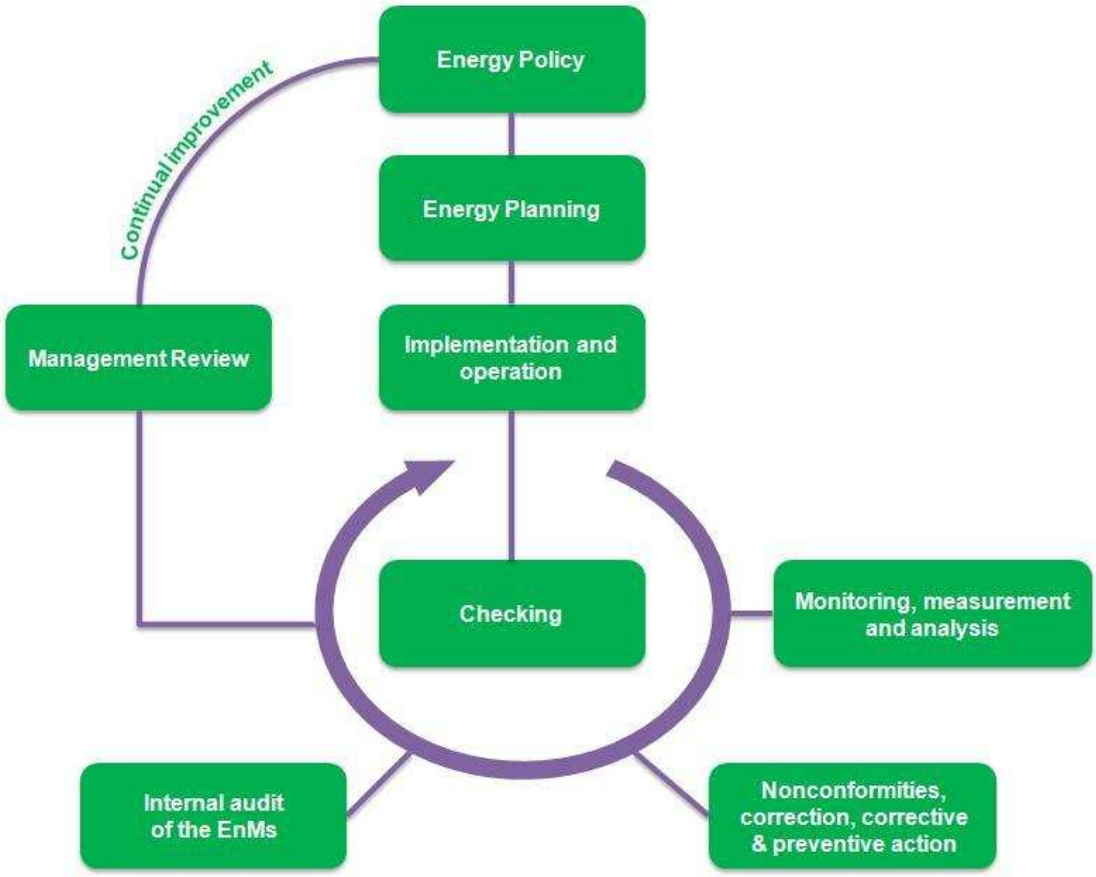
Measuring Energy Use Trend, Relative to Output

The key ingredient to the energy productivity framework is its account for economic growth.

Most companies are already tracking the components of **energy productivity** – their output and their **energy use**.

Energy productivity resonates more broadly across companies' boardrooms by helping track energy efficiency improvements in a way that aligns directly with business growth and development goals.

Have the flexibility to choose the metric by which you track your progress in terms of the ratio of economic output per energy consumed, for instance by the number of products you sell or by the revenue you generate per each unit of energy consumed.



Using an **energy productivity** lens, the relationship between economic growth and energy consumption is the key indicator for progress.

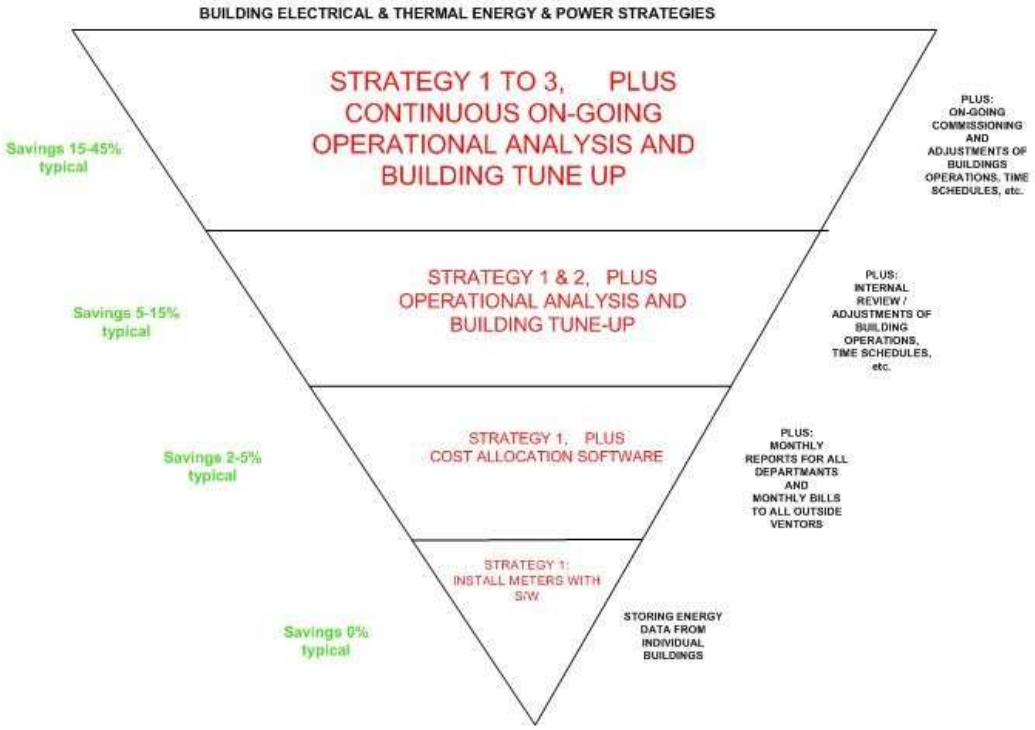
You commit to one of three pathways:

1. doubling energy productivity,
2. establishing energy management systems in facilities and
3. Reaching a self-selected energy productivity improvement target, or owning and operating only net zero carbon buildings and making energy efficiency improvements.

Energy MANAGEMENT: Why?

If your company commits to doubling its **energy productivity**, then it has a variety of ways to do so, ranging from doubling the economic output, while keeping energy consumption constant, to halving its energy consumption, while maintaining economic output, or something in between.

Energy productivity correlates positively with greater savings and financial stability, which helps companies articulate a straightforward narrative that relates energy savings with higher profitability.



CHAZAPIS **COMMISSIONING**

How Meters Help Save Energy

HVAC&R systems, lighting and plug load together account for nine-tenths of the facility's energy consumption and for that reason provide a significant opportunity for bottom line impacting energy-efficiency measures aimed at optimizing performance, reliability and service life of:

- Boilers and steam traps
- Chillers and cooling towers
- Air compressors and air-handling systems
- Fans, pumps and motors
- Lighting systems
- Office equipment
- Energy management and other automated building systems

Once meters are installed and commissioned, they may be used to control costs, diagnose equipment problems, allocate usage costs, set resource efficiency goals and many other uses. Meter data information can lead to large economic savings by allowing facilities personnel to:

- Profile real-time energy demand (kW) and consumption (kWh) patterns
- Compare energy demand and usage trends by day, week, month or year
- Monitor all utility services, including electricity, gas, water, steam and more
- Schedule energy data collections to occur automatically
- Evaluate, in real-time, the impact of critical load-shedding activities
- Determine specific processes that are not energy-efficient
- Identify poor equipment performers by benchmarking energy levels at multiple facilities