Bauhaus Presentation – 22 April 2022

Energy Efficient Mortgages NL Hub

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25 May 2021 vs 22 April 2022

• 332 days ago Vincent Mahieu was on the Bauhaus stage, announcing the Dutch energy efficiency initiative.

• So much has happened and we have learned so much that we look forward to sharing with you some of the insights we have gained in The Netherlands from going through Section 7 of the EU Taxonomy, word by word, sentence by sentence, footnote by footnote.
Energy Efficient Mortgages NL Hub – An Introduction

• The Energy Efficient Mortgages NL Hub (EEM NL Hub) is an initiative from a wide range of stakeholders in the Dutch residential mortgage market.

Members of the EEM NL Hub support and promote the acceleration and adaptation of energy efficient housing in the Netherlands.

• The EEM NL Hub is a direct response to the request from the European Energy Efficient Mortgage Initiative (EEMI) to set up local (knowledge) hubs and actively participates in EEMI / EEML initiatives.

• The EEM NL Hub was launched on the 10th of November. The vast majority of all Dutch mortgage originators and many other stakeholders have joined the initiative (23 members and 20+ affiliated members).

Members
Composition of the Dutch property stock

- **To be built**: 1 mln
  - The general perception is that
    1. Most properties have an EPC
    2. The Dutch property stock is already highly sustainable
- **Existing property stock in the Netherlands**: 8.25 mln
- **Rental sector**: 3 mln
  - No valid energy label
- **Privately-owned**: 5.25 mln
  - Apartments: 1.25 mln
  - Houses: 4 mln
  - Valid energy label: 2.3 mln
  - No valid energy label: 2.9 mln

- **However**:
  - Only 40% of privately-owned properties have an EPC (60% have not).
  - ±40% of the privately-owned properties without a valid energy label are expected to be F & G.
  - Only **1600** privately-owned properties have an A++++ label and can thus be considered ‘2050 Paris proof’.
Activities of the EEM NL Hub revolve around three pillars

**Pillar 1:**
Dutch Framework for Energy Efficient Mortgages

**Pillar 2:**
Data & Disclosure

**Pillar 3:**
Representation & Alignment

The framework is intended to be applied on a ‘Comply or Explain’ basis

More than 15 bi-weekly working group meetings with 40+ participants where information is shared and compiled

EEM NL Hub Members (review, usage and feedback)
The EU Taxonomy & Climate Delegated Act

Environmental Objectives

- Climate change mitigation
- Climate change adaptation
- Sustainable and protection of water and marine resources;
- Transition to a circular economy
- Pollution prevention and control;
- Protection and restoration of biodiversity and ecosystems.

EU Taxonomy Alignment

Are the technical screening criteria for Substantial Contribution met?

Are the technical screening criteria for ‘not causing significant harm’ (DNSH) in respect of the other environmental objectives met?

Are the criteria for Minimum Social Safeguards complied with?

Chapter 7:
- Construction of New Buildings (7.1)
- Renovation of Existing Buildings (7.2)
- Specific measures (7.3–7.6)
- Acquisition & ownership of buildings (7.7)

Dutch analysis into the application currently on-going
### Climate Delegated Act

#### 7.1 New-build

New-build must be 10% more energy efficient than local building regulations.

#### 7.2 Renovation

<table>
<thead>
<tr>
<th>Major renovation</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>30% reduction PED</td>
<td>2</td>
</tr>
</tbody>
</table>

#### 7.3 Specific measures

#### 7.4

#### 7.5

#### 7.6

#### 7.7 Existing properties

| ≤31/12/2020 | 1 |
| >31/12/2020 | 2 |

### Substantial contribution to Climate Change Mitigation

The **Primary Energy Demand (PED)**[^282], defining the energy performance of the building resulting from the construction, is **at least 10% lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures** implementing Directive 2010/31/EU of the European Parliament and of the Council[^283].

The energy performance is certified using an as built Energy Performance Certificate (EPC).

### Footnote

[^282]: The calculated amount of energy needed to meet the energy demand associated with the typical uses of a building expressed by a numeric indicator of total primary energy use in kWh/m² per year and based on the relevant national calculation methodology and as displayed on the Energy Performance Certificate (EPC).

Paragraph 7.2 of EU Taxonomy Climate Change Mitigation

**Climate Delegated Act**

<table>
<thead>
<tr>
<th>7.1</th>
<th>New-build</th>
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<tbody>
<tr>
<td>7.2</td>
<td>Renovation</td>
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<tr>
<td>1</td>
<td>Major renovation</td>
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<tr>
<td>2</td>
<td>30% reduction PED</td>
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<td>7.3</td>
<td>Specific measures</td>
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<td>7.7</td>
<td>Existing properties</td>
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<tr>
<td>1</td>
<td>≤31/12/2020</td>
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<tr>
<td>2</td>
<td>&gt;31/12/2020</td>
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</table>

**Substantial contribution to Climate Change Mitigation**

The building renovation complies with the applicable requirements for major renovations. 299

Alternatively, it leads to a reduction of primary energy demand (PED) of at least 30 %. 300

**Footnote**

299 As set in the applicable national and regional building regulations for ‘major renovation’ implementing Directive 2010/31/EU. The energy performance of the building or the renovated part that is upgraded meets cost-optimal minimum energy performance requirements in accordance with the respective directive.

300 The initial primary energy demand and the estimated improvement is based on a detailed building survey, an energy audit conducted by an accredited independent expert or any other transparent and proportionate method, and validated through an Energy Performance Certificate. The 30 % improvement results from an actual reduction in primary energy demand (where the reductions in net primary energy demand through renewable energy sources are not taken into account), and can be achieved through a succession of measures within a maximum of three years.

**Renovation must meet conditions of major renovation or result in 30% improvement of energy efficiency of the property**
Paragraphs 7.3-7.6 of EU Taxonomy Climate Change Mitigation

<table>
<thead>
<tr>
<th>Climate Delegated Act</th>
<th>Specific measures</th>
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### Substantial contribution to Climate Change Mitigation

- 7.3 Installation, maintenance and repair of energy efficiency equipment
- 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)
- 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings
- 7.6 Installation, maintenance and repair of renewable energy technologies

Specific measures are very concrete sustainability improvements to the underlying property and ‘should be’ easily classifiable as EUT aligned.
### Substantial contribution to Climate Change Mitigation

1. For buildings built before 31 December 2020, the building has at least an Energy Performance Certificate (EPC) class A.

As an alternative, the building is within the top 15% of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings.

2. For buildings built after 31 December 2020, the building meets the criteria specified in Section 7.1 of this Annex that are relevant at the time of the acquisition.

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### Existing properties

<table>
<thead>
<tr>
<th>Period</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>≤ 31/12/2020</td>
<td>Energy Performance Certificate A (or top 15%)</td>
</tr>
<tr>
<td>&gt; 31/12/2020</td>
<td>10% more energy efficient than local building regulations</td>
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**Climate Delegated Act**

<table>
<thead>
<tr>
<th>Section</th>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
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<td>7.7</td>
<td>Existing properties</td>
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</table>
## Substantial Contribution based on Climate Change Mitigation

<table>
<thead>
<tr>
<th>Climate Delegated Act</th>
<th>Translation actual text and application to Dutch situation</th>
<th>Data availability</th>
<th>Application to mortgage loan level</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 New-build</td>
<td>Do we understand what the EUT means?</td>
<td></td>
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<tr>
<td>7.2 Renovation</td>
<td>Can we apply it to the Dutch legislation and practice?</td>
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<tr>
<td>7.2.1 Major renovation</td>
<td>Do we think there is data available to demonstrate alignment of the economic activity?</td>
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<tr>
<td>7.2.2 30% reduction PED</td>
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<tr>
<td>7.3 Specific measures</td>
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<tr>
<td>7.3.1 Existing properties</td>
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<td>7.3.1.1 ≤31/12/2020</td>
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<td>7.3.1.2 &gt;31/12/2020</td>
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<td>7.7 Dutch Bouwbesluit</td>
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<tr>
<td>7.7.1 Required data</td>
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<td>7.7.2 Whole loan vs loan part</td>
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<td>7.7.3 Loan data vs sustainability data</td>
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<td>7.7.4 GAR calculation</td>
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<td>NTA 8800 vs other methodologies</td>
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<td>Real life practicalities</td>
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<td>For existing and new properties</td>
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</table>
# EU Taxonomy application to Dutch residential properties

<table>
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<tr>
<th>Climate Delegated Act</th>
<th>Translation actual text and application to Dutch situation</th>
<th>Data availability</th>
<th>Application to mortgage loan level</th>
<th>Ready for EUT alignment (in terms of SCC)?</th>
</tr>
</thead>
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**Completed/available**

**Pending confirmation**

**Challenges to be resolved**

**Very significant challenges remaining**
Preliminary insights – having completed the initial review

1. At this stage only existing properties (≤31/12/2020) with an EPC class A will qualify for EU Taxonomy alignment.

2. First batch of questions on the interpretation of Substantial Contribution has been submitted - guidance needed to complete our interpretation and be able to truly understand and ‘apply’ section 7 of the EU Taxonomy for Substantial Contribution.

3. Much about application and interpretation of DNSH is unclear as of yet: understanding DNSH and obtaining the data to realise full EU Taxonomy alignment will be a big challenge.

4. Availability of data will be a major challenge in demonstrating ‘Substantial Contribution’ alignment:
   A. > 25 additional ‘property’ data fields required;
   B. >15 ‘process’ data fields required (currently not recorded);
   C. Significant changes to how ‘loan / loan parts’ are constructed.

Netherlands
Focus of EEM NL Hub shifting to data & disclosure

**EU Taxonomy**
- Subst. contribution criteria
- DNSH criteria
- Social Minimum Safeguards

**Disclosures**
- SFDR
- NFRD
- CSRD
- Pillar III / BTAR
- EU GBS
- ?
- ?
- PCAF reporting
- Annual reports
- (ESG) Ratings
- ECB Collateral Framework

**EEM NL Hub Workgroup 2 focus areas**
- A Disclosure Requirements
- B Data Requirements
- C Data Sources
- D Legal Requirements
- E Quality Assurance

**Operational set-up**
- E

**Governance**
- F

**Other sustainability related objectives / legislation**
- PCAF
- UN SDG
- ABS Rating Agency criteria
- EBR/EBV + Subsidies
- Co2 Emission Reporting
- Other

**EEM NL Hub Workgroup 2 focus areas**
- A Disclosure Requirements
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Use case 1: From green to dark green

- If the economic activity considered under 7.2 is ‘renovation’ and only the budget for the renovation is deemed a sustainable financing, then the EU Taxonomy will have an unintended (but very undesirable) consequence:

  **Customer A**
  - Current energy label: B
  - Mortgage loan:
    - Purchase of property: € 250.000
    - Renovation budget: € 30.000
  - Renovation:
    - Kitchen € 20.000
    - Sustainability refit € 10.000
  - New energy label: A

  **Customer B**
  - Current energy label: F
  - Mortgage loan:
    - Purchase of property: € 250.000
    - Renovation budget: € 30.000
  - Renovation:
    - Sustainability refit € 30.000
  - New energy label: B

- In both cases € 280,000 of financing:
  - Customer A: relatively easy to demonstrate (1 on-site visit) and after the renovation the whole € 280k mortgage loan will be Subst. Contribution aligned.
  - Customer B: complex to demonstrate the 30% improvement and even if successful, only € 30k will become Subst. Contribution aligned, despite the vastly more meaningful CO₂ emission reduction!
Use case 2: 1mln new-build properties required by 2030!

- To address the housing shortage, before 2030 approximately 1mln new properties will have to be added to the Dutch housing stock (currently 8.25mln).
- The current mortgage debt in the Netherlands is € 750bln. The 1mln new properties will require > € 350bln of additional financing (not all will be privately-owned).
- For Dutch mortgage lenders, a new construction will have to align with section 7.1 (and 7.7(2)) of the EU Taxonomy as soon as possible - critical to source economical funding.
- However, at the same time, we know that each property that is built in the Netherlands according to the EU Taxonomy target of ‘10% better’ will need to be further refitted to meet the 2050 objectives of CO₂ neutral: to ‘save the world’ we need to be much more ambitious than ‘just’ EU Taxonomy alignment!

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Requirements (in kWh/M2/yr &amp; EPC)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Houses</td>
<td>Apartments</td>
</tr>
<tr>
<td>Dutch building regulations</td>
<td>30</td>
<td>A+++</td>
</tr>
<tr>
<td>EU Taxonomy</td>
<td>&lt;27</td>
<td>&lt;A+++</td>
</tr>
<tr>
<td>2050 ‘save the world’</td>
<td>0</td>
<td>A+++++</td>
</tr>
</tbody>
</table>
Conclusions

1. Significant progress made in interpreting and applying Section 7 of the EU Taxonomy but particularly in respect of DNSH and on the data side, much work remains.

2. Too strict interpretation and application will limit the amount of ‘green’ financing which in its turn is key in providing customers with the financial stimulus to undertake renovations.

3. The financial sector is learning rapidly (data on energy efficiency, customer behavior) and developing solutions and new products to support clients in undertaking the sustainability renovation journey.

4. Timely review of (section 7 of) the EU Taxonomy is needed to address the unintended consequences and ensure alignment with future and related regulation (such as e.g. EPBD IV but also local subsidy programmes).
Questions & Contact

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