

Customer-friendly Individual Heat Metering in the Netherlands

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Customer-friendly metering heat



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Introducing individual metering & billing **in centrally-heated apartments** must include creating a new awareness among rental corporations and consumers of the energy costs associated with **individual dwellings**.

Introducing individual metering and billing of energy in centrally-heated apartment buildings will stimulate energy efficiency substantially, and will also result in substantial cost differences between individual dwellings. This should also be taken into account in cost-effectiveness assessments.



Introducing the Netherlands



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Autoriteit
Consument & Markt



NL.V.V.E.



- Dutch Heat Act only active since 1 January 2014.
 - Scope Heat Act is all district heating situations and centrally heated buildings
 - Maximum price for heat → ‘Not More Than Usual’-principle should ensure that heat consumers pay similar prices compared with natural-gas consumers
 - Large heat suppliers must be licensed by 1.1.2016
 - Individual metering and billing is mandatory, provided that it is technically and economically feasible.
 - Billing based on individual consumption has been executed on a voluntary basis only. EED and Dutch Heat Act will make individual metering and billing mandatory. Any type of socialization is no longer applicable.



- EED & Dutch Heat Act have impact on:
 - Type of metering → Electronic metering that allows remote meter readings is basically required
 - Method of cost allocation → Introduction of fixed fee plus variable usage tariff with price cap.
 - Method of billing → Individual billing cannot go hand-in-hand with existing 'socialization practices'. All consumers must be billed on individual usage and costs.

Heat Market in the Netherlands (1/2)



Estimated numbers heat industry:

- 900,000 heat customers (mainly households)
- 7,000 heat suppliers (4 big ones, many small residential corporations)

- Some 44% of customers is billed based on individual metering according EED
 - Central meter per unit that measures G_j

- Some 49% of customers is billed based on submetering
 - Analog or electronic submetering per heating element

- Some 7% of customer billed by cost allocation method such as surface square meter allocation

- However, in most situations some form of socialization occurs. This means that 'recalculations' affect individual billing. This is not in accordance with EED and Heat Act.

Heat Market in the Netherlands (2/2)



- In the past twelve to fifteen years, all new buildings were equipped with individual metering.
- Rental corporations and building owners must eliminate socialization, and must end recalculation of individual meter data. Billing must be based on individual metering and consumption.
- *CA EED Questionnaire result:* It is generally expected that introducing individual metering in existing buildings is not cost-efficient or technically feasible.

Energy Efficiency Effects



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Step 1: Cost allocation per building, billing based on surface (or comparable)



Y1: 14%
Y2: 18%
Y3: 20%*

Step 2: Analog individual metering or submetering (with and without socialization)



Y1:
1.4% - 3.8%**

Step 3: Electronic individual metering or submetering (with and without socialization)

* Source: NL VVE

**Source: NL VVE, savings based on pilot in 2 buildings with 107 units in total, 2008-2012

Individual Billing Key Factor

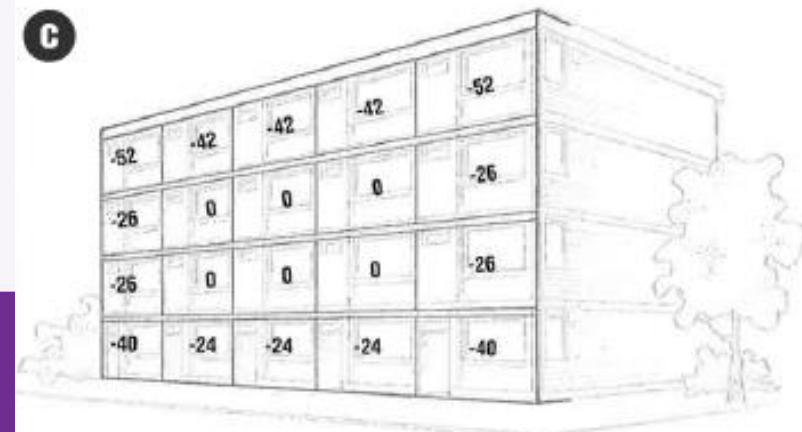
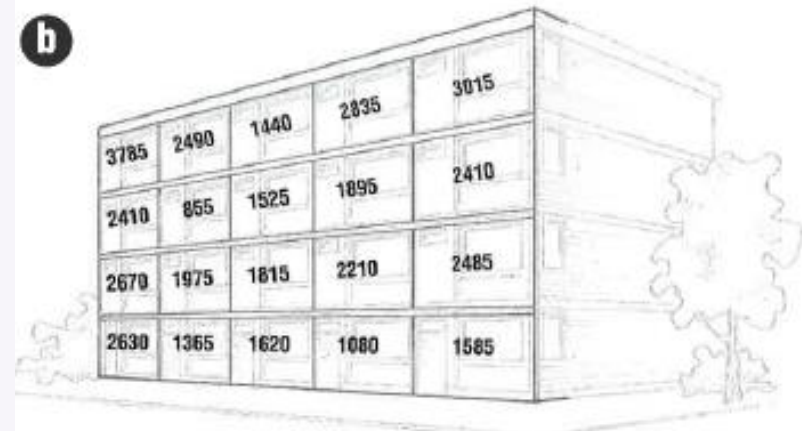
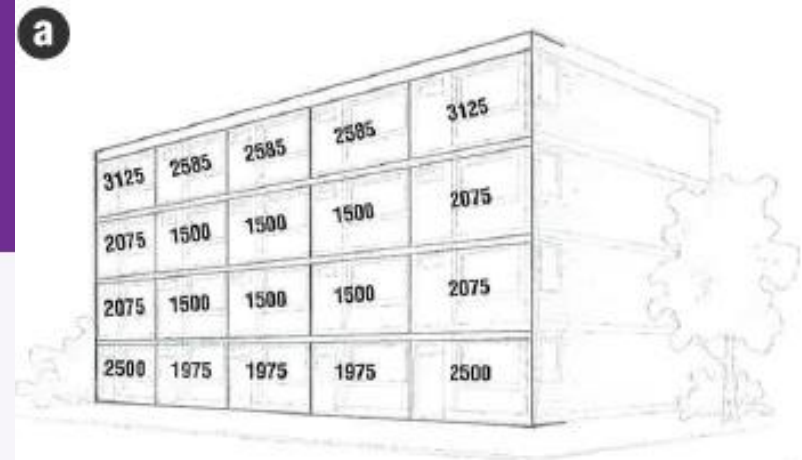
EED requires individual billing. That means socialization is no longer allowed.

→ Individual billing based on individual consumption

Location of individual dwelling influences energy costs heavily

→ Possibly 100% or higher

This affects costs of individual dwellings and their attractiveness.



Customer perspective



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- Individual metering results in substantial energy savings
- New buildings are already equipped with individual meters (but not all of them are electronic meters or meters per unit)
- Old buildings are likely to only get individual metering in case of a major renovation.
- Introducing individual metering with direct feedback may result in extra energy efficiency effects of 1.4% - 3.8%.
- Ending socialization will have a major impact on customers (both positive and negative)

Customer perspective



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Two Key Questions:

Why is this important for consumers and for rental corporations?

Why is this relevant for cost effectiveness assessments?

Relevance for Cost Effectiveness



- Cost effectiveness assessments should take into account the impact of consumers' attitude about energy-efficiency effects (savings)
- Resistance among consumers against introduction of individual metering & billing must be taken into account and should be prevented by transparent and understandable information about living costs per individual dwelling.
- We see a risk of fueling a broader public debate about affordability of living costs, particularly for vulnerable customers, if consumers are not well informed about the impact of individual metering & billing.

Thank you for your attention



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Core Theme 3

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