

**APPENDIX C – SCOTTISH NATURAL HERITAGE (SNH)**  
**Overview of Challenges & Opportunities relating to climate change**  
**Part of Convention of the Highlands & Islands Paper -28<sup>th</sup> October 2019**

Sector	Overview of challenges and opportunities
Power	<p><i>Challenges:</i> Grid connection for new renewable generation.</p> <p><i>Opportunities:</i> Support development of the whole <b>renewables</b> industry: onshore and off shore wind, wave and tidal energy, solar, hydro, biomass including potential for circular economy such as fish farm waste to create biofuel</p> <p>The Highlands &amp; Islands could be a major contributor of <b>carbon capture and storage</b></p>
Transport	<p><i>Challenges:</i> More frequent extreme weather events (such as heatwaves and floods etc) are likely to cause disruption across the transport network. Nature based solutions will complement traditional engineering measures to maintain connectivity.</p> <p>Vehicles, ferries, shipping and aviation - phasing out of internal combustion engine vehicles and increasing <b>electric vehicles</b> (EV). Rapid development and placement of infrastructure such as EV charging points.</p> <p>Funding applications for active travel through Sustrans need rural proofing, with requirement for 50% match funding on active travel projects difficult to secure outside urban areas.</p> <p><i>Opportunities:</i> Trialling of low and zero emission flights in the Highlands and Islands by 2021.</p> <p>Significant potential around <b>e-bikes for commuting</b> (will</p>

environmental standards.

*Opportunities:* Reduction in fuel poverty levels and therefore potentially child poverty levels.

For the region to become a 'demonstrator' of new and innovative technologies and systems (for example the [Hydrogen 100 project](#))

Natural defences such as beaches, dunes and saltmarshes can be cost effective way of protecting buildings and infrastructure<sup>1</sup>. New and existing developments can use nature based solutions to improve resilience.

#### Industry

*Challenges:* Electrification of industry will be a significant component of reducing emissions, however wider challenges remain in supporting Scotland's oil and gas sector in the energy transition.

*Opportunities:* Use of skills and expertise from oil and gas sector to support highly productive transition. 'Greening' of offshore oil and gas installations by incorporating renewable technology, e.g. floating offshore wind

#### Land Use

*Challenges:* Land use is already being affected by climate change and increasingly with 'hotter dryer summers, warmer wetter winters and more flooding'.

Uncertainty over shape and size of future rural funding support. Funding has traditionally come through government, and there is a need to look at bringing in carbon funding from private business on top of government funding.

*Opportunities:* How land is used has an essential role to