

# Sustainability and NEC option X29

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### Climate change under the NEC



THERE is no commonly agreed definition of sustainability, although a good starting point is the 1987 United Nations Report of the World Commission on Environment and Development, chaired by Gro Harlem Brundtland the former prime minister of Norway, that defined sustainable development as that which:

*“... meets the needs of the present without compromising the ability of future generations to meet their own needs.”*

Sustainability is commonly defined with reference to the required processes and measures, with an example being a sustainable fisheries agreement which details actions and responsibilities.

Sustainability may also embrace regenerative development measures especially where a resource is becoming depleted.

Sustainability is often described as having three dimensions or pillars; environmental, social and economic, also known as; planet, people and profit.

As consumers adopt sustainable values, their choices become increasingly based upon the reputation of a company and their products or services.

Businesses are addressing this trend within a corporate social responsibility policy with a strategy for the issues of; environmental, social and governance, commonly referred to as ‘ESG’.

#### Climate change

The environmental dimension of an ESG policy is considered to be of significant importance, especially in relation to climate change. For a sustainable fisheries agreement climate change may ultimately have a greater affect upon the future levels of fish stock, despite the efforts of the parties.

#### What is climate change?

In the 19th century scientists realised that gases in the atmosphere caused a ‘greenhouse’ effect that increased the Earth’s temperature, including as proposed by Joseph Fourier, a French mathematician and physicist, in the 1820s. Following experiments in the 1850s, Eunice Newton Foote, an American scientist, demonstrated the interaction of sunlight on various gases and concluded that the sun’s heating effect was greatest with carbon dioxide (CO2 ), with the heat increasing by the amount of moisture present.

During the 20th century, however, many scientists remained sceptical. Although they accepted that human activity could cause warming, industrial emissions of tiny airborne particles, called aerosols, caused cooling. It was not known at the time which would have the dominant effect.

There was also limited official research into the subject as much of this was undertaken as a ‘curiosity’ rather than being formally commissioned. This also meant that accurate and consistent data and records were not generally available for reference. It was acknowledged that the oceans acted like a giant sponge and absorbed both heat and CO2, with plants also able to ‘absorb’ CO2 through photosynthesis.

This was countered by de-forestation and increased agriculture that transformed ‘dormant’ carbon into CO2. The levels steadily increased, however, through the burning of fossil fuels and industrial emissions. Although the initial environmental focus was on pollution, attention shifted to climate change during the 1960s and 70s as greater collaborative research gave credibility to the earlier findings.

In 1975 Wallace S Broecker, an American geochemist, published an article, ‘Climatic Change: Are We on the Brink of a Pronounced Global Warming?’ in which he coined the phrase ‘global warming’ which is essentially the increase in the Earth’s average surface temperature due to increased levels of greenhouse gases (GHGs). In 1979 the climate research board of the National Academy of Sciences, Washington DC, published a report chaired by Jule Gregory Charney, a meteorologist, that was a decisive study into the impact of CO2 on the climate. The report coined the phrase ‘climate change’ that refers to both the regional and global long term change to the Earth’s climate.

#### Recent developments

- In 1988 the Intergovernmental Panel on Climate Change (IPCC), operating as part of the United Nations, was set up to coordinate scientific research.
- In 1992 world leaders met in Rio De Janeiro, Brazil, to discuss environmental issues, signing up to a United Nations Framework Convention on Climate Change (UNFCCC), setting benchmarks for 1990 GHG levels.
- In 1997 a conference of the UNFCCC parties met in Kyoto, Japan, and set targets to reduce GHG emissions.
- In 2008 the UK Parliament passed the Climate Change Act (CCA) 2008 that legislated a commitment to reduce carbon emissions, and other GHG’s, by at least 80%, compared with the 1990 baseline, by the year 2050.
- The 2015 Paris Agreement sought to limit the increase in global temperatures, above pre-industrialised levels, from the previously determined 2.0 degrees to 1.5 degrees.
- In 2019 the UK Parliament passed legislation to amend the target in the CCA 2008 from 80% to 100%, thereby creating a ‘net zero’ commitment.
- In 2021 the goals of the Paris Agreement were re-af firmed at the Conference of the Parties meeting 26 to the UNFCCC (COP26).

#### Construction industry

A UN global status report published in 2022 noted that construction activities rebounded in 2021 in most major economies, following the COVID-19 pandemic. As a result CO2 emissions from building operations reached an all-time high, which was 2% higher than the previous peak in 2019.

As the built environment contributes around 40% of total CO2 emissions, changes to industry practices are essential in supporting efforts to meet the UK legislated ‘net zero’ target. The complexity of the issue is that infrastructure significantly contributes to the social and economic dimensions of sustainability. Structures will not only have to be constructed and operated in a more environmentally efficient manner, but to also withstand the impact of climate change over time, including being adaptable to changing needs.

The UK government has significant influence in making necessary changes, including; introducing regulation, targeting public expenditure, mandating procurement standards on the public sector, introducing energy efficiency standards and performance based rating for buildings.

Contract terms to deal with climate change seem to have lagged behind other developments. The Chancery Lane Project is a network of legal professionals that have developed an ‘open source’ suite of contract clauses to assist with the issues relating to climate change, although these are designed for a multitude of different contracts, not specifically construction. A particular clause that was developed purposely to deal with climate change for the built environment is NEC option X29.

#### NEC option X29

In March 2022, NEC released a consultative version of a new contract procedure, written specifically for the NEC ECC form of contract, which was titled; ‘Option X29 - Reducing the impact of the works on climate change.’

Following consultation and feedback, a formal published version was released on 26 July 2022 for all the ‘long’ forms of NEC contract and subcontract, re-named; ‘Option X29 - Climate Change’

The new clauses were accompanied with corresponding information for contract (or subcontract) data and were further supplemented with guidance notes. Option X29 was formally incorporated into the NEC contracts with the January 2023 amendments.

Notwithstanding the different parties and named roles, a review of the option clauses is set out below. For reference, the numbering refers to the ECC form. X29.1 – Identified and defined terms This sets out defined terms specific to this option, which are;

- Climate change requirements: This is common to all the NEC forms and are the requirements specifically relating to climate change and are stated in the scope. They are likely to be written by the ‘purchaser’, although the procurement process may determine both the origin and what is included. Examples may include; waste management, recycling, ‘green’ energy usage and transportation emissions. As the climate change requirements form part of the scope they may be changed by an instruction given in accordance with the contract.
- Climate change plan: This is common to all the NEC forms and is in addition to any other stated programme or plan and shows how the climate change requirements are planned to be met.
- Climate change partners: This is common to all the NEC forms and refers to the people and organisations who contribute to and are identified in the climate change requirements. Although these may be changed by an instruction given in accordance with the contract, care should be taken not to ‘interfere’ with the rights and obligations of the other participants.
- Performance Table: This is identified in contract data and provides an incentivisation structure for specified performance targets. Note that various requirements in relation to the performance table under X29 do not apply to the FMC, FMS, DBOC and ALC contracts, as they already include these. Note that the Performance Table is not scope so changes can only be made where the contract expressly provides for this.

#### X29.2 – Collaboration

This is a specific requirement to collaborate with other climate change partners. Although the NEC contracts are described as ‘collaborative forms’, an express obligation to collaborate is only found in options X10, X12 and X29, which is likely because the most effective way to achieve the intended outcome for these options is for all ‘partners’ to work together.

#### X29.3 – Early warning

This clause provides an additional reason to give an early warning, in addition to those found at clause 15. This relates to a matter that could ‘adversely affect’ the climate change requirements, with the wording very similar to that within clause X10.3 in relation to the information model.

#### X29.4 – Climate change plan

This procedure is very similar to that found at clause X10.4 in relation to an information execution plan. A climate change plan may be identified in contract data or submitted for acceptance within the period of time stated. A formal acceptance response is required within two weeks, although this is three weeks for the subcontract forms. Although clause X10.4 provides for ‘deemed acceptance’, where there is no response within the stated timescale, this requirement is not included in the published version of X29 for a climate change plan, although was included in the consultative version. It is noted that this clause under the NEC ALC form is different as this contract operates on a contrasting basis and arrangement.

#### X29.5 – Disclosure

All the NEC forms are consistently worded and state that information may be published or disclosed as stated in the climate change requirements, which allows for ‘good news’ to be shared with a wider audience.

#### X29.6 – Acceleration and accepting defects

This provides for corresponding changes to be made to the performance table, although the acceleration provisions do not apply to the TSC or TSS forms. Note that any such requirements, where applicable, are already included in the core contract conditions for the FMC, FMS, DBOC and ALC contracts.

#### X29.7/8/9/10 – Compensation events

These additional requirements supplement those within the compensation event procedure at core clause 6, to provide for changes to the Performance Table. Corresponding requirements are already included in the core conditions for the FMC, FMS, DBOC and ALC contracts.

#### X29.11 – Proposals to change the scope

This procedure is very similar to that found under option X21, for a whole life cost proposal, and allows the ‘supplier’ to propose changes to the scope to reduce the impact on climate change. Where the ‘purchaser’ is prepared to consider the proposal the ‘supplier’ submits a quotation that comprises detailed information, including demonstrating the reduced impact, along with corresponding contract changes.

A quotation should provide sufficient information to allow an informed decision to be made. It is suggested that the scope identifies an appropriate methodology as to how any climate change impact reduction calculations are made, to ensure a consistent approach.

The ‘purchaser’ consults with the ‘supplier’ regarding the quotation, which requires a formal acceptance response within the period for reply. Although the timescale can be extended by agreement, it may be useful for the ‘supplier’ to state a ‘long stop’ date by which a decision is required.

It is noted that the scope cannot be changed in relation to a proposal, unless a corresponding quotation has been accepted, which prevents the ‘purchaser’ from ‘stealing’ good ideas. Where a proposal is accepted any corresponding scope change is expressly stated not to be a compensation event, although this does not align with the contract procedure for such changes.

There are some terminology variances between the forms that reflect the nature of the intended application, for example the TSC, TSS, FMC, FMS and DBOC forms do not refer to completion date or key date. The procedure under the PSC and PSS forms is significantly shorter and deals with such changes under the core clauses. It is noted that this clause under the NEC ALC form is significantly different as this contract operates on a contrasting basis and arrangement.

#### X29.12 – Performance measurements

This clause details the procedure for reporting, measuring and making payments, in relation to the targets set out in the performance table. This is similar to the procedure under option X20 for key dates.

#### X29.13 – Limitation of liability

This clause adds the amounts payable in accordance with the performance table as an ‘excluded matter’ where option X18 limitation of liability applies. The PSC and PSS forms do not refer to option X18 as it does not contain ‘excluded matters’ under these forms. The FMC, FMS, DBOC and ALC contracts do not include this clause.

#### Comments on option X29

The formal NEC guide to the consultative edition suggested that various terms, including; climate change, net zero, sustainable development and biodiversity, could be used interchangeably. It further stated that the option had been drafted using ‘generic terminology’ to provide the greatest flexibility in its application, which implies that the intention was that it could be used to address a range of environmental issues.

Although this intention is clearly a positive one, it is not the message conveyed by the NEC promotional articles, which stated that option X29 would promote ‘net zero (greenhouse gas) emissions’. Furthermore, sustainability could be an environmental issue although it may also be a social or economic one. In addition biodiversity is an ecological matter whereby the primary influence may not be linked with climate change. Perhaps further clarity would be useful to emphasise the stated intention, not least because the option is titled ‘climate change’.

Some commentators have suggested that numerous X options could be combined by making use of the performance table to manage incentives, including X6, X7, X17, X20 and X21. Whilst this appears sensible in rationalising an increasing number of option clauses, each of these has particular associated requirements that should be retained to facilitate the correct application of the procedure.

#### Summary

Global warming is set to imminently pass the 1.5 degrees temperature increase, just a few years after the Paris Agreement. Although this threshold is a significant one, this does not mean losing hope. As we saw during the COVID-19 pandemic, human beings are both resilient and resourceful and the application of future technologies, for example carbon sequestration and removal techniques, will undoubtedly play an important part in addressing climate change issues.

NEC option X29 is likely to become increasingly common in construction contracts to allow parties to fulfil their ESG and climate change commitments, especially so once examples of ‘best practice’ on the practical application of the option are developed and shared.

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