



## Engineering for Future Generations

Sophie Howe

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Sophie Howe, the former Future Generations Commissioner for Wales, eloquently wove together threads of governance and engineering, illuminating a path toward a more sustainable and equitable world. Her address resonates with urgency, urging us to transcend short-term gains and embrace a holistic, long-term perspective.

Howe's celebration of the Welsh language revival serves as a beacon—a testament to sustained commitment. Beyond linguistic preservation, it symbolizes the power of collective vision. Just as language thrives when nurtured, so too can our infrastructure flourish when guided by a holistic foresight.

Referring to the Well-being of Future Generations Act, Howe emphasised engineers as the custodians of the act goals, bear the mantle of responsibility, considering the ripple effects of our decisions echoing through time. Our choices today reverberate across generations, shaping the fabric of society. Howe's clarion call for holistic thinking resonates. Our interconnected challenges—like a complex ecosystem—defy silos. Climate change intertwines with AI ethics, infrastructure impacts well-being. We must weave these threads into a cohesive tapestry, transcending disciplinary boundaries. Imagine setting coordinates in a navigation system—a destination beyond our lifetimes. Howe implores us to chart a course with clarity. Our policies, designs, and innovations should align with this compass. A bridge built today spans generations, a policy enacted echoes through time.

Howe highlighted a triad of challenges—artificial intelligence (AI), climate change, and aging populations—demands ethical governance and innovative engineering. AI, a double-edged sword, promises transformation but requires careful wielding. Climate change, an existential threat, necessitates urgent action. Engineers must lead the charge, designing resilient solutions. Aging populations beckon us to reimagine infrastructure—accessible, adaptable, and attuned to well-being. Howe's departure from conventional problem-solving reverberates. We stand at a crossroads, where innovation is our compass. Well-being goals guide our journey. Let us depart from the familiar, embracing novel solutions. The status quo suffices no longer; we engineer for resilience.

Sophie Howe's address echoes through the corridors of time. We engineer not just for today but for generations yet unborn. Let us collaborate—engineers, policymakers, citizens—embracing systemic change. Our legacy lies not in steel and concrete alone but in the well-being we nurture. As we weave resilience into our infrastructure, we honour the past, serve the present, and gift the future.