

ENVIRONMENTAL MANAGEMENT ACCOUNTING

The Strategic Shield & Sword
of Modern Business Resilience

Integrating Profit with Planet.

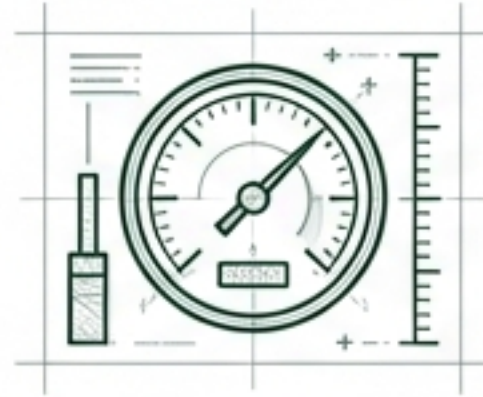


THE DOUBLE-EDGED SWORD



Business cannot operate in isolation. Excellence requires managing the toxic trail of industrialization.

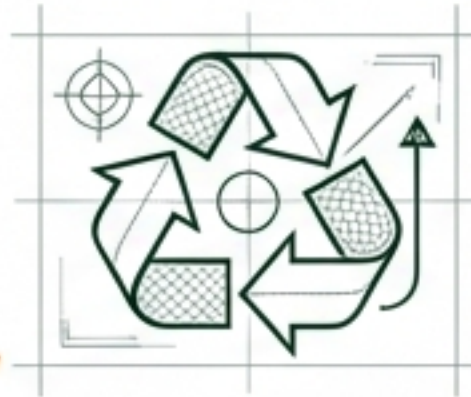
DEFINING EMA



CONTROL
(Monitoring
Efficiency)



PLANNING
(Forecasting
Impacts)



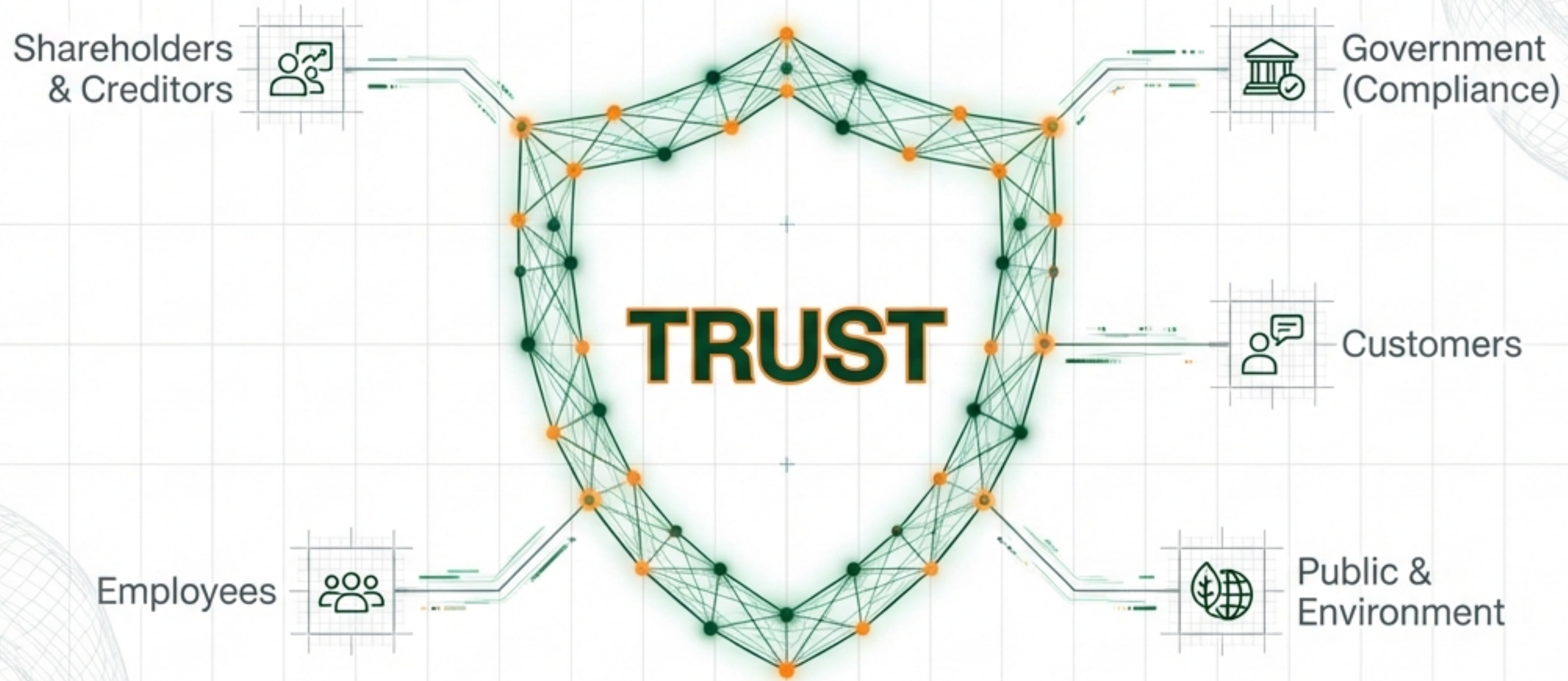
EFFICIENCY
(Minimize
Waste)



Managerial accounting process involved in measuring, collecting, analyzing, and communicating environmental information for internal use.



THE SHIELD: CORPORATE GOVERNANCE



Governance is the responsibility to operate transparently, paying taxes correctly and adhering to regulations.



C
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CLEAR

Information must be straightforward, distinct, and unambiguous.

CONSISTENT

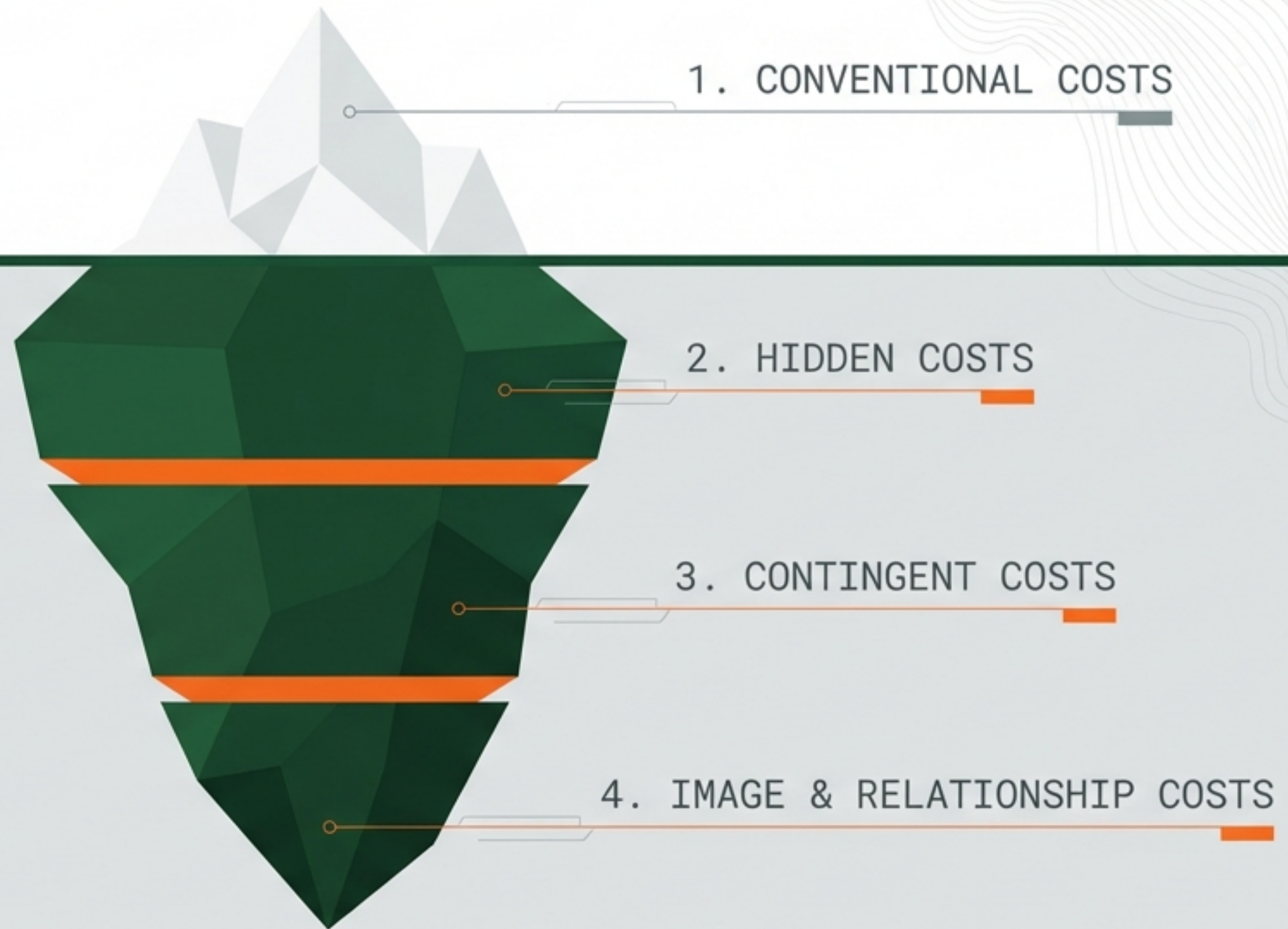
Disclosure must be regular and uniform over time.

COMPARABLE

Data must follow standards to allow benchmarking.

THE VISIBLE & THE INVISIBLE

Classifying Environmental Costs



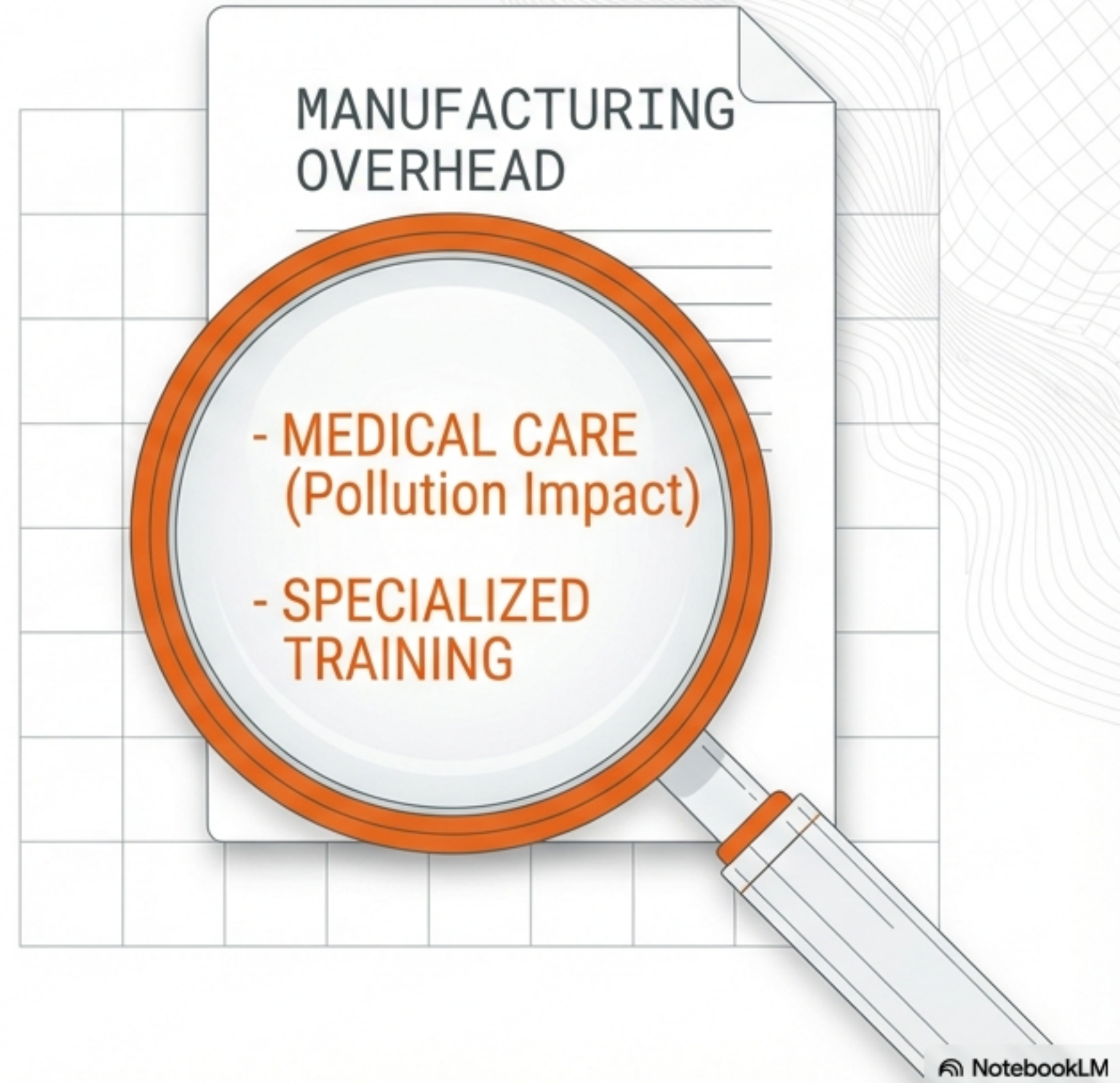
1. CONVENTIONAL COSTS

- RAW MATERIALS
- LABOR COSTS
- CAPITAL ASSETS (EQUIPMENT)
- UTILITIES

Standard costs recognized in general accounting for production.

2. HIDDEN COSTS

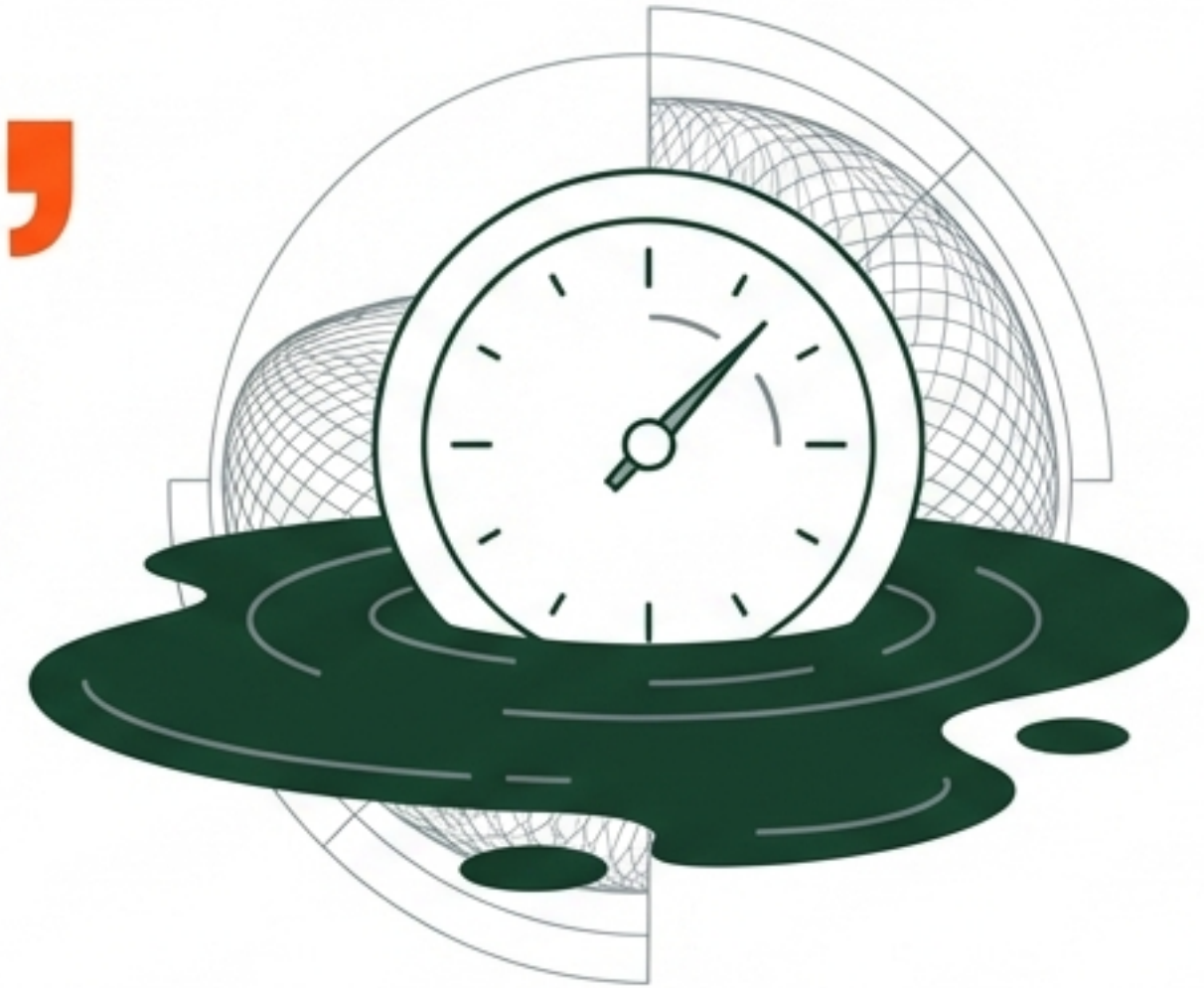
Expenses often obscured within general overhead pools. Accountants must analyze and allocate these correctly.



3. CONTINGENT COSTS

THE 'WHAT IFS'

Future liabilities based on risk assessment. Not on the books yet, but potential debts.



Estimated cleanup costs for oil spills or maritime accidents.

4. IMAGE & RELATIONSHIP RELATIONSHIP COSTS

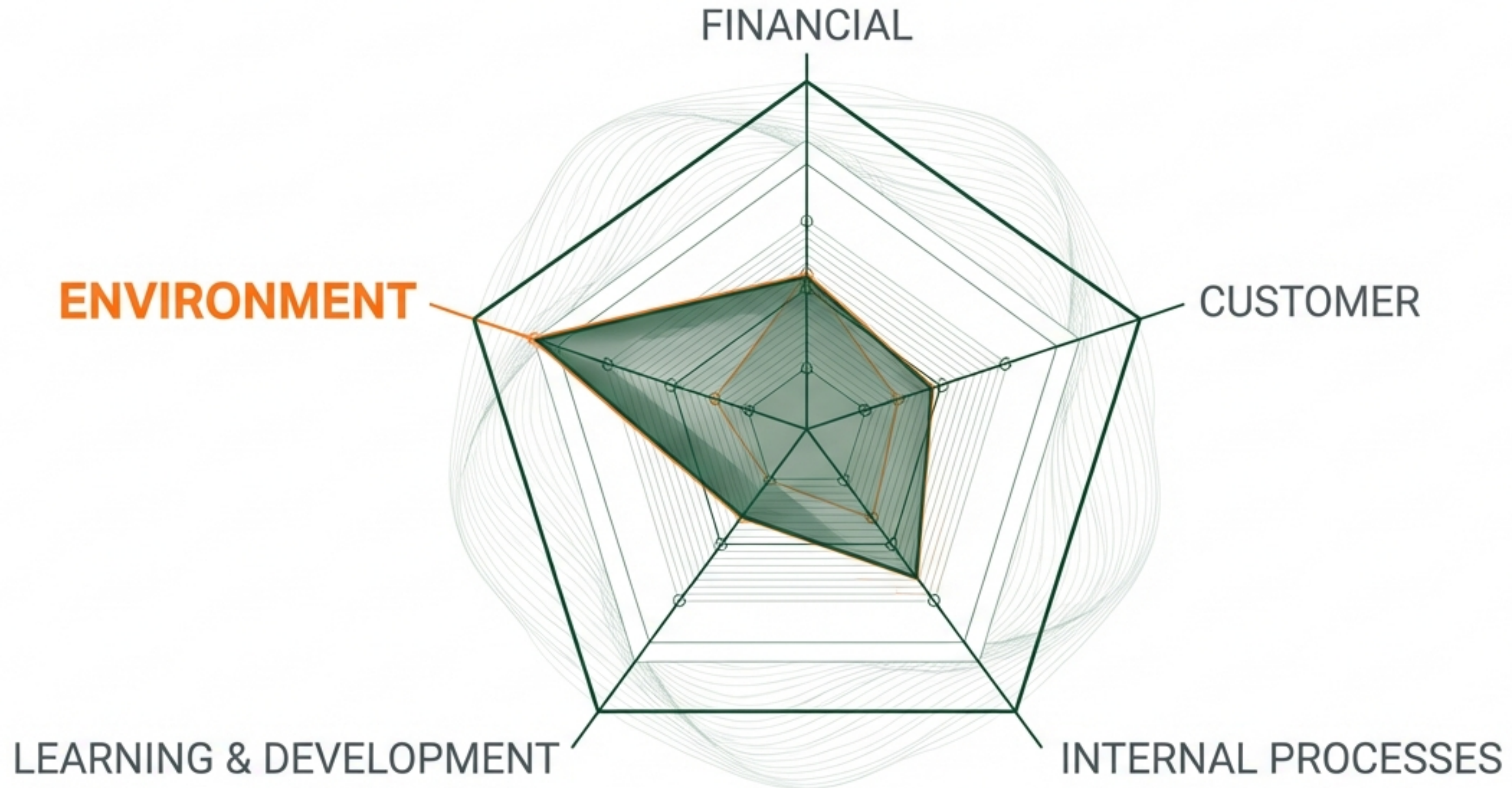
Investments made to enhance corporate brand reputation regarding environmental responsibility.



THAI AIRWAYS: 'Green' aviation operations creating a socially responsible brand.

THE BALANCED SCORECARD

Measuring performance beyond the bottom line.



CASE STUDY: BANGCHAK PETROLEUM

Granular Cost Tracking

PRODUCT OUTPUTS	NON-PRODUCT OUTPUTS / WASTE
• Crude Oil	• Sub-standard Oil
• Chemicals	• Waste Water
• Energy	• Excess Chemicals
	• Prevention Costs (Monitoring)

Recycling Benefits: Revenue from waste reuse.

CASE STUDY: PTTGC

When Contingent Costs Become Reality

EVENT: RAYONG OIL SPILL (2013)
CAUSE: 16-inch crude oil pipe leak.

- Ecosystem destruction (Coral/Beach)
- Collapse of local fishery livelihoods
- Tourism industry loss

THE PATH TO SUSTAINABLE ADVANTAGE



GOVERNANCE



EMA COST ANALYSIS



STRATEGIC DECISION

EMA is not just about saving the environment; it is about saving the business.

Evaluate your hidden costs today.