Why is the concept of Green Productivity gaining ground with Governments & Enterprises?

The cyclical approach of Plan-Do-Check-Act in quality management was founded on the study of how nature manages variation. Green Productivity leverages this congruence for profit-oriented results.

Green Productivity is an integrated approach. It addresses the concerns of policy makers and the realities that those who produce face. The practice of Green Productivity is characterized by four distinguishing criteria.

Integrated people-based approach: One of the strengths of Green Productivity is its worker involvement and team based approach. Its people focus extends to improved working environment, worker health and safety, non-discrimination and related social welfare issues. The people involvement also ensures transparency and accountability.

Productivity Improvement: The other side of the Green Productivity coin is productivity improvement. The Kaizen approach of continuous improvement forms the basis. This has to accompany environmental protection. The concept of continuous improvement achieved by adopting the tenets of the PDCA (Plan, Do, Check and Act) cycle is aimed at ensuring not only productivity improvement; it includes environmental improvement, unlike classical productivity improvement programs. This is a dynamic and iterative process.

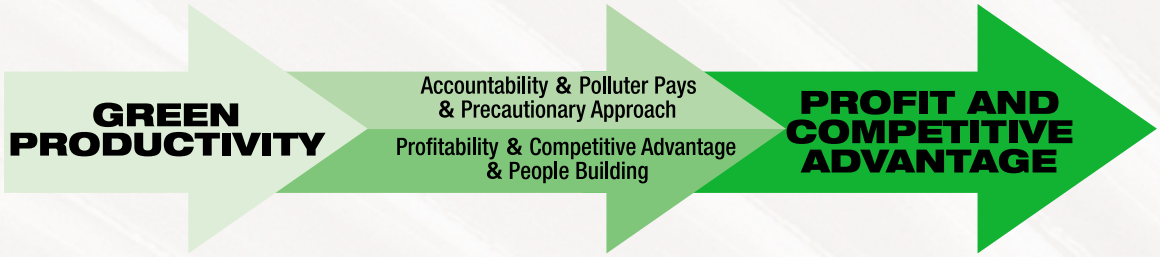
Environmental Compliance: The heart of Green Productivity is environmental protection, which is the purpose of legal instruments. It is one of the most challenging tasks facing industry. The practice of Green Productivity assists through tools and techniques for pollution prevention and source reduction. Residues will require being managed using end-of-pipe treatment measures. While achieving environmental compliance it is the unique characteristic of Green Productivity that productivity will also improve.

These practices may lead to a situation beyond compliance with the ultimate aim of ensuring quality of life. It is paramount that government support enterprise to innovate new technologies that go beyond compliance, as it will bring greater returns.

Information-driven improvement: Documentation and reporting are the strengths of Green Productivity drawn from management systems that exist for quality and the environment (QMS and EMS respectively). The adage "What gets measured gets done" is one of the driving forces of Green Productivity.

Performance of an organization after establishing a Green Productivity program would be continuously measured and evaluated using a set of defined Green Productivity performance indicators.

The integration between what is conventionally termed productivity improvement concepts and environmental protection concepts is evident. Ecological and productivity principles marry the responsiblity and accountability for environmental restoration into the producer's hands so that the business benefits of profit and competitive advantage reward the people taking action.



Green Productivity offers a **Strong Framework** that enables fluid passage to productivity improvements

Green Productivity has an open framework to absorb several of the existing, proven approaches that leverage the benefits of eco-efficiency, cleaner production, pollution prevention, amongst others. The framework is based on two key components:

- a set of tools used to rationalize the input-throughput-output focus and
- a set of defined sustainable practices that will guide the practitioner to achieve the objective of Green Productivity.

The emphasis of the framework however is not on terminology or systems. It is based on the strategy of sustainability in economic development and environmental protection, a logical step-by-step path for change.

What is productivity?

As an integrated concept

$$\text{PRODUCTIVITY} = \frac{\text{Output x Satisfaction}}{\text{Input x Innovation}}$$

as objective ➡ Socio-Economic Concept

as a means ➡ Technical concept

INPUT	THROUGHPUT	OUTPUT
Life cycle assessment is used as the basis for generating information on a product/service. Decisions are made on product design, manufacturing practices, purchasing policy, product distribution and management practices based on this information.	Product design must follow the principles of eco-design thereby subscribing to the need to develop products that have a lower environmental burden. Having incorporated eco-design principles into product design, the first step is to examine the purchasing policy for inputs and where required modify it to ensure green purchasing.	Apart from green purchasing, eco-design requires that environmental objectives be incorporated into the manufacturing operation, with no or minimum loss of product performance, useful life or functionality while reducing the generation of waste, reduction of toxics content of the product, reduction of the energy requirements an/or extending the useful service life of the product. This will also ensure health and safety in the workplace as well as for consumers using the products. In using eco-design as the basis, product stewardship must be adopted in the distribution, use, and disposal of the outputs (products).

The benefits in adopting this framework must be measurable. Progress must be shown and shared. Metrics used to measure an organization's performance based on the impact of Green Productivity are Multifactor Productivity (MFP) and Profitability Analysis. These are measurements that are commonly used in business. ***Green Productivity adds dimension and value.***

Profitability is the cornerstone of Green Productivity

Green Productivity advocates the need to generate profits be it through savings on raw materials by practicing resource efficiency, improved productivity, quality, sales, etc. Green Productivity recognizes this as significant in that for any form of economic activity to be sustainable, profitability is an essential ingredient. Competitive advantage is essential for businesses to establish and maintain a market position. This also translates into profitability. This principle advocates competitiveness in pricing, quality and, in the case of Green Productivity, in 'eco-friendliness'. In the practice of Green Productivity, the integration of environmental and productivity improvement will create new business opportunities and provide competitive advantage in a market where "quality" has been the focus. Extending this concept to include environmental quality is shared by the global consensus that developed the international management standard ISO 14001. Of all the tools available under the umbrella of Green Productivity, ISO 14001 is valuable for internal management improvements that align environment performance with quality and as a means of communicating these improvements to others using a globally accepted model. ISO 14001 is gaining in importance as a purchasing criterion and a passport to trade.

In the case of the quality revolution, businesses eventually realized that apart from cost reduction, quality could increase profitability. Similarly, integrating environmental protection into business strategies will return advantages that businesses will realize, enabled by Green Productivity.

Green Productivity helps to leverage progress within an enterprise by transferring knowledge and building confidence. People building and employer orientation is crucial at two levels. One is the commitment of the top management since these people are responsible for setting priorities for the company, allocating resources, motivating and encouraging employees. For Green Productivity to be successfully adopted in business, a pre-requisite is employer (top management) commitment to adopting "green" as a value-adding foundation. The second level is worker involvement in the practice of Green Productivity. The involvement and commitment of the line workers must be included for the effective implementation of Green Productivity. Workers enable the seemingly trivial contributions that add up over time to produce exponential value.

Empowering people to feel confident enough to change daily habits, reduce their ecological footprint[1] and be rewarded with a business advantage is an important benefit that Green Productivity offers.

GREEN PRODUCTIVITY

Ensures Profitability
Reduces Environmental Impact
Enhances Quality of Life

1 The Ecological Footprint measures the amount of nature's resources an individual, a community, or a country consumes in a given year.

Green Productivity

takes the symphonic complexity of sustainability and harmonizes it into a tune that anyone can whistle while they work

Why does Green Productivity work?

It takes the future vision of sustainable development, an amorphous concept for the average person, and gives it form, reason, and process. It brings sustainability from rhetoric to within reach in a methodical, logical and affordable manner. Increased efficiency enables greater cost control, increased cost-effectiveness and this leads to a more profitable position.

The central concept of Green Productivity is that substances should not be produced faster than they can be reintegrated into cycles of nature. In reality, there is no such thing as "away", energy is neither created nor destroyed, it just changes form. Therefore it is important to optimize the use of the materials and energy to obtain full value of one's efforts and investment.

What proof do we have?

The companies that have participated in Green Productivity have shared their results with us. They understand the need to increase the wealth of their businesses by building on a sustainable foundation including economic, environmental and social criteria as cornerstones. When walking through their factories, across their shop floors the hum of efficiency has a new pitch. There is pride in their voices about the company's progress using Green Productivity. This echoes on the street where they work. It filters through to others in their community. It reverberates as a wave upstream and downstream along their supply chain.

How does Green Productivity start?

It begins with the end in mind – success.

GREEN PRODUCTIVITY

- *Makes Quality Products*
- *Improves Health & Safety*
- *Increases Profitability*
- *Raises Morale*
- *Enhances Company Image*
- *Ensures Regulatory Compliance*
- *Promotes Environmental Protection*
- *Leads to Sustainable Development*

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