

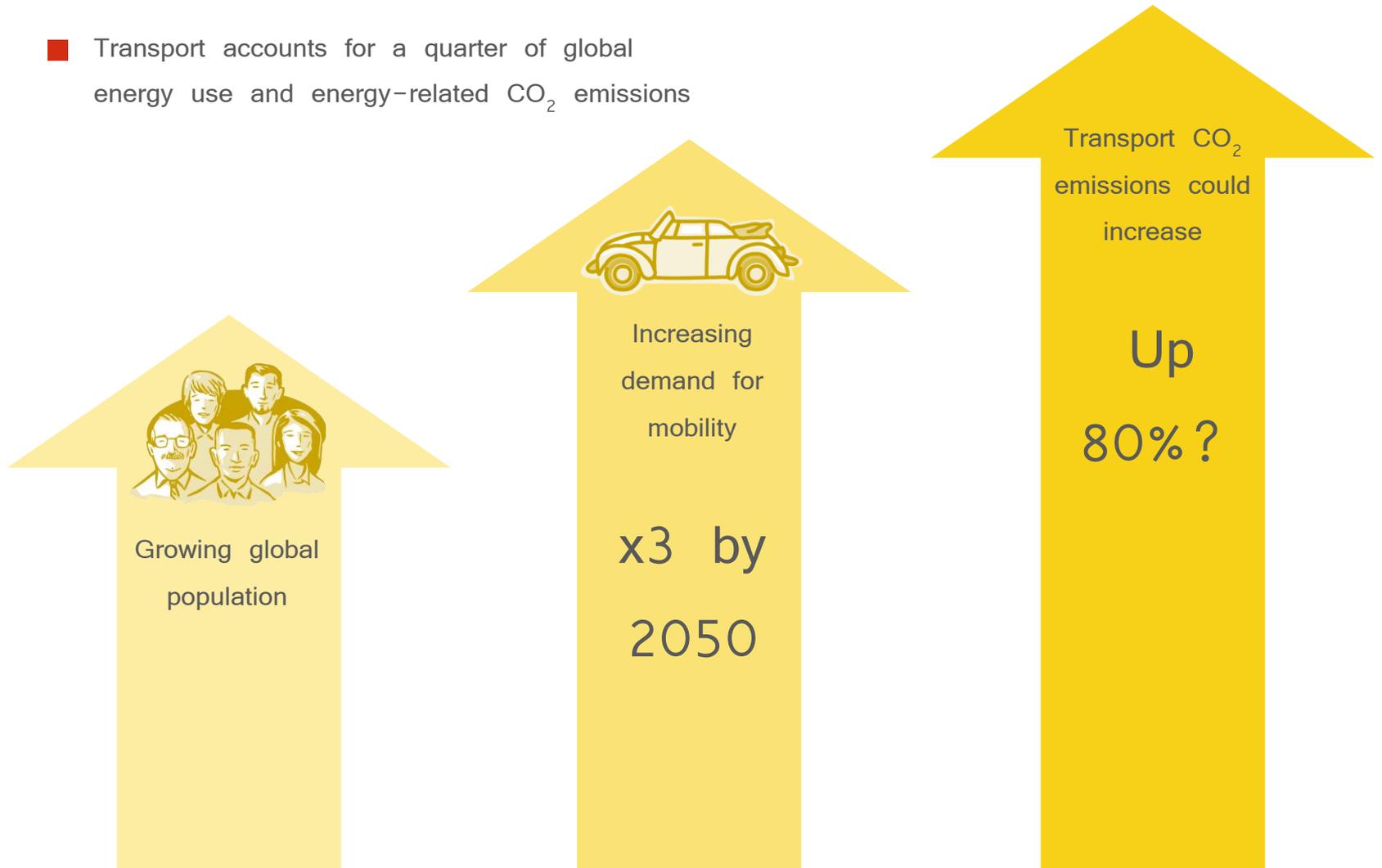


THE FUTURE OF OIL AND THE ROLE OF BIOFUELS

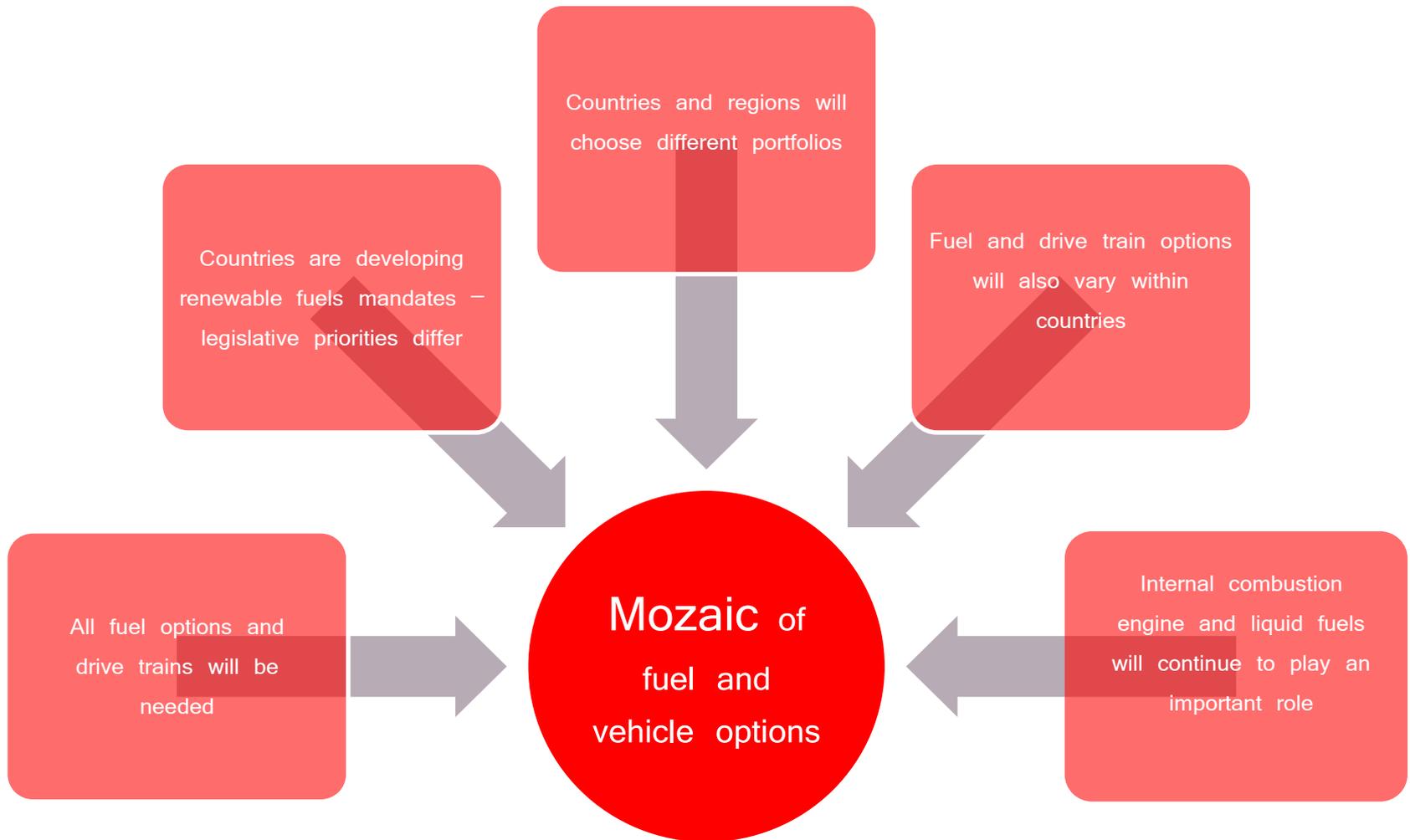
Mark Gainsborough, EVP Strategy, Portfolio & Alternative Energy

TRANSPORT ENERGY DEMAND WILL INCREASE RAPIDLY

- Transport accounts for a quarter of global energy use and energy-related CO₂ emissions

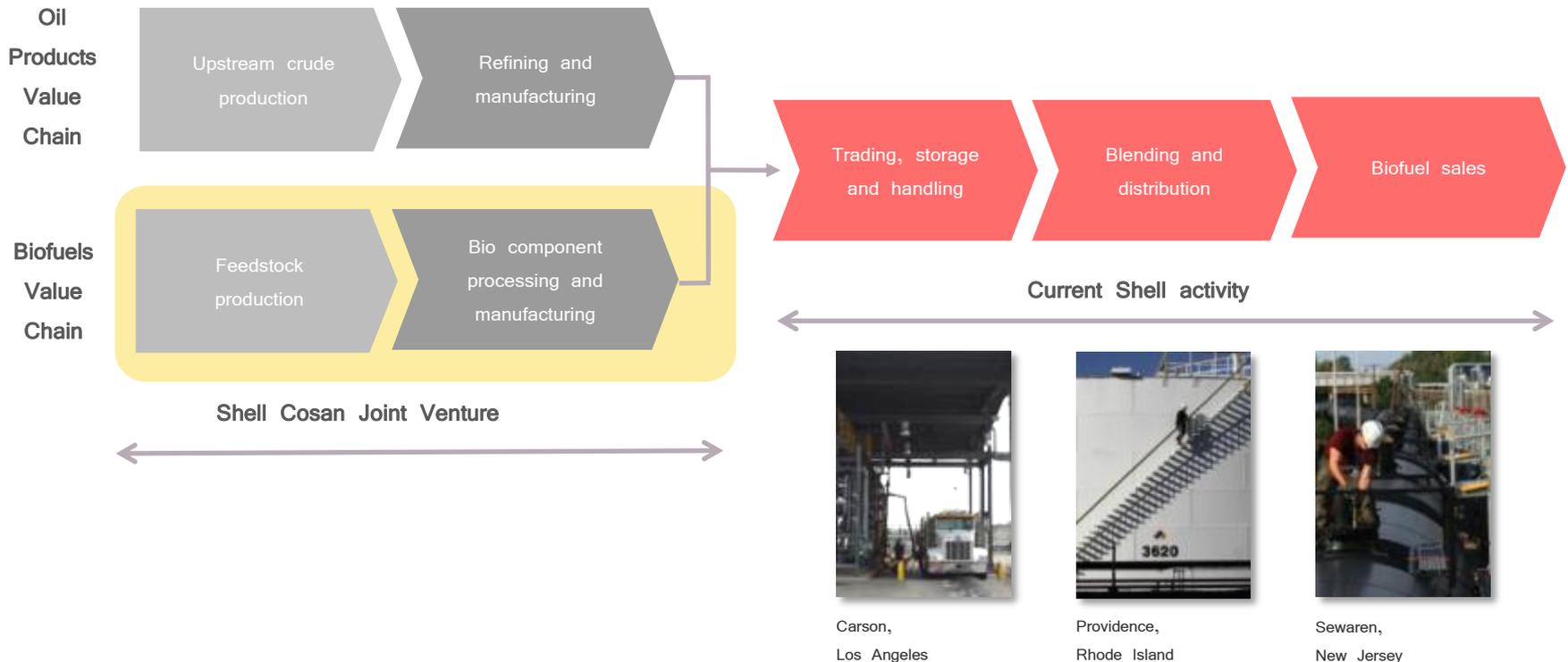


NO SINGLE ALTERNATIVE TO OIL BASED ROAD TRANSPORT



SHELL: A LEADER IN TODAY'S BIOFUELS

- Most practical commercial solution to reduce CO2 in the transport fuels sector over the next twenty years
- Government polices have created a growing international market for biofuels – 9% by 2030
- One of the world's leading distributors of biofuels – 9.5 billion litres in 2010



SHELL COSAN JOINT VENTURE (Raízen)



Shell's first move
into the
production of
conventional
biofuels

Brazil – most
efficient ethanol
producing country

Brazilian sugar cane
– lowest CO₂,
sustainable, cost
competitive

2 billion +
litres production
capacity per year



ADVANCED BIOFUELS WILL BE NEEDED



Biofuels growth
needs to be
supported by
advanced biofuels

Dedicated teams
working in four
research centres

Research
agreements with
leading academic
institutions

