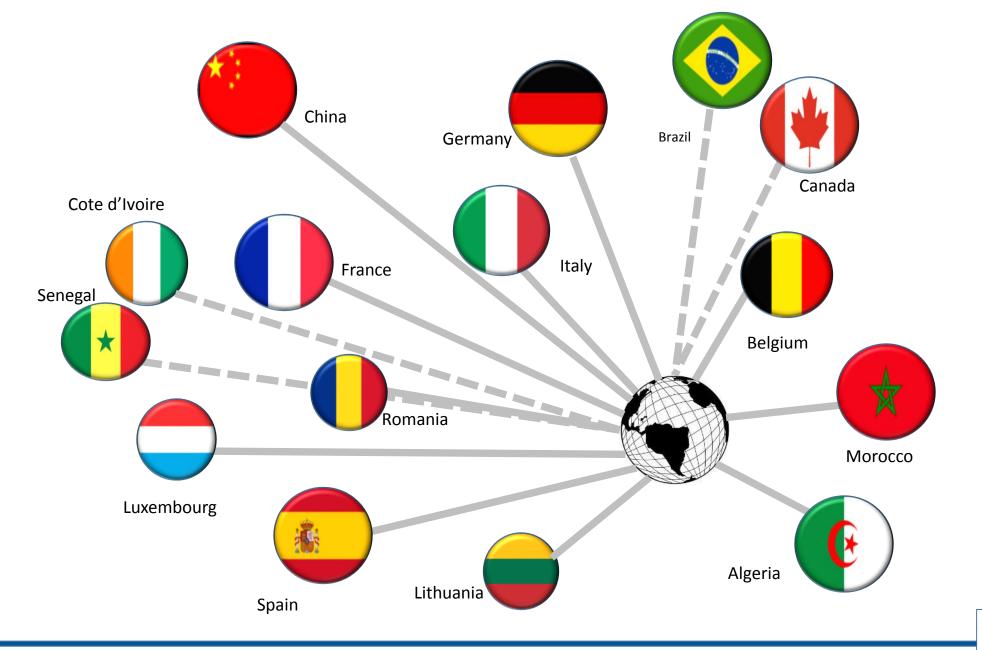
- An organized social network
- Collectively managed by professionals
- To develop competencies & green business
- To foster innovation

## An international network of 11+1 platforms

- Managed in each country by a non-profit organization
- Coordinated by an international association







## 11 + 1 platforms today

## >>> World wide target



## Various formats for information and promotion

### **Information**



News







Events

Videos

Trainings

### **People**

Directory of users, companies, networks



Online communities



### **Connected**



Connected with other social media

### **Solutions & innovations**



Innovative Buildings & Solutions Database



City & urban solutions
Database (districts)



Infrastructure Database (energy, waste, transport...)

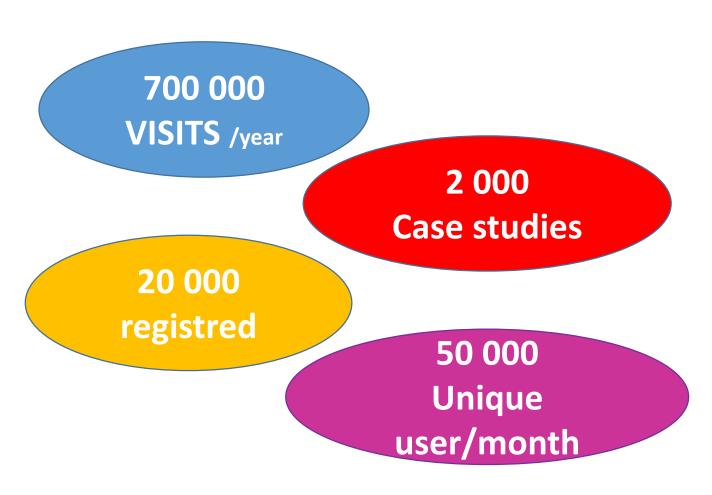
#### Case already implemented.

Published by project partners integrated in an (inter)national awards process



## An online meeting place for all professionals

- Contractors, entrepreneurs
- Architects, planners, engineers
- Construction companies, urban services, business
- Promoters, developers
- Researchers, teachers
- Networks, public agencies
- Local communities





## Case studies access in each national languages

#### 中国石油大厦



项目类型:新建建筑

建筑类型:高于28米高层か公

建设年份: 2004 交付年份: 2012

气候区:[Cwa]温和,冬季干燥

楼面净面积: 200 838 m<sup>2</sup> Oth

建设/改造费用:214748364

户/工位数工位:3500工位

费用/m2:10 693 ¥/ m<sup>2</sup>

费用/工位: 613 567 ¥/工位







Districts



Project type : New Construction

Building Type: High office tower > 28m

Construction Year: 2004

Delivery year: 2012

Climate zone : [Cwa] Mild, dry winter, hot

and wet summer.

Net Floor Area: 200 838 m<sup>2</sup>

Construction/refurbishment cost: 2 147 483

647¥ 0

Number of Work station: 3 500 Work station

Cost/m2: 10 693 ¥/ m<sup>2</sup>

Cost/Work station: 613 567 ¥/Work station

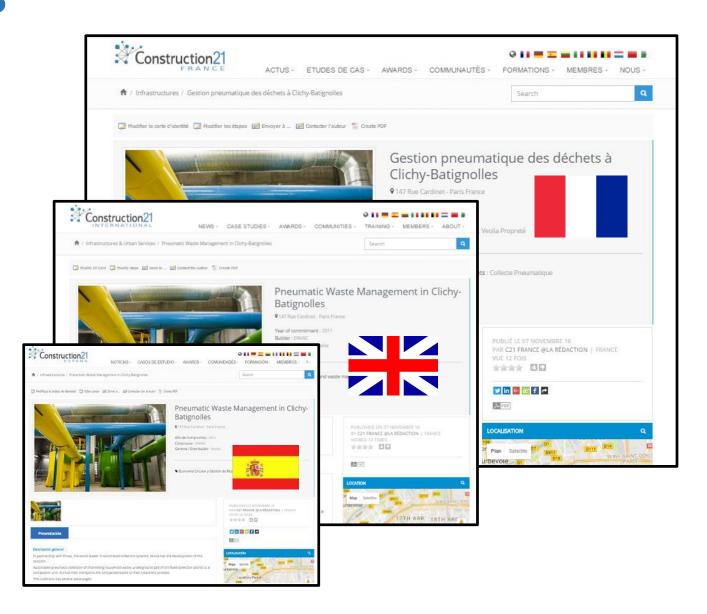


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### Access to innovations

- You publish in your native language
- Case study visible in English, Chinese, French,
   Spanish, Italian...



## International awards connected to COP

- 150 candidates
- 19 countries
- 1 video for 9 winners
- A global promotion
- 50 media partners
- 500 000 view







## **Key elements for experience Construction 21**

Objectives	Problem	Solutions
Access to innovative case studies already on the market	Balance quality / quantity Complex indicators deters candidates	Awards to attract and online support for posting case Communication on awards
Local to global approach	Relevance of national level (national innovation system)	Governance based on national chapters Communities on-line and open process
Access of national stakeholders to global knowledge	Language issue : English is not universal	National portals in national languages Translation process and multilingual database
Strengthen National Innovation System (NIS)	Lack of institutional leadership Communication difficulties	Media partnership to help NIS partners communication Steering the information system is a transaction tool to make stakeholders work together
Disseminate online knowledge to professionals and decision-makers	Low ability to use digital technology, communication tools or networks practices	Promotion of digital literacy through training sessions
Foster participation and contribution on the portal	No personal return for public involvement	Implementation on the portal of personal and organization pages valuing contributions
Attractive site that generates recurring uses	New media competition and rapidly evolving use	Agile development for new uses (smart phone) and social networks (Twitter, LinkedIn)
Exchanges in online communities	Lack of loyalty	Organization of physical meetings through partnerships with trade shows

### Governance

#### **Strategy**

#### **Operational**

Strategic decisions

National Chapter

International

non-profit organisation

#### **National C21 support**

Construction21 AISBL Board

- Content management
- Communication
- Communities management
- Administrative & financial portage
- Member of C21 international

#### **Steering comity**

Representing the national innovation system

#### **Finance**

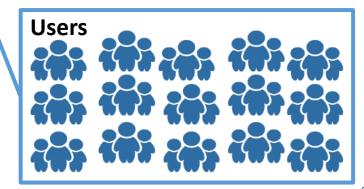
Fee, sponsorship, services, subventions

Project taskforce

Awards management, New functionalities...

Community manager Contributors

Members registered on the platform



International
Organizations, NGO,
Foundations, enterprises,
Universities/Schools

Associations, institutions enterprises, academics

Network heads, clusters, platforms, media, trade shows...

#### Actors in the field:

construction companies, industrial, engineers, craftsmen, architects, urban planners, real estate, training, local communities



## **Join City21**

Contact

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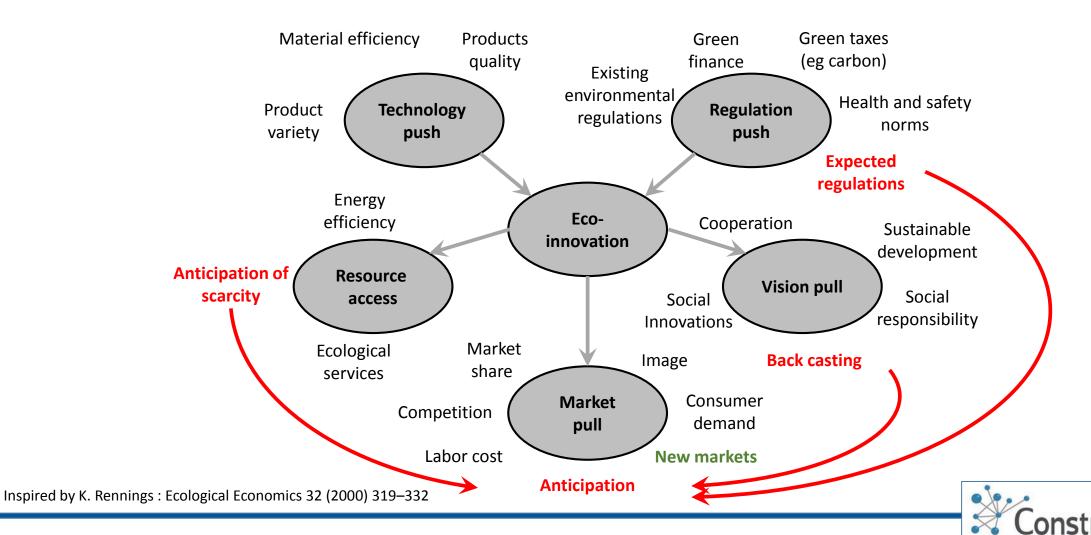
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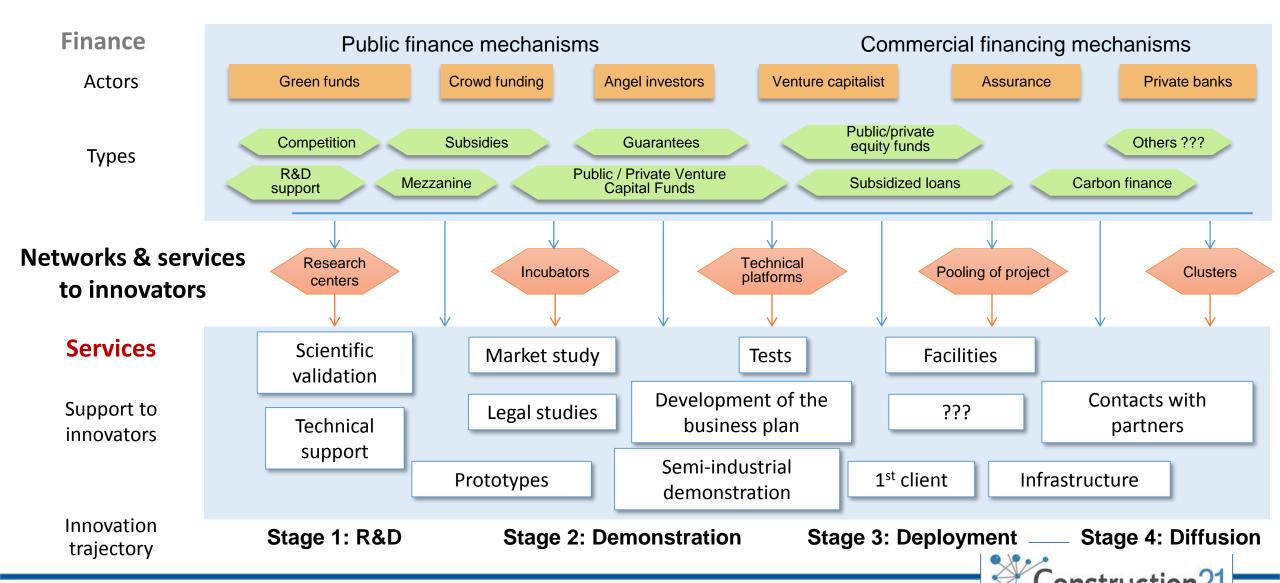
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## **Drivers of eco-innovation**



### Service and finance for innovation



## The ecosystem behind Construction 21: Portals and software solutions

Construction 21 is powered by an NGO: CIRIDD (<u>www.ciridd.org/</u>), developing different portals and social media forming an ecosystem of software solutions and sharing of experience





Portal innovation for francophone developing region, focused on digital Map of clusters and resource centers



News portals on sustainable development by regional, thematic or actors access. A specific portal is concerning STI



www.economiecirculaire.org www.genie.ch www.eclaira.org www.recita.org

Institut Mines-Télécom

International portal interconnected with sub-national portals on circular economy

