

# EU industry commitment

Moving towards net zero buildings

Energy efficiency is often referred to as the first fuel of the economy. Innovative technologies in this area can reduce energy costs, drive growth and offer multiple economic, social and environmental benefits. Companies doing business in Europe are well positioned to drive positive change by creating more resilient, low carbon and energy efficient buildings. Market drivers alone however are not enough to create the business and investment environment needed to accelerate a low carbon transition in the sector. More ambitious and clearer legislation can provide stronger incentives and greater opportunities for businesses to invest, innovate and grow across Europe and globally.

Increasing the efficiency of energy use in buildings and moving towards low carbon energy systems will improve the productivity of the whole economy, while delivering the investments and actions required to do so represents a new business opportunity in its own right. Operational energy is the major carbon impact of buildings. Nearly zero energy buildings (nZEB)<sup>1</sup> thus contribute directly to the emissions mitigation efforts necessary to limit climate change below 2 degrees and avoiding the substantial potential economic and social costs of failing in this regard.

## Therefore as companies in the buildings value chain committed to mitigating the impacts of climate change:

We acknowledge that the European building sector is responsible for almost 40 per cent of energy consumption (27% households / 13% services) and 36 per cent of CO2 emissions.<sup>2</sup>

Market drivers and legislative action has seen the EU keep its overall final energy consumption fairly stable over the past 25 years, but the energy consumption of buildings has increased by approximately 12 per cent over the same time period.<sup>3</sup> This is despite the considerable potential for greenhouse gas (GHG) emissions reduction in the building sector.

#### We recognise the building sector's contribution to Europe's energy import bill.

The building sector is particularly reliant on imported energy, especially natural gas (the cost to the EU in 2013 was almost €400 billion).⁴ There is a need to increase ambition and provide the right incentives to upgrade the existing building stock and reduce this energy demand. In doing so, society will reap the economic benefits and savings from avoided energy use as well as decrease import dependency.⁵

## We welcome existing European legislation mandating that all buildings built in the EU after 2020 should be nearly Zero Energy Buildings (nZEB).<sup>6</sup>

In the context of an ongoing drive to improve productivity, as well as climate and energy security concerns, it makes sense to decrease energy waste from buildings by adopting ambitious legislation and engaging the buildings supply chain, including the power sector. The EU has committed to a set of targets for 2020 and 2030: to reduce greenhouse gas emissions (from 1990 levels) by 20 per cent and at least 40 per cent respectively; to increase energy efficiency sufficient to reduce primary energy use by 20 per cent and 27 per cent respectively and to ensure that 20 per cent and 27 per cent of the energy supplied is generated from renewable resources respectively.

# We believe that without additional concerted action and new commitments from business and Member States we will not meet our 2020 nearly Zero Energy Buildings (nZEB) target and the potential for achieving the 2 degree target will be compromised.

The year 2020 is just four years away and information on national compliance with energy performance requirements is lacking. Without further effort, Europe will not be in a position to fully exploit the energy saving potential of building renovation (estimated at between 55 to 80 per cent depending on the country). Increased focus must be placed on capturing the full energy and carbon savings potential represented by the EU's existing building stock, whilst also delivering the multiple energy savings benefits that flow from new building stock and ambitious energy renovation programmes. EU progress reports demonstrate current practice is far below technically achievable standards. These standards need to be met and expectations intensified through continued legislative action in the EU and at the international level coupled with appropriate global and regional action by business both in energy use and full life cycle carbon reduction, if we are to reduce GHG emissions from the sector.

The adoption of strong and ambitious policies at an international level, assisted by a UN-led framework, and supported by business would facilitate technology transfer and harmonisation of business practices, thus promoting the growth of net zero energy and carbon building stock across the world, significantly contributing to a net zero economy whilst generating economic growth and employment.

## **Our industry commitment**

The inconsistent performance of the building sector to date in improving energy efficiency highlights the need for a more focused and concerted approach that builds on the existing EU legislative framework but engages the whole value chain in determining common goals that will deliver nearly zero energy and net zero energy buildings.

In light of the challenges our economies face and as businesses engaged in the building sector value chain, we need to do more to enhance collaboration and coalesce around some common sector goals that will support the delivery of **nearly Zero Energy Buildings (nZEB)** from new build and renovation in the short term and move towards full carbon neutrality by 2050. Successful delivery of this goal will be accelerated by joint commitments from different parts of the building value chain including architects, designers, landlords, occupiers, contractors, intermediaries and product and service suppliers.

Together we seek to unlock net zero pledges across Europe and to meet EU 2020, 2030 and 2050 GHG emission targets.

#### We are looking for industry leaders and governments to work with us to realise this goal and commit to:

- 1. delivering nearly Zero Energy Buildings (nZEB) for new buildings by 2020, in accordance with regulation,
- 2. striving towards nZEB retrofit by 2030 with clear implementation plans from Member States.

#### While we commit to the above baseline goals, we also pledge to:

- drive down energy intensity across our own corporate property estates
- work together, with our customers and other value chain partners, towards wide scale adoption of nZEB, or better, by 2020, specifically addressing the non-technical barriers that exist across the value chain
- ensure ambitious but realistic targets are in place and report progress against them in relation to the delivery of nearly zero energy, or better, energy performance of new buildings by 2020, taking into consideration our role in the building value chain and local market context
- collaborate on target setting protocols across the value chain to achieve the nZEB requirements and working towards the reduction of GHG emissions across the whole life cycle carbon of buildings
- engage in a constructive dialogue with the EU and Member States' national and sub-national governments on policy, progress, reporting and performance

#### To deliver the above, we will need from EU and Member State governments:

- a stable long term trajectory for emissions reductions, setting clear sectoral targets for 2020 to 2050 and supporting the EU's overarching GHG reduction targets of 80-95% by 2050 and a "2 degree threshold"
- clear nZEB implementation plans from Member States
- implementation of effective carbon pricing to stimulate energy savings and low carbon technologies
- a consistent programme of public sector investment in, and procurement of, low carbon and energy efficiency technologies including the support for private sector investment in nZEB, net zero energy and lower carbon buildings overall
- consistent review and public reporting of the building sector's progress against EU GHG emissions targets
- appropriate financing schemes that will leverage the required upfront energy efficiency investments, and make capital more accessible for national, regional or local energy efficiency platforms and programmes
- regular and open dialogue with the building sector value chain on policy effectiveness and industry progress

We look forward to working with our peers through-out the built environment value chain, and governments across Europe, to gather more endorsement for these aims and ensure we meet our joint de-carbonisation goals.

Paris, 3 December 2015, COP21 Buildings Day.

### The Prince of Wales's Corporate Leaders Group (CLG) Signatories:

























### **Non-CLG signatories:**









#### Footnotes:

DIRECTIVE 2010/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, of 19 May 2010 on the energy performance of buildings: 'nearly zero-energy building' means a building that has a very high energy performance, as determined in accordance with Annex I [For the purpose of the calculation buildings should be adequately classified into the following categories: single-family houses of different types; apartment blocks; offices; educational buildings; hospitals; hotels and restaurants; sports facilities; wholesale and retail trade services buildings; other types of energy-consuming buildings]. 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. When setting requirements, Member States may differentiate between new and existing buildings and between different categories of buildings.

<sup>2</sup> http://ec.europa.eu/research/industrial\_technologies/eeb-challenges-ahead\_en.html

The University of Cambridge Institute for Sustainability Leadership (CISL) provides the secretariat to the CLG. Decisions of the CLG do not necessarily represent the policies or positions of CISL or of the wider University of Cambridge.



Head Office: 1 Trumpington Street, Cambridge, CB2 1QA, United Kingdom

Telephone: +44 (0)1223 768850

Brussels Office: The Periclès Building, Rue de la Science 23, B-1040 Brussels, Belgium

Telephone: +32 (0)2 894 93 20

www.cisl.cam.ac.uk

Patron: HRH The Prince of Wales

<sup>&</sup>lt;sup>3</sup>Enerdata/ Odysee data 2012

<sup>&</sup>lt;sup>4</sup> Eurostat 2013 accessed at http://ec.europa.eu/eurostat/statistics-explained/index.php/Trade\_in\_energy\_products

<sup>&</sup>lt;sup>5</sup> Eurostat 2013 accessed at http://ec.europa.eu/eurostat/statistics-explained/index.php/Trade\_in\_energy\_products

<sup>&</sup>lt;sup>6</sup> Article 2 of the EPBD defines Net Zero Energy Building as "a building that has a very high energy performance. 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".

<sup>&</sup>lt;sup>7</sup> http://www.euroace.org/LinkClick.aspx?fileticket=QzB1Pvj4FFc%3d&tabid=192

<sup>8</sup> https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings

<sup>°</sup> as reflected in global commitments such as Architecture 2030 "RoadMap to Zero emissions", June 2014; the World Business Council for Sustainable Development "Manifesto for Energy Efficiency in Buildings" and the World Green Buildings Council "Collective Commitment"; and regional or national initiatives such as the China Accord, and the UK Green Buildings Council's "Ten point plans for Buildings in the next Parliament. March 2015"