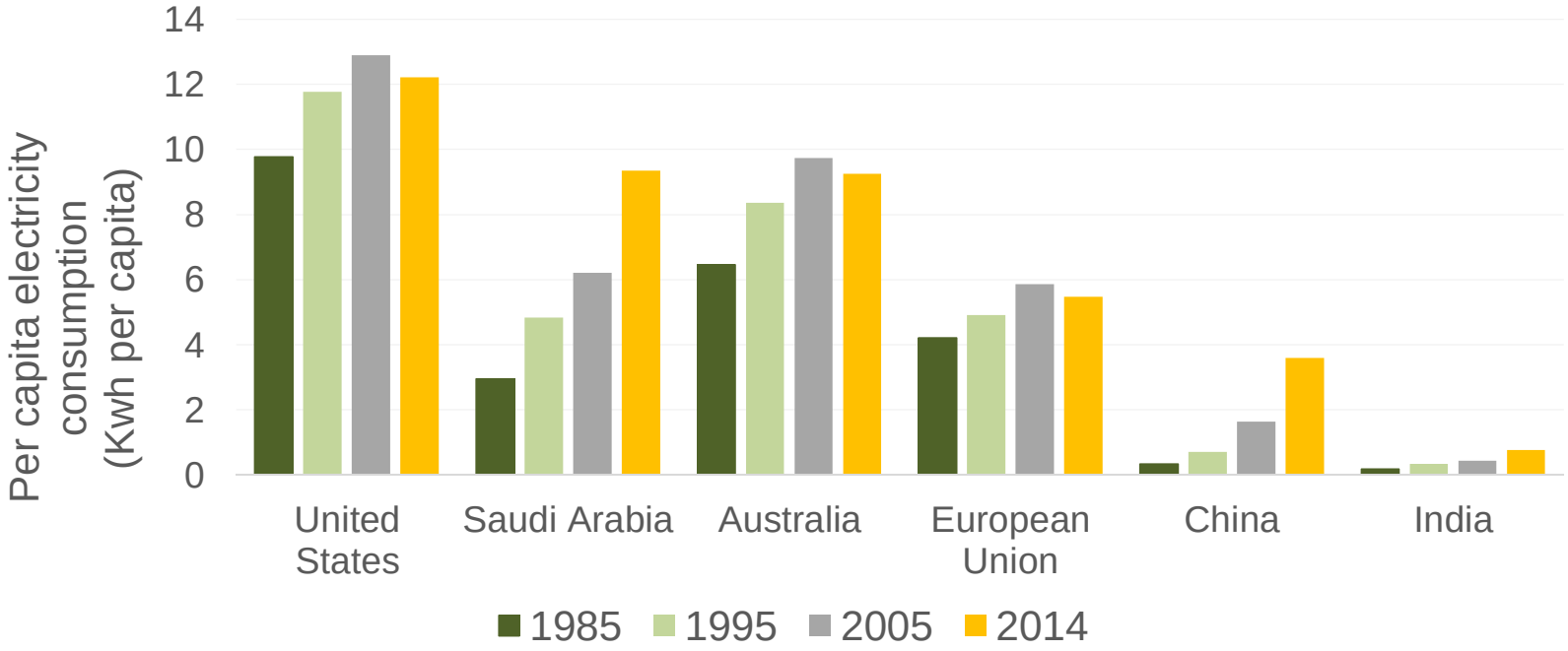
KAPSARC
مركز الملك عبدالله للدراسات والبحوث البترولية
King Abdullah Petroleum Studies and Research Center

Energy productivity in Gulf Cooperation Countries (GCC)

International Leadership in Energy Productivity and Energy Efficiency
2016 Australian Summer Study on Energy Productivity

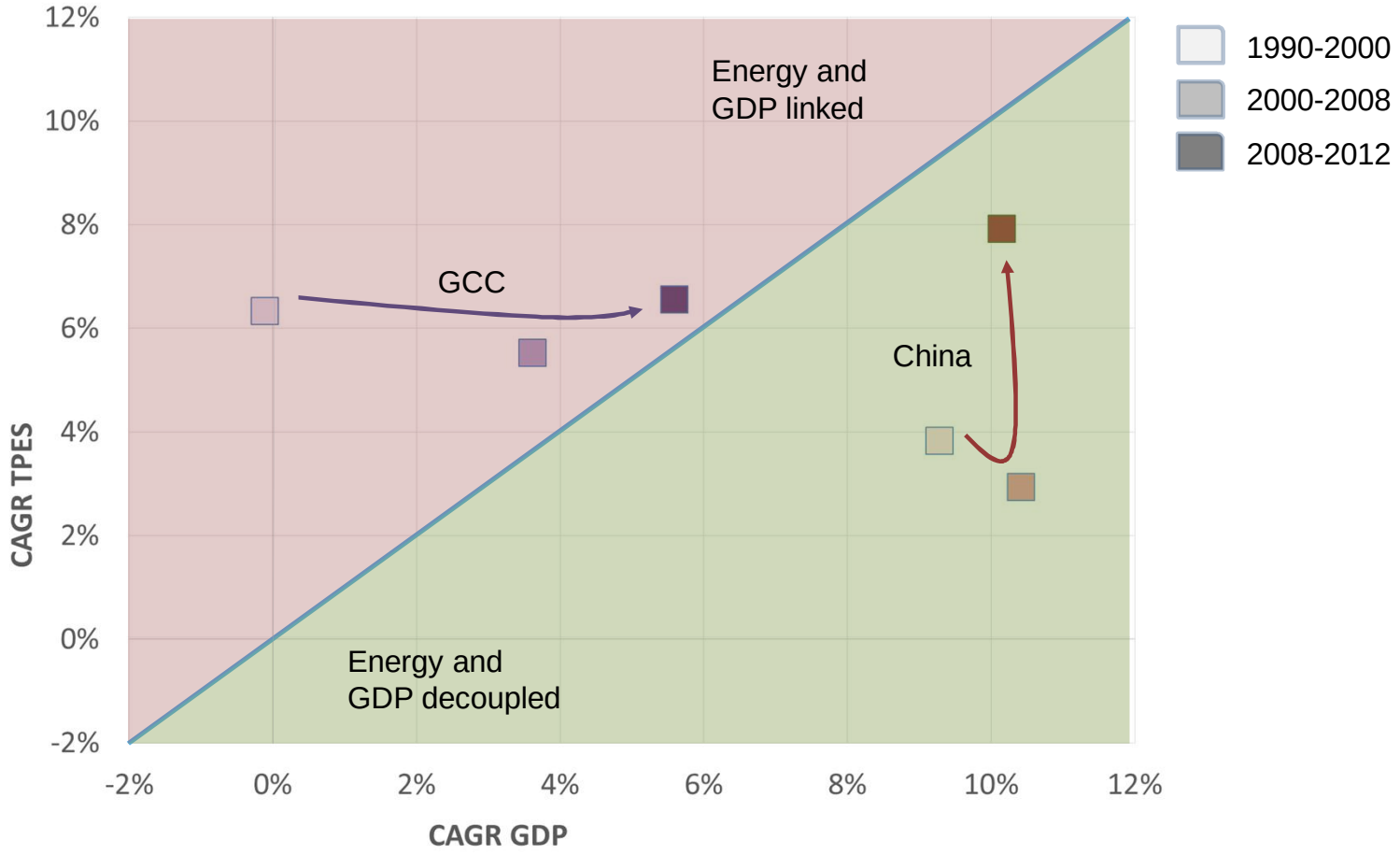
Nicholas Howarth, D.Phil
Sydney, February 24, 2016

Per capita electricity consumption



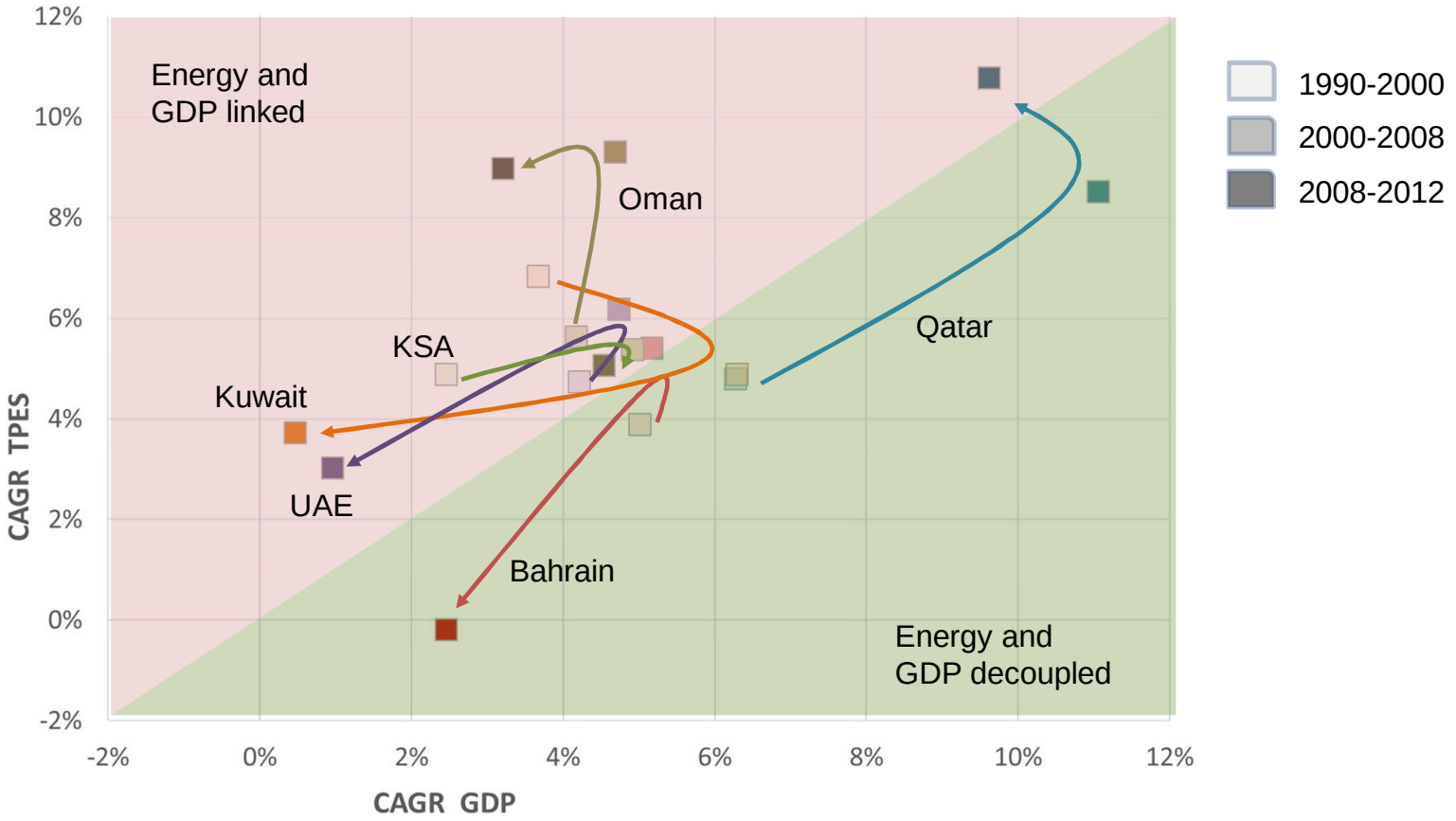
- Driven by its growing household wealth and the expansion of energy intensive industries the Kingdom is increasing per capita energy consumption fast.
- High energy prices, increasing energy efficiency and slowing economic growth generally put downward pressure on per capita electricity consumption.

Energy decoupling in GCC countries and China



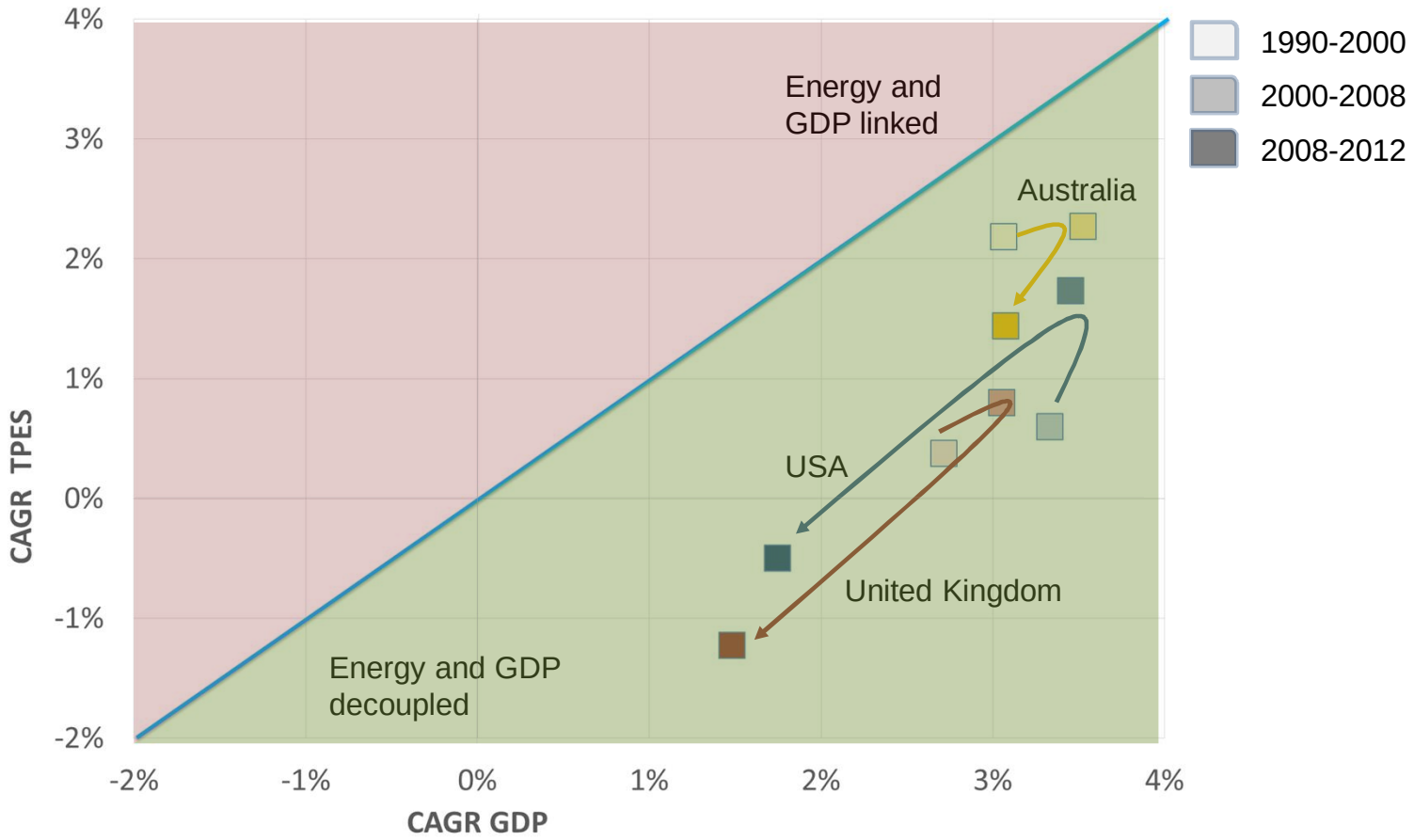
Source: KAPSARC analysis based on IEA data

Energy decoupling in GCC by country



Source: KAPSARC analysis based on IEA data

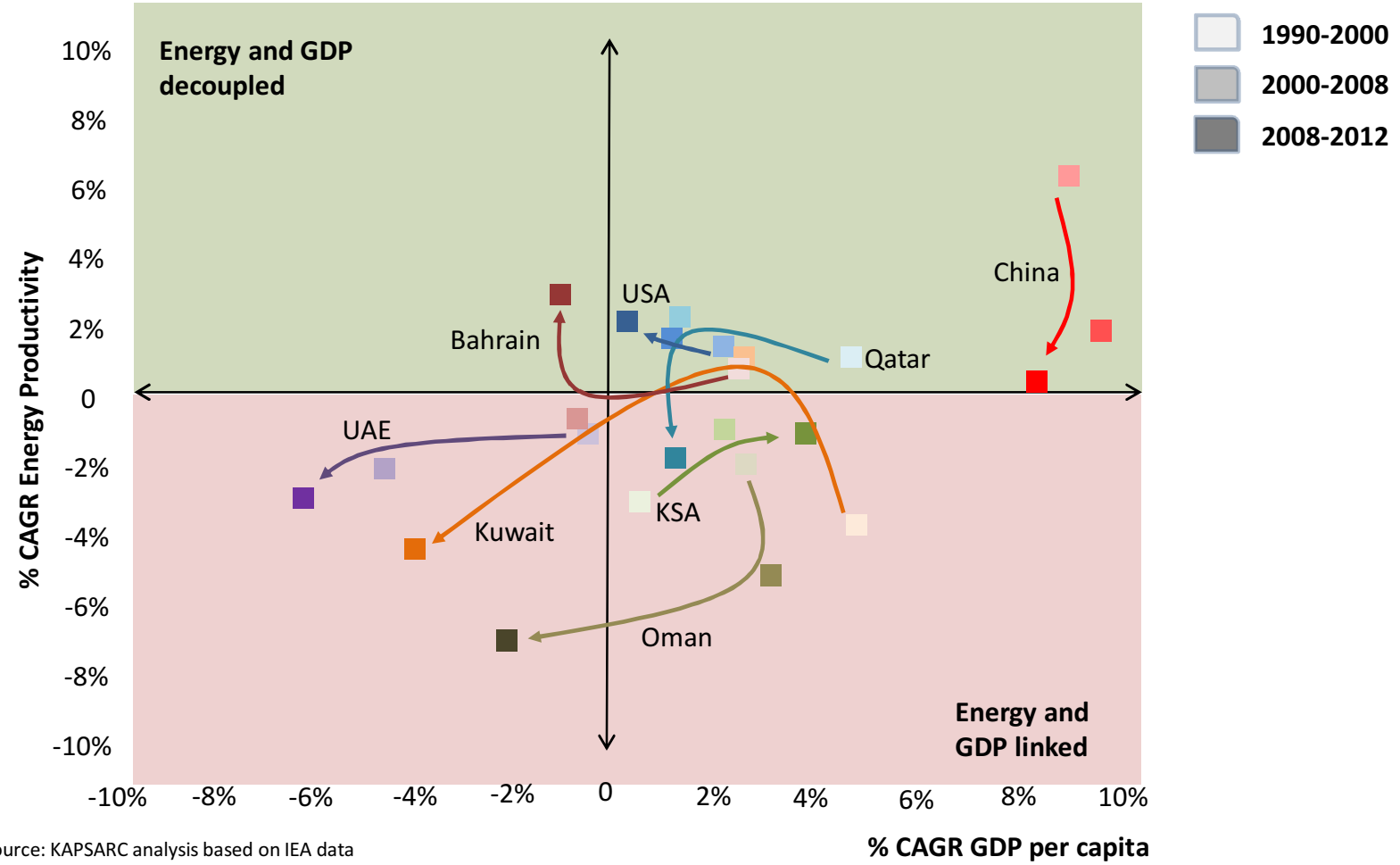
Energy decoupling in selected advanced countries



Source: KAPSARC analysis based on IEA data

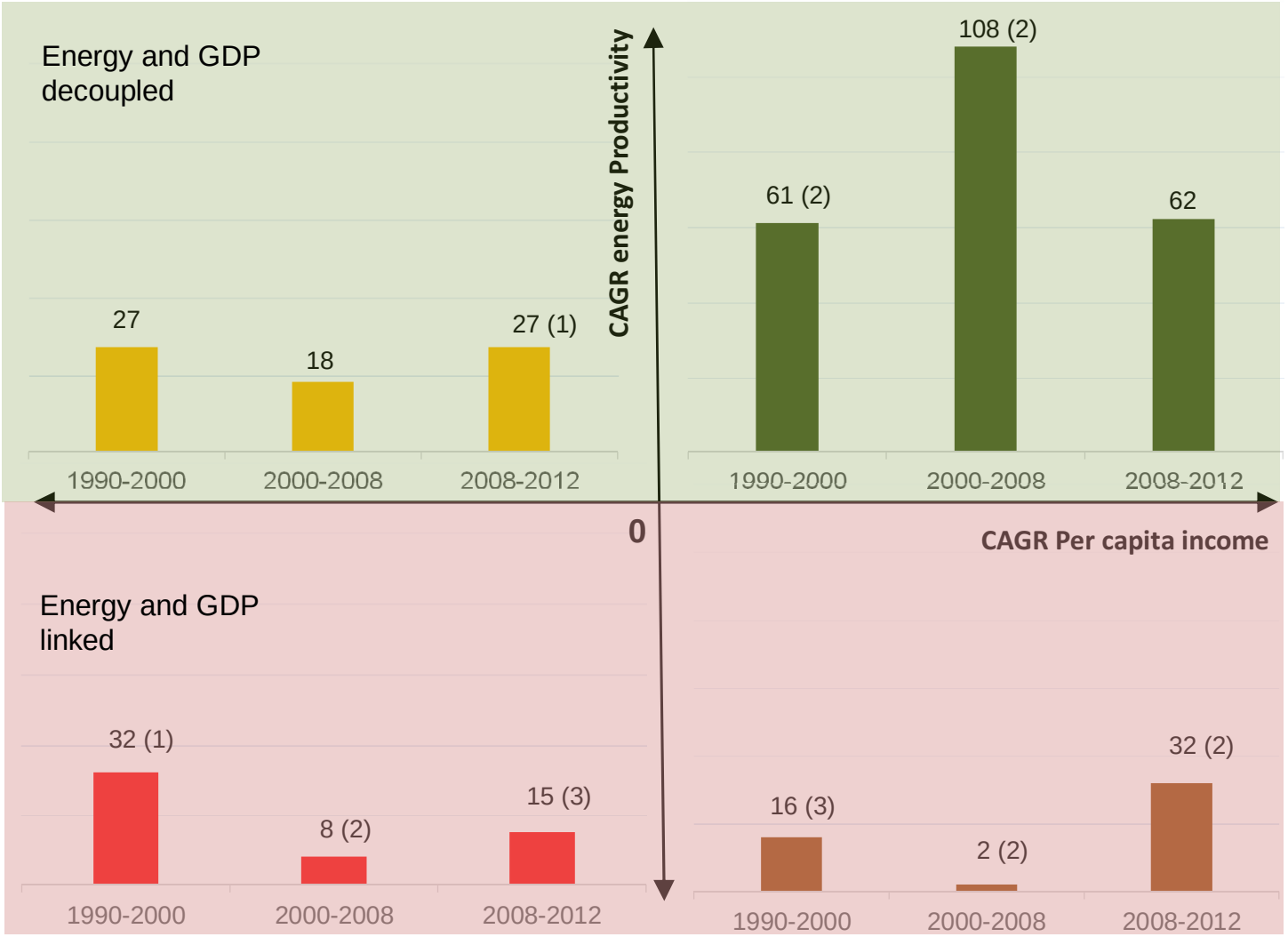
Energy productivity and per capita income

Energy productivity is not an end in itself, it must make people's lives better



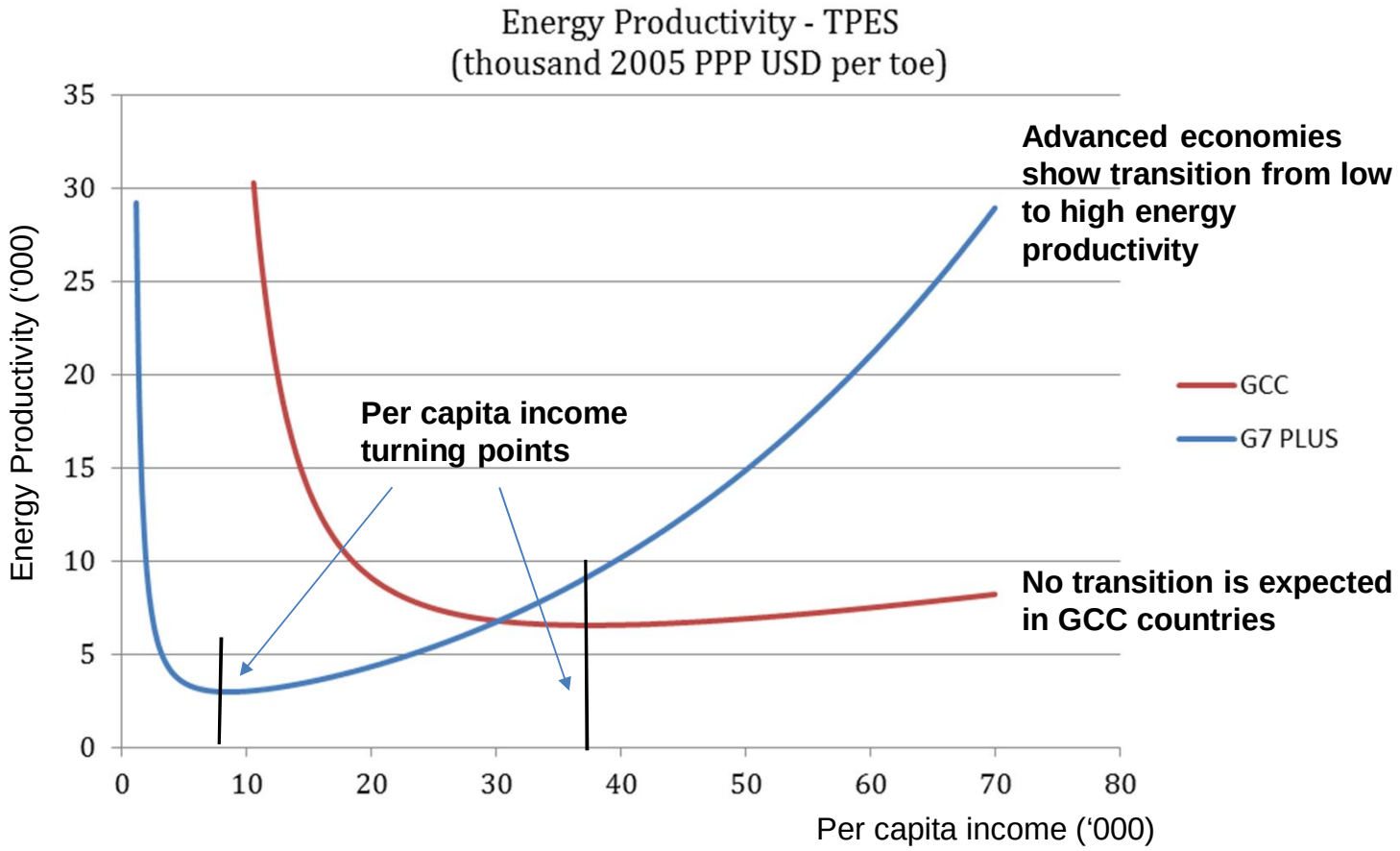
Source: KAPSARC analysis based on IEA data

Energy productivity and per capita income growth have collapsed since the GFC



Source: Number of countries in each growth paradigm (GCC in parentheses) KAPSARC Analysis based on IEA data

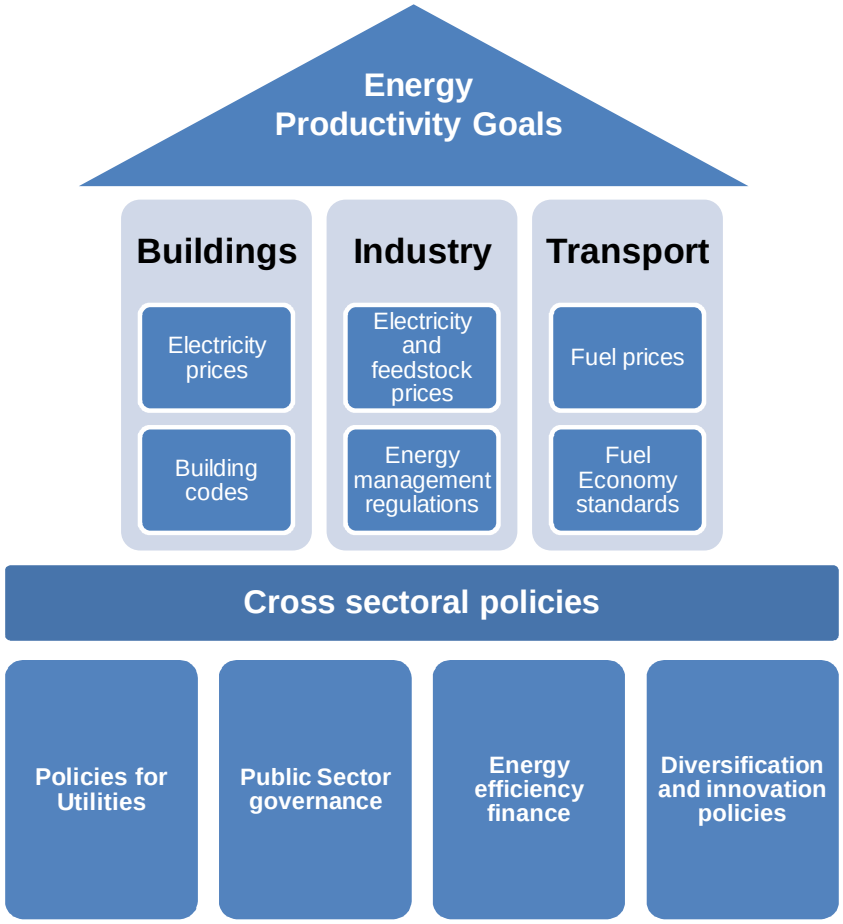
Without a significant shift in policies it is unlikely GCC countries will be able to achieve high energy productivity growth



Sources: KAPSARC Energy Productivity Kuznets Curve Analysis based on OECD and World Bank data (1971-2012)

Overview of KAPSARC-UNESCWA GCC Energy Productivity Project

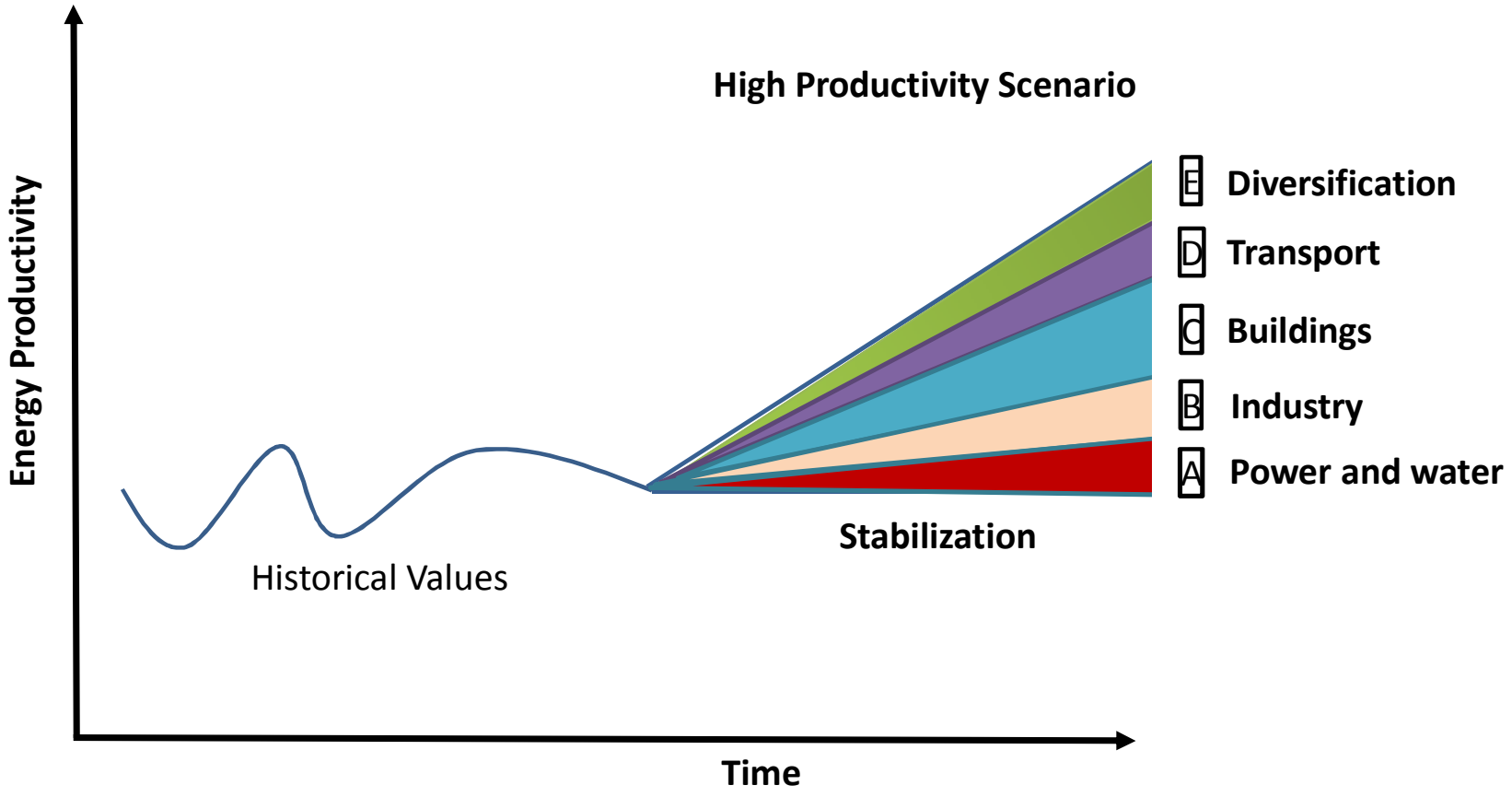
A plan for boosting energy productivity based on best-practice policy lessons from regional and international experience



Sources: KAPSARC based on IEA (2014) Energy efficiency policy recommendations for the Arab South Mediterranean Region and UNECE (2015) Best policy practices for promoting energy efficiency

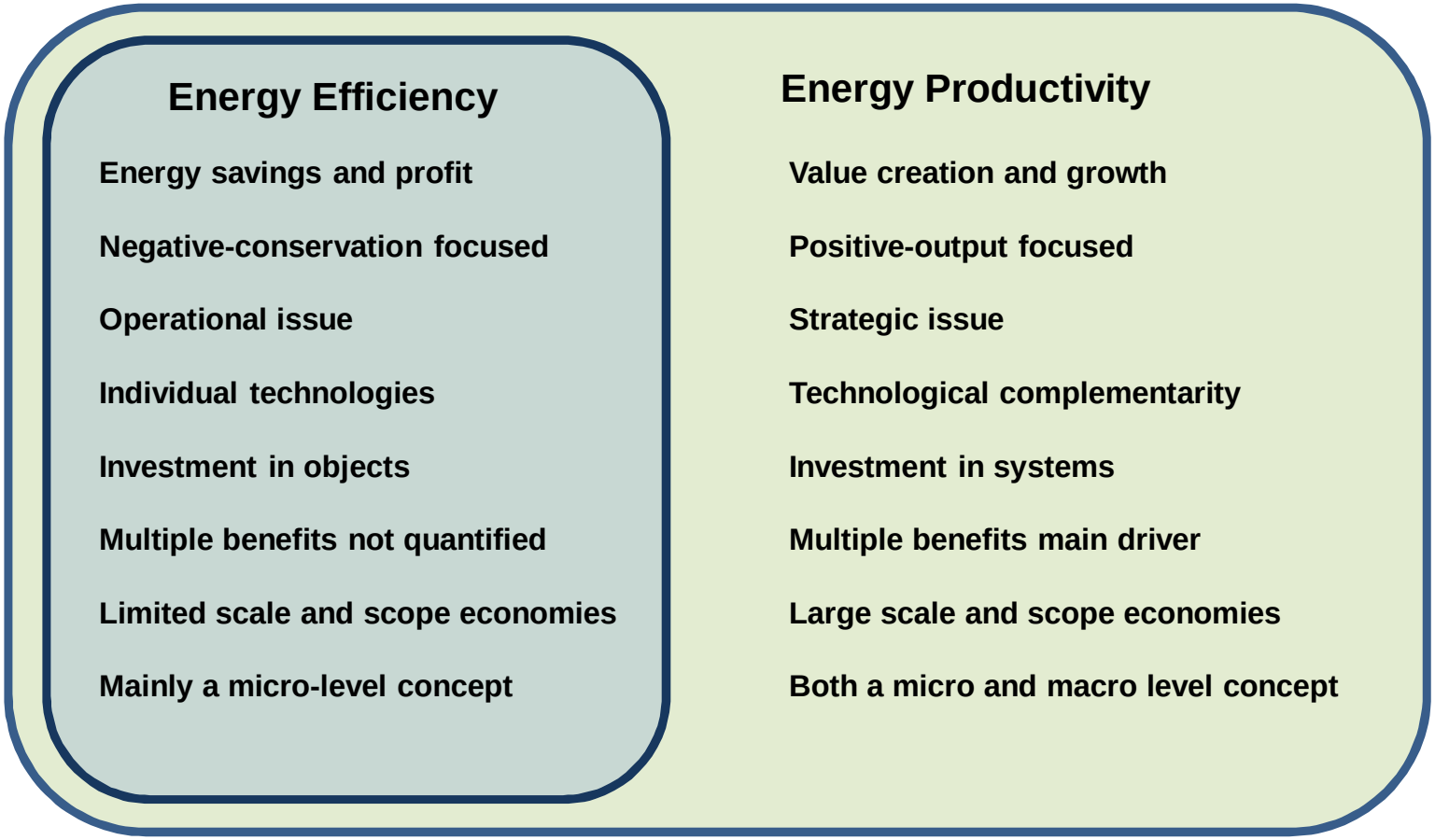
A 20 point plan for enhancing energy productivity

Policies should look to enhance efficiency as well as drive economic growth, innovation and diversification



Energy productivity puts energy at the center of economic planning

It encompasses energy efficiency but is a much broader concept



Source: KAPSARC