Uk2zero National Policy Forum Submissions 2023
Green and Digital Future Commission: Delivering Growth

Delivering Green Growth decarbonises, improves citizens' well-being and secures electoral support. Labour's election prospects soared following its 2022 Conference Climate Change policy commitments. But green policies need to become speedier and more flexible to stay ahead with War weaponising energy, and energy insecurity seeing nations' reach for hi-carbon coal. Neglected indigenous, renewable energy resources offer relatively low-cost, speedy and flexible decarbonisation and target green growth at renewable energy technology manufacture, employment and local communities. Site-specific they are most appropriately developed by councils in partnership with other stakeholders. Major fossil fuel corporations might not be re-orientating towards clean energy business models but local council, community and small to medium sized company-led development can independently reap their benefits.

Relatively cheap Geothermal and Tidal Stream Power, Waste, Latent and Geothermal Heat mean shorter and less costly, lead-times than most conventional, particularly nuclear, power plants; faster investments returns, lower consumer bills; longer periods for savings to accrue; higher disposable incomes.

Broadening Britain's mix of indigenous renewables, boosts energy security; encourages green economic activity expansion; diversity delivering sustainability as well. Site-specific green renewable energy development delivers decentralised growth directly where its needed: to local people, local economic activities; boosting community wealth building and levelling-up across the land.

Local supplies of waste, latent and geothermal heat and delivered locally via District Heating (DH), Schemes aka Local Heat Networks will meet the 50% of national energy demand attributable to heat. (The Committee on Climate Change advise that we need to grow DH from delivering their current 2% to 18% of consumed heat, if we are to meet our 2050 decarbonisation target).

Geothermal heat could meet UK demand for 100 years. Mine water heat lies beneath 25% of UK homes. Waste sewer heat from sewers possesses 20twh of potential annually – 1.6million homes worth. More exists in underground train tunnels and electricity transformer stations. Hi-energy industries' waste heat can heat local premises or generate power (WHTP). Power station waste heat can be harnessed via CHP. Latent river heat capacity totals around 6GW; canals 84 MW; coastal and estuarial, 340MWm3. The Thames alone could satisfy nearby settlement demands possessing under 500GW of heat demand.

Satisfying heat demand with heat resources means less power needs to be produced, as does recycling (especially lead, iron, aluminium and steel). Both mean significantly less inefficient electricity generation needs to occur to satisfy national heat demand and produce essential materials; affording more energy-efficient, more cost-effective means to meet nation al demands for heat and materials.

Geothermal power plants, operating in twenty nations, are four times less expensive than nuclear ones. Flexible they can be enlarged in 20-30 MW increments as finance and site problems dictate. It is always high tide somewhere on the UK coastline, so Tidal Stream energy can be constant, a base- line power source, whose costs are falling. 24GW of power could be delivered by 2050 - a healthy export income to boost national economic statistics too.

Solar power provided 14.6 GW of power in 2021; wind, 28GW of installed capacity – half on, half off-shore, and increasing annually. Surplus electricity cannot easily be stored so it hasn't been generated, but recent Netherlands and German initiatives consume generate surpluses in electro-static hydrogen production which may be stored. Local community rooftop solar installations would boost our realisation of solar potential.

Neglected indigenous heat and power resource development spells energy security, green growth, local employment growth, increased levels of disposable income and well-being and sustainability.