Non-renewable sources dominate Pakistan's total energy supply despite domestic growth in renewable energy production since 2013. Natural gas, oil, and coal contribute 60% of the country's total energy supply, with biofuels, wind, and solar energy accounting for the remaining 40%.

Capacity growth has been dominated in the fossil fuels sector as well. Although solar and wind energy growth exists, biofuel expansion has been limited. Pakistan has significant potential to leverage solar and wind renewables (given favourable geography and decreasing technology costs), which could reduce exposure to fuel price and currency shocks[1].

Focusing on geographic features can help narrow down areas where expansion of certain sources is possible. For example, higher average wind speeds in Karachi might make it more suitable for wind energy expansion, whereas areas in Punjab (Lahore, Multan) might be better suited for solar expansion.

A strategic shift towards renewables, supported by evidence-based geographic planning can pave the way for an affordable and sustainable future for Pakistan.

[1] IGC (2025): Sustainable Pakistan: Addressing climate-driven demands and fiscal challenges for electricity. https://www.theigc.org/publications/sustainable-pakistan-energy-crisis