

# *Cladiri “NZE” tinta europeana imposibila fara “RES”*

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# Building Performance Institute Europe

- ▶ Asociatie non-profit cu sediul in Bruxelles fondata de European Climate Foundation, Climate Works si European Council for an Energy Efficient Economy (eceee)
- ▶ Operational din februarie 2010
- ▶ Obiectivul principal BPIE este cresterea eficientei energetice in cladirile din Europa
- ▶ Centru de expertiza tehnica in cladiri si pol european al retelei globale de bune practici (global best practice network)
- ▶ Activitati: studiu si evaluare a performantei energetice in cladiri, analiza politicilor europene si nationale si sustinerea implementarii acestora in statele UE, suport pentru elaborarea de politici si programe ambitioase la nivel european si national, diseminare (ex. workshopuri tematice, publicatii etc.)

# Obiective la nivel national pentru cladiri noi

- **Selected National Targets for New Buildings**

- **Country Target**

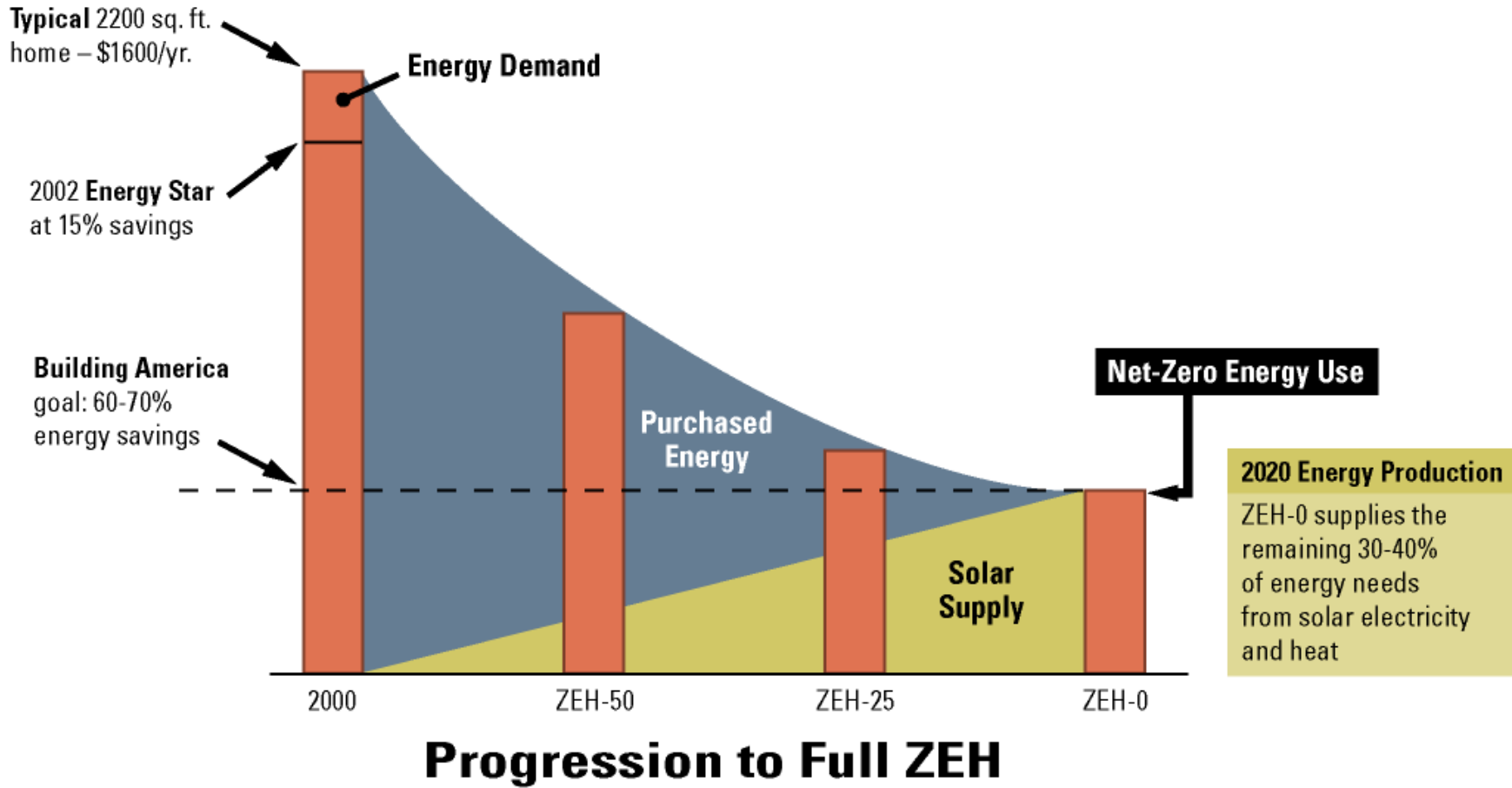
- Denmark                      75% by 2020 (c.f. base year 2006)
- Finland                      Passive house standards by 2015
- France                      By 2020 new buildings are energy-positive
- Germany    By 2020 buildings should be operating without fossil fuel
- Hungary                      Zero emissions by 2020
- Ireland                      Net zero energy buildings by 2013
- Netherlands              Energy-neutral by 2020 (proposed)
- Norway                      Passive house standards by 2017
- UK (England & Wales)              Zero carbon as of 2016

- *Adapted from: SBI (Danish Building Research Institute), "European National Strategies*
- *to move towards very low energy buildings*

# Objective UK-cladiri zero energie

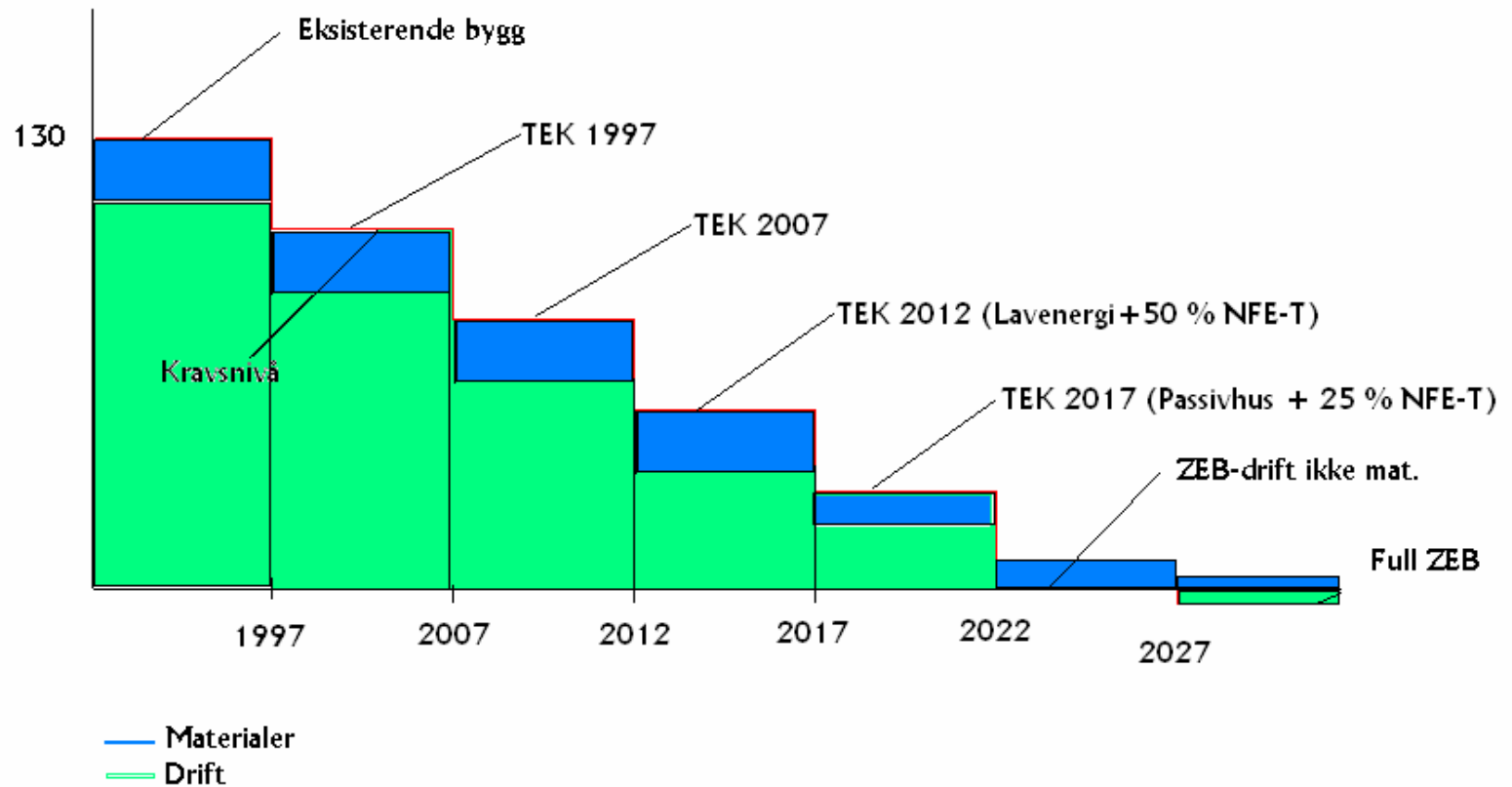
- • **10 kg CO<sub>2</sub>(eq) /m<sup>2</sup>/year for detached houses;**
- • **11 kg CO<sub>2</sub>(eq) /m<sup>2</sup>/year for other houses;**
- • **14 kg CO<sub>2</sub>(eq) /m<sup>2</sup>/year for low rise apartment blocks**

# Exemplu SUA



# Exemplu Norvegia

Klimagassutslipp(kg/m<sup>2</sup>år)



# Definitii cladiri zero energie

- **Net Zero Site Energy:** A site ZEB produces at least as much energy as it uses in a year, when accounted for at the site.
- **Net Zero Source Energy:** A source ZEB produces at least as much energy as it uses in a year, when accounted for at the source. Source energy refers to the primary energy used to generate and deliver the energy to the site. (NB this is equivalent to the Industry Committee's definition.)
- **Net Zero Energy Costs:** In a cost ZEB, the amount of money the utility pays the building owner for the energy the building exports to the grid is at least equal to the amount the owner pays the utility for the energy services and energy used over the year.
- **Net Zero Energy Emissions:** A net-zero emissions building produces at least as much emissions-free renewable energy as it uses from emissions-producing energy sources. (In other words, a **Zero Carbon Building.**)

## Exemplu de stimulare cladiri zero energie Cehia

- **B Passive standard MDHs** CZK/dw.u. **150,000**
- **B Passive standard FHs** CZK **250,000**
- **D Subsidy bonus for selected combinations of MDH measures**  
CZK/MDH **50,000**
- **D Subsidy bonus for selected combinations of FH measures**  
CZK **20,000**
- **1 Euro = 25 CZK**
-

# Casa Slovenia de vacanta zero energie



Incalzire pelleti lemn sau pompa de caldura

Alimentare apa din colectare apa ploaie

Materiale de constructie poliester si lemn

Toilet cu enzime

Dimensiuni: 9 – 3 – 3.6 m

Posibilitati de marire spatiu prin cuplare

# Casa Ungaria pentru locuit permanent

Energia folosita energia solara cu PV

Ventilare completata cu un colector in sol

Partea de sud acoperita cu ferestre pentru un mediu ambiental bun

Cost maxim 100.000 Euro



Va multumesc pentru atentie !



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