



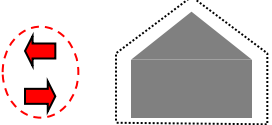
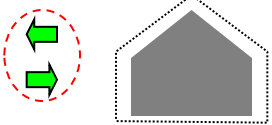


# Nye insentiver fra Enova for fremme av nullutslippsbygg

Tore Wigenstad, Seniorrådgiver Enova



BEGREP		Årlig	Levetid (LCA)
LAVENERGIBYGG (klasse 1 og 2)		Energibehov > 0	-
PASSIVHUS		Energibehov > 0	-
A-merket Bygg		Lever energi > 0	-
0-ENERGI HUS		Lever energi ≤ 0	-
PLUSSHUS		-	Netto levert energi ≤ 0
0-UTSLIPPSHUS		-	Netto utslipp ≤ 0



**DIRECTIVE 2010/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
of 19 May 2010  
on the energy performance of buildings  
(recast)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 194(2) thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Economic and Social Committee <sup>(1)</sup>,

Having regard to the opinion of the Committee of the Regions <sup>(2)</sup>,

Acting in accordance with the ordinary legislative procedure <sup>(3)</sup>,

Whereas:

<sup>(1)</sup> Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings <sup>(4)</sup> has been amended <sup>(5)</sup>. Since further substantive amendments are to be made, it should be recast in the interests of clarity.

<sup>(2)</sup> An efficient, prudent, rational and sustainable utilization of energy applies, inter alia, to oil products, natural gas and solid fuels, which are essential sources of energy, but also the leading sources of carbon dioxide emissions.

<sup>(3)</sup> Buildings account for 40 % of total energy consumption in the Union. The sector is expanding, which is bound to increase its energy consumption. Therefore, reduction of energy consumption and the use of energy from renewable sources in the buildings sector constitute important measures needed to reduce the Union's energy dependency and greenhouse gas emissions.

Together with an increased use of energy from renewable sources, measures taken to reduce energy consumption in the Union would allow the Union to comply with the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC), and to the global temperature rise below 2°C and its commitment to reduce, by 2020, overall greenhouse gas emissions by at least 20 % below 1990 levels, and by 30 % in the event of an international agreement being reached. Reduced energy consumption and an increased use of energy from renewable sources also have an important part to play in promoting security of energy supply, technological developments and in creating opportunities for employment and regional development, in particular in rural areas.

<sup>(4)</sup> Management of energy demand is an important tool enabling the Union to influence the global energy market and hence the security of energy supply in the medium and long term.

<sup>(5)</sup> The European Council of March 2007 emphasized the need to increase energy efficiency in the Union so as to achieve the objective of reducing by 20 % the Union's energy consumption by 2020 and called for a thorough and rapid implementation of the priorities established in the Commission Communication entitled 'Action plan for energy efficiency: realizing the potential'. That action plan identified the significant potential for cost-effective energy savings in the buildings sector. The European Parliament, in its resolution of 31 January 2008, called for the strengthening of the provisions of Directive 2002/91/EC, and has called at various times, on the latest occasion in its resolution of 3 February 2009 on the Second Strategic Energy Review, for the 20 % energy efficiency target in 2020 to be made binding. Moreover, Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 <sup>(6)</sup>, sets national binding targets for CO<sub>2</sub> reduction for which energy efficiency in the building sector will be crucial, and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources <sup>(7)</sup> provides for the promotion of energy efficiency in the context of a binding target for energy from renewable sources accounting for 20 % of total Union energy consumption by 2020.

<sup>(1)</sup> OJ C 277, 17.11.2009, p. 75.  
<sup>(2)</sup> OJ C 200, 25.8.2009, p. 41.  
<sup>(3)</sup> Position of the European Parliament of 23 April 2009 (not yet published in the Official Journal), position of the Council at first reading of 14 April 2010 (not yet published in the Official Journal), position of the European Parliament of 18 May 2010 (not yet published in the Official Journal).  
<sup>(4)</sup> OJ L 1, 4.1.2003, p. 65.  
<sup>(5)</sup> See Annex IV, Part A.

**ARTICLE 2 (Definitions)**

2. 'nearly zero-energy building' means a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;

**ARTICLE 9 (Nearly zero-energy buildings)**

1. Member States shall ensure that:
  - (a) by 31 December 2020, all new buildings are nearly zero-energy buildings; and
  - (b) after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings.

Member States shall draw up national plans for increasing the number of nearly zero-energy buildings. These national plans may include targets differentiated according to the category of building.

...

**Står ingen ting om Passivhus eller Zero Emission Building**



## HVA HAR VI I DAG?

# Enovas rådgiverteam

### FØR eventuell søknad

- Innledende rådgivning (5 t – 10 t)
- Startkurs om passivhus
- Bistand i arkitekturkonkurranser

[www.enova.no/radgiverteam](http://www.enova.no/radgiverteam)



## HVA HAR VI I DAG?

### Støtte til utredning

- 50% av utredningskostnaden
- Maks. 50 000,-

#### Krav:

- kartlegging av tiltak som sikrer passivhusstandard



## HVA HAR VI I DAG?

### Investeringsstøtte + rådgivning

#### Investeringsstøtte Passivhus

- Nye yrkesbygg: 350 NOK/m<sup>2</sup>
- Rehabilitering av yrkesbygg: 550 NOK/m<sup>2</sup>
- + Prosjektspesifikk rådgivning (20 – 60 timer)

#### Investeringsstøtte Lavenergi 1

- Nye yrkesbygg: 150 NOK/m<sup>2</sup>
- Rehabilitering av yrkesbygg: 450 NOK/m<sup>2</sup>



Marilunden, NW, Stavanger



## HVA HAR VI I DAG?

### Etablering av egen fornybar varmesentral

Investeringsstøtte til varmesentral basert på fornybar energi:

- Bioenergi – pellets, flis, ved
- Varmepumpe – luft/vann og væske/vann
- Solfangeranlegg

Støttenivå

Investeringsstøtte inntil 80 øre/kWh fornybar varmeleveranse



### Varmesentral forenklet

Maksimalt støttenivå kr/kWh	
Flis	1 700
Briketter	1 700
Pellets	1 700
Varmepumpe (luft-vann)	1 100
Varmepumpe (væske-vann)	1 600



## HVA HAR VI I DAG?

- Har støtte til Passivhus + lokal energiforsyning (to separate program)
- Ikke skreddersydd i forhold til 0-utslippsprosjekter



## Dagens støttere regime

PASSIVHUS	Besparelse [kWh/m <sup>2</sup> ]	<b>Støtte</b> [kr/m <sup>2</sup> ]	Støtte [kr/kWh]
Småhus	42	<b>450</b>	10,7
Kontorbygg	81	<b>350</b>	4,3

Alle kWh tall referer seg til levert energi. Referanse er TEK 10.  
Elektrisk oppvarming for småhus, FV for Kontorbygg



## Støtte basert på kWh

Tabellen tar utgangspunkt i dagens støttesats (kr/kWh) og overfører dette til et 0-energi bygg

0-Energi	Besparelse [kWh/m <sup>2</sup> ]	Støtte [kr/kWh]	Støtte [kr/m <sup>2</sup> ]
Småhus	132	10,7	1410
Kontorbygg	156	4,3	671

*"Krevende" tall for bransjen?*

## Støtte basert på merinvestering

0-Energi	Besparelse [kWh/m <sup>2</sup> ]	Antatt merinvestering [kr/m <sup>2</sup> ]	Støtte 60% [kr/m <sup>2</sup> ]	Støtte [kr/kWh]
Småhus	132	4000	2400	18,2
Kontorbygg	156	4000	2400	15,4

*"Krevende" tall for Enova*

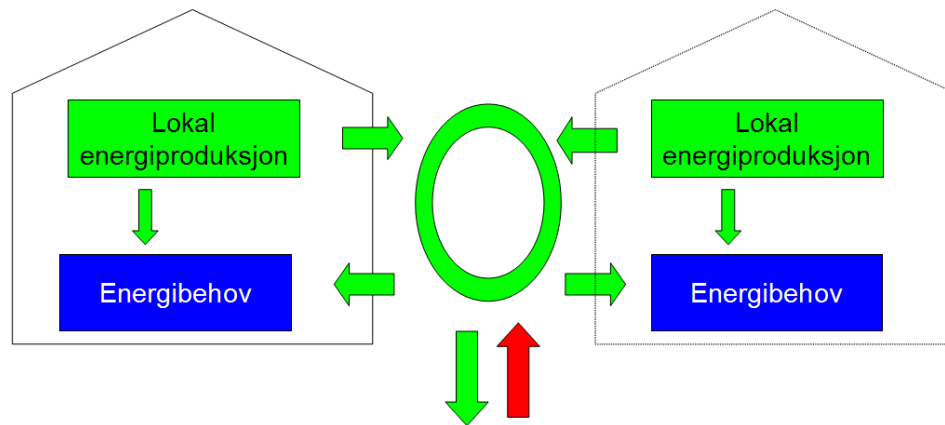
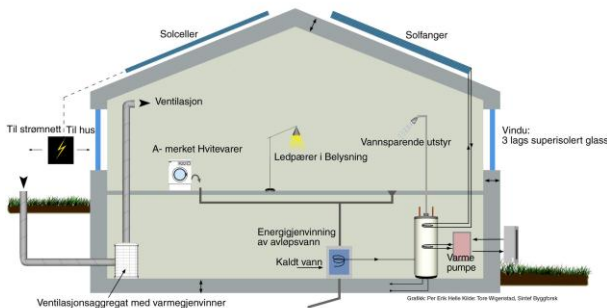


# HVOR GÅR VI?

Enova må intern avklare om vi skal stimulere til 0-utslippsbygg. (Er konseptet lurt gitt ”det store målet”?)

Hvordan støtte de ulike konseptene?  
Stand alone versus områdeutbygging

Områdeutbygging tar lang tid. Utbygger vil sikre seg støtte for utbygging langt fram i tid. (Ikke tilpasset Enova sine ”kortlivede” program)



## HVOR GÅR VI?

I SUM & inntil videre:

Tar søknader enkeltvis. Søknad gjennom Området: **Ny teknologi.**

Søknad kan i første omgang være en enkel prosjektbeskrivelse inneholdende:

- Omfang
- Aktører
- Tidshorisont
- Energimål
- Estimat over merkostnad (Bygningsnivå- energiforsyning)

