Accelerating market transformation

Breakout for policy makers #2

Tom-Pierre Frappé-Sénéclauze, Pembina Institute

Grégoire Clerfayt, Brussels

Richard Yancey, Building Energy Exchange (NYC)

Lloyd Alter, TreeHugger.com









Leading Canada's transition to clean energy

The Pembina Institute is a non-partisan think tank that seeks policy change to transition Canada to clean energy.

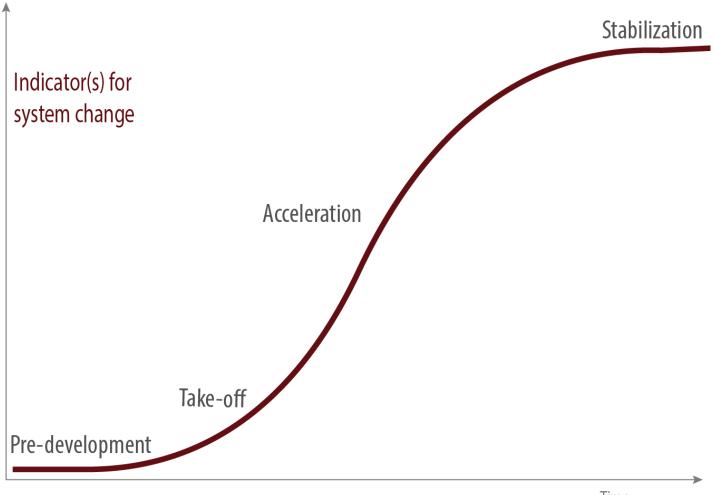




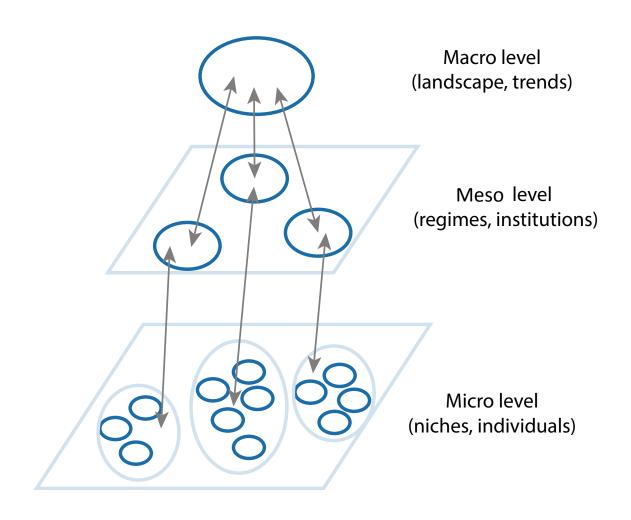
Karen Tam Wu Program Director Buildings & Urban Solutions



Market transformation



Market transformation: Bottom-up & Top-down



Passive buildings in NA

296 buildings

228 one or two family dwellings

42 multi-unit

26 commercial / institutional

784 dwellings

2/3 iPHI or PHIUS certified (or in process)
1/4 are on the PHI database



Passive House Network membership

644 members

Maine: 60

New York:209

Quebec:40 (just started)

Ontario: 30 (just started)

California: 40

Northwest: 109

CanPHI West: 180



Barriers to passive design

1. Regulation and Political Agenda

2. Business case and financing

3. Capacity

4. Knowledge

- 5. Applied products
- 6. Awareness and communication
- 7. Quality Assurance



Early adopters: public sector

Frankfurt (DE, since 2007) Altach (AT, since 2007) Bregenz (AT, since 2007) Dornbirn (AT, since 2007) Frastanz (AT, since 2007) Götzis (AT, since 2007) Hörbranz (AT, since 2007) Krumbach (AT, since 2007) Langenegg (AT, since 2007) Mäder (AT, since 2007) Rankweil (AT, since 2007) Thüringen (AT, since 2007) Wolfurt (AT, since 2007) Zwischenwasser (AT, 2007)

Aschaffenburg (DE, 2008)

Lower Austria (AT, 2008) Leipzig (DE, since 2008) Wei (AT, since 2008) Leverkusen* (DE, 2009) Bremen (DE, since 2010) Heidelberg (DE, since 2010) State of Hesse (DE, 2010) Cologne* (DE, since 2010) Freiburg* (DE, since 2011) Hamburg* (DE, since 2012) Antwerp (BE, since 2013) **Walldorf*** (DE, 2010) State of Bavaria (DE, 2011) Villamediana de Irequa (SP, since 2013)

Oslo (NW, since 2014) Brussels* (BE, since 2015) **Luxembourg*** (as of 2017) School District of Darmstadt-Dieburg (DE) Kempten (DE) District of Lippe (DE) Nuremberg* (DE) Offenbach Harbour -Mainviertel* (DE) State of Saarland (DE) ... New York 2017? ... Vancouver 2018?

* PH requirement goes beyond civic facilities

--- B.C. 2020?

Opportunity: land use



Opportunity: land use



Opportunity: land use



Early adopters: affordable housing



Orchards at Orenco, Portland (OR)

Rendering: Ankrom Mosian Architects



Improving business case: Incentives & market conditions

Increase Benefits

Cash incentives

Density bonusing

Faster sale, higher price (consumer demand)

Recognition, visibility

Decrease Cost/Risk

Financing

Streamlined permitting

Supply chain

PH-ready contractors





Brussels' BatEx Program







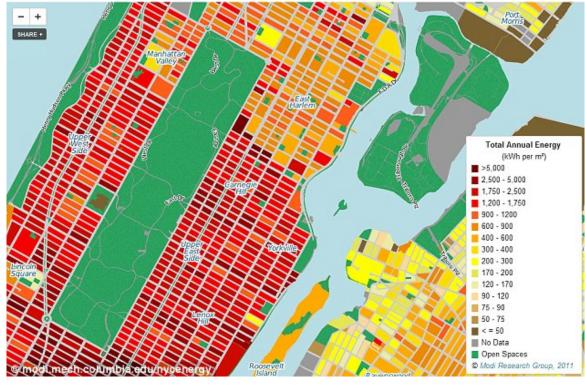
Awareness and communication













are you normal?

work in passivehouse but I'm normal



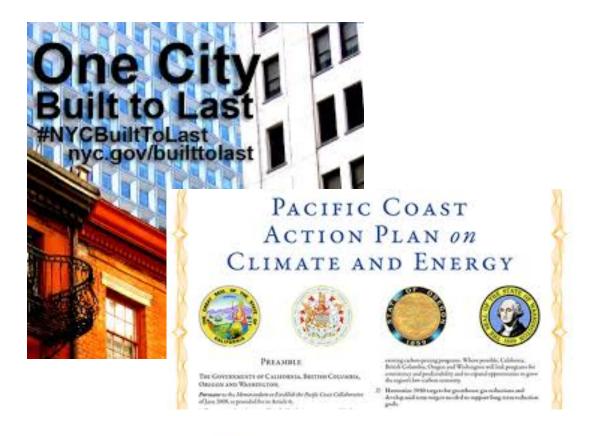








Political vision











Panelists

Grégoire Clerfayt: incentives

Manager Energy and Buildings, Institut Bruxellois pour la Gestion de l'Environnement (Brussels)

Sonia Zouari: public sector adoption Project Architect and PH designer, CSV Architecture

Richard Yancey: capacity building Executive Director, Building Energy Exchange (NYC)

Lloyd Alter: outreach strategies Editor, TreeHugger.com







Breakout tables

Table 1: Incentives and 'exemplary building program'

Table 2: Capacity building & professional networks

Table 3: Corporate policies for public buildings

Table 4: Outreach & public education

What needs to be done? Who does it?

Brainstorm, prioritize and report back!



pembina.org

pembina.org/subscription

Pembina eNews, Media releases, Publication alerts

twitter.com/pembina facebook.com/pembina.institute



First Passive House MURB in Vancouver



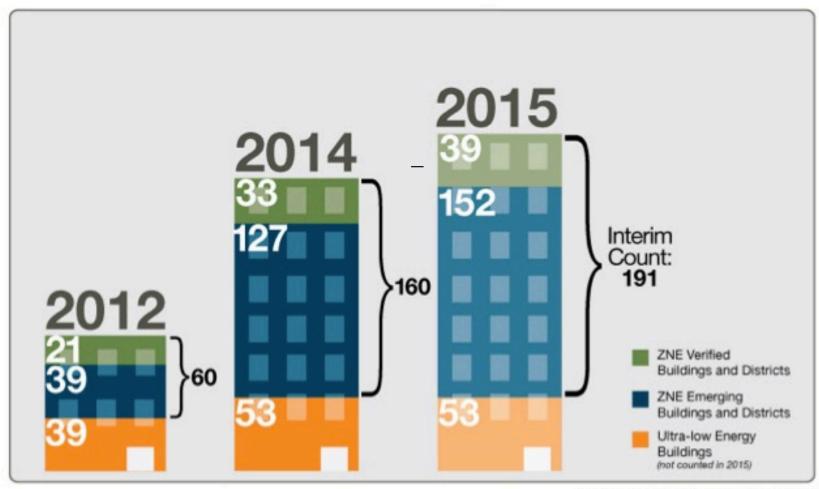


Cornell Tech, NY

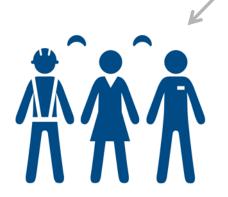




Growth of 'Net-Zero' and 'Net-Zero Ready' buildings in North America



\$1M spent



5.3 jobs in energy sector



13-18 jobs

in energy efficiency sector