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## 22 SDCC Climate Change Pre Planning Guidance

"you cannot manage a risk if you deny it, or if you don't see it coming" *Jeffrey Williams, Director, Climate Consulting, Entergy Corporation* 

Climate change is everyone's issue. Global and local changes in temperature, the frequency and severity of extreme weather, and the availability of water has a direct bearing on spatial planning.

Recent experiences have demonstrated the impacts of climatic changes at global, national and regional scales. Projections of future climate indicate that these changes will continue and intensify. Climate change is considered as the greatest and widest ranging environmental issue ever seen, presenting a unique challenge for societies. The main conclusion is that the benefits of strong and early action on climate change far outweigh the costs of not acting.

Planning Authorities play a role in both limiting the causes of climate change (Mitigation) and adjusting to the impacts (Adaptation). Mitigation focuses on limiting the speed and scale of climate change. Mitigation receives attention in policy circles, such as debate over carbon pricing. Adaptation involves adjusting to actual or expected climate change effects and managing risks. Local Authorities are already responding to a cascade of effects that move through the natural and built environment. Climate impacts exacerbate existing environmental effects while also having the potential to trigger new effects. Adaptation aims to reduce vulnerability to climate change impacts – for example by lowering sensitivity or building adaptive capacity

Climate change vulnerability relates to the risk of adverse effects. It involves three concepts:

- ✓ **Exposure** to hazard (such as increased rainfall);
- ✓ Sensitivity to hazards (such as an number of people located in flood risk areas);
- Capacity to adapt to hazards (for example, measures to protect against flooding).

Adaptation measures are best planned in advance and can be classified as:

- 1. **Grey Measures** which include technological or engineering solutions, including largescale infrastructural changes such as defences against flooding or improving road surface material to withstand higher temperatures;
- 2. **Green Measures** which refer to nature or ecosystem based solutions such as reinforcing natural defences such as wetlands, maintaining and restoring healthy ecosystems and removing man-made obstacles;
- 3. **Soft Measures** or non-structural approaches involve the design and application of policies and procedures to promote behavioural shifts such as individuals using less water or energy.

A changing climate exacerbates existing risks for everyone and has the potential to create new ones. Climate impacts transcend local authority boundaries and have a wide range of social, environmental and economic implications. It is essential that all relevant stakeholders including in particular landowners and developers are engaged in the adaptation process. By looking at the impacts of past climate-related events, everyone can begin to understand our level of vulnerability to projected climate changes. However, it is important to remember that this is a starting point and not a predictive of future impacts. New impacts will arise and should be anticipated and accounted for in adaptation planning.

All planning applications for major developments should clearly and fully address climate change risks. Proposals should fully identify and assess a range of adaptation options to take advantage of any opportunities and bring any anticipated negative impacts of climate change to an acceptable level.

Adaptation is an iterative process and developers will need to evaluate, monitor and review climate change adaptation progress and adjust or adapt proposals according to new /emerging information.

Section 1.15.0 along with the Green Infrastructure and Energy Planning sections of the South Dublin County Council Development Plan 2016 - 2022 further elaborate the issue of Climate Change and Planning.