"SCENARIOS TOWARDS A RESOURCE EFFICIENT EUROPE"

Resource efficiency improvements in the Built Environment

– A conference to discuss the study findings with stakeholders and the European Commission

WHEN: Thursday 20th of February 2014, 09:15 – 16:00

WHERE: Congress Centre Bedford, 135-137 Rue du Midi, Brussels, Belgium

REGISTRATION: The conference is free of charge (within the limits of available seats). Register at: http://www.tno.nl/home.cfm?context=formulier&content=formulier&laag1=formulier&Item_id=468&taal=2

WHY: A major study conducted on behalf of DG Environment indicates that a significant reduction of resource use could be achieved in the built environment by 2030 with zero or close to zero effect on GDP. The study identified the inefficient use of resources at meso and macro level, identified a number of improvement potentials and estimated the economic and environmental impacts.

WHAT: The conference aims to present and discuss the results of the study to diverse stakeholders and discuss further steps and actions towards a resource efficient Europe.

KEY RESULTS: The construction sector is a major user of resources. Much of the environmental impact of a building occurs during the construction phase. However, there are also significant resource efficiency opportunities in the operating phase. At societal level, any investments on improvement and administrative costs are recovered by reduced operational costs. The study indicates that policy mixes including mandatory and financial instruments have the highest impact on resource efficiency, whereby standardization and certification play a major role in any policy mix. The long life of buildings and infrastructures pose limits on resource efficiency improvements in the short term, however the investments are overcompensated in the long term.

MODERATOR: Adriaan slob, TNO

INFO: All finalized topical papers can be accessed at: http://ec.europa.eu/environment/resource_efficiency/haveyoursay/index_en.htm

The draft final report will be sent in advance to all participants.

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Time	Subject	Speaker
09:15-09:45	Reception with coffee	
09:45-10:00	Opening and welcome	European Commission
10:00-10:15	Introduction	Prof. Arnold Tukker, TNO
10:15-10:30	**Importance of Resource Efficiency in the Built environment** Explanation on the need for resource efficiency in the built environment, addressing the role of regulation in changing business and individual behaviours.	Prof. Arnold Tukker, TNO
10:30-11:00	**Historical insights on resource efficiency** Historical perspective of resource-efficiency improvements in the built environment. Concluding that the main way to improve resource efficiency in the built environment is closing loops. • An expert will open the plenary discussion	Dr. Ester van der Voet, CML
11:00-11:45	**Possible technical improvements** Technical improvement options, prioritised by experts, comprise 21 specific measures that give the possibility to achieve significant reduction of resource use at the European level by the year 2030. • An expert will open the plenary discussion	Jane Anderson, PE International
11:45-12:30	**Supportive policy instruments** Policy instruments mixes are needed to support resource-efficiency improvements. The right combination of administrative, economic and informative instruments could play a major role in achieving a significant reduction of resource use at the European level by the year 2030. • An expert will open the plenary discussion	Prof. Arnold Tukker, TNO
12:30-13:30	Lunch will be served	

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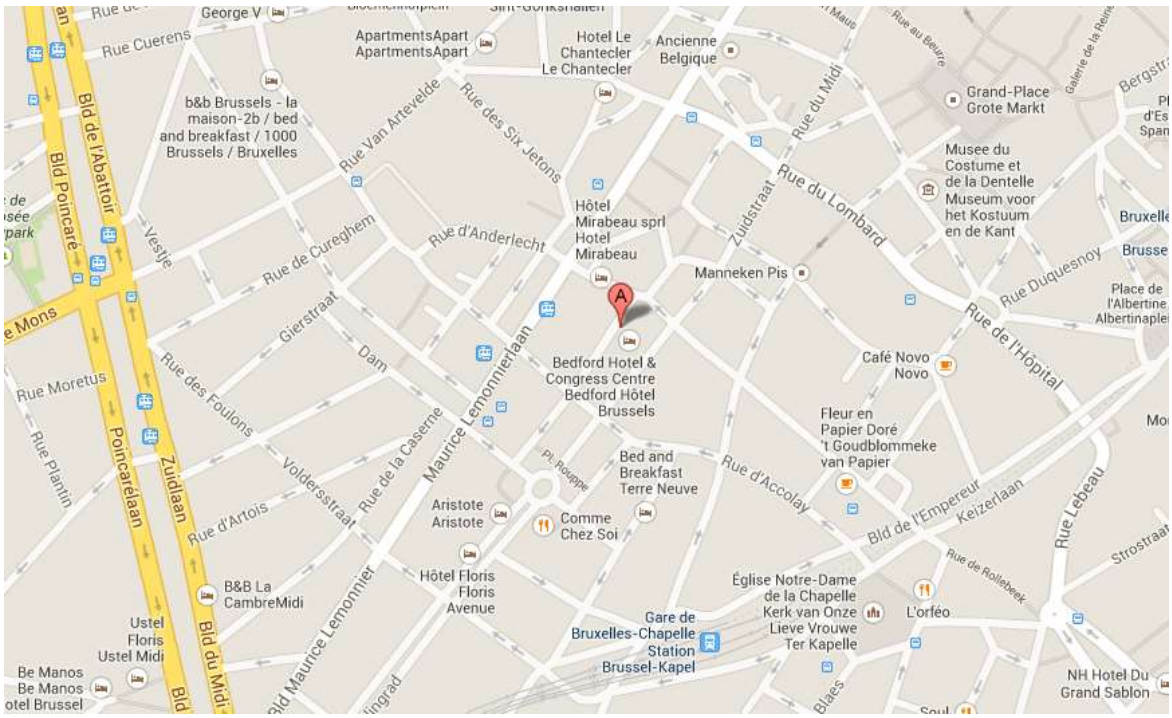
13:30-14:30	**Scenarios towards a resource-efficient Europe** Policy scenarios concerning different uptake rates of the ten technical improvement options. • An expert will open the plenary discussion	Frédérique Reynès, TNO
14:30-15:00	**Conclusions on the policy implications** Policy implications resulting of technical improvement options and policy mixes, and reflections on the results of the study.	Prof. Arnold Tukker, TNO
15:00-15.45	**Expert panel discussion**	Panel with high-level representatives from policy, science and NGO's
15:45-16:00	Closure of the conference	European Commission

MEETING VENUE AND TRAVEL DIRECTIONS

The meeting will be held at Congress Centre Bedford, 135-137 Rue du Midi, Brussels, Tel: +32 2 507 00 00. The venue can be easily reached from metro station "Anneessens" and from Gare Centrale Station.



For any missing information you can contact Sophie Emmert at sophie.emmert@tno.nl

STUDY BACKGROUND

Introduction and goals

In June 2010 the European Council adopted the Europe 2020 Strategy. The Europe 2020 Strategy establishes Resource efficiency as one of its fundamental Flagship initiatives to ensure a smart, sustainable and inclusive growth of Europe. In support of the Flagship initiative on Resource Efficiency, the Commission initiated a study in the Built Environment with the following aims:

- Identify inefficient use of resources at meso- and macro level and
- Quantitatively assess potentials and socio-economic and environmental effects of efficiency improvements up to 2030.

The study was executed by TNO, CML, Alpen-Adria University/Social Ecology and PE International, focusing on residential buildings, offices and built infrastructure. The core methodology is a hybrid modelling approach. The study team identified improvement options, associated costs and improvement potential at micro/meso level. The study was conducted with bottom-up methods such as Life Cycle Assessment and Life Cycle Costing. The information generated in life cycle analyses was used in macro-economic modelling (EXIOMOD) to assess economy-wide impacts of different improvement scenarios. The engagement of stakeholders via workshops was an important part of the study.

Topical papers

In the course of the study the following topical papers were produced. These topical papers are documents that describes key conceptual issues, key choices made in the assessment framework, or key information that was input for modelling. The subjects are listed below:

Topical Paper #	Title	Status
1	'Resource efficiency in the built environment – a broad-brushed, top-down assessment of priorities'	Finalized
2	'Strategies for decoupling - options to consider in the field of buildings and infrastructure'	Finalized
3	'Potential approaches for modelling resource efficiency related to buildings and infrastructure. Reflections on a hybrid set-up'	Finalized
4	'Validation of (detailed) technical improvement options'	Finalized
5	'Policy options for Resource efficiency as input for modelling'	Finalized
6	'Description of technical improvements and policy scenarios for the period 2013-2030 related to resource efficiency improvements in the area of built environment'	Being Finalized before the conference
7	'Validation of scenario results and cost curves'	Being Finalized before the conference
8	'Policy implications: aligning Resource Efficient Europe with current standardisation activities and resource efficiency in sustainability certification of buildings and infrastructure'	Being Finalized before the conference
9	'Indicators for resource efficiency – potential way of representing results'	Being Finalized before the conference
10	'Assessment of industry specific historical resource efficiency improvements'	Being Finalized before the conference