

# A Importância da Gestão de Ativos para a Sustentabilidade Empresarial: Financeira – Ambiental - Social

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# Lets make AM Relevant to Sustainability





The role of Maintenance & Asset Management in Sustainability & ESG (Environment, Social, Governance)

#### **OBJECTIVES**

- GFMAM society members can enhance visibility for: "The role of Maintenance & Asset Management in Sustainability & ESG".
- Raise the credibility and relevance of GFMAM/ABRAMAN
- Provide communication opportunity to experts who want to know more about the role of Maintenance & Asset Management in Sustainability & ESG.
- Publication of a document about GFMAM's view or opinion for the role of Maintenance & Asset Management in Sustainability & ESG.

#### TYPE 4

Anyone in GFMAM members can join in.



# **Buckminster Fuller – Spaceship Earth Asset**

We humans are unable to take in enough energy through our skins to keep alive.

We need the biological life-sustaining system that the vegetation or land and the algae in the sea, employing photosynthesis, to take the correct amount.

But we can't eat all the vegetation (we just can eat very little of it).

But insects and Other animals and creatures can, so that we get energy by taking milk and meat from them.

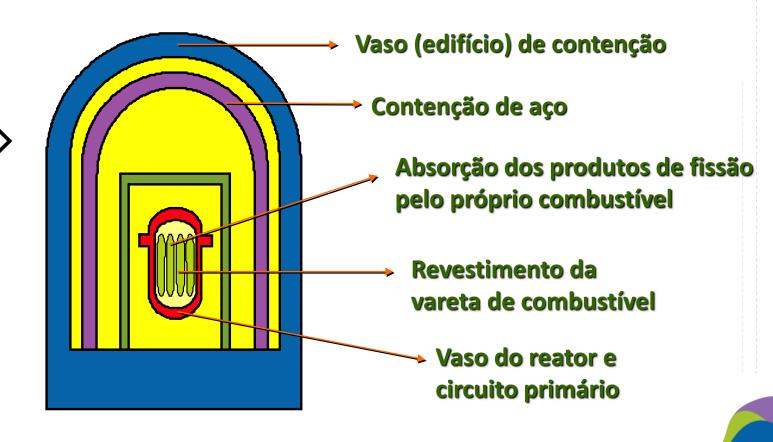
We have been mis-using, abusing, and polluting the extraordinary Chemical energy-interchanging system for regenerating all life abord our planetary spaceship.

# Ativos de Alta Confiabilidade



# BARREIRAS FÍSICAS MÚLTIPLAS CONTRA A LIBERAÇÃO DE PRODUTOS RADIOATIVOS

Relutância em simplificar (Redundâncias e defesas em Profundidade)



# Porque então isso acontece?





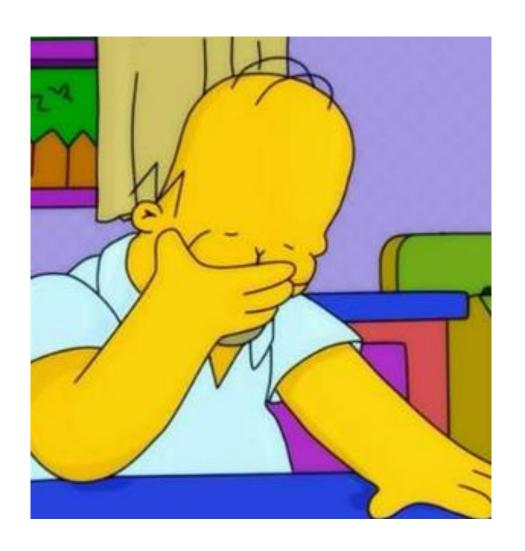






# Foi a "encrenca" da manutenção





"Quando tudo vai bem, ninguém lembra que existe.

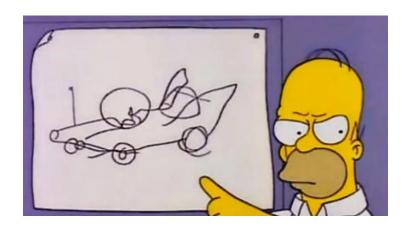
Quando algo vai mal, dizem que não existe.

Quando é para gastar, acha-se que não é preciso que exista.

Porém, quando realmente não existe, todos concordam que deveria existir.



### Avião não cai! É derrubado pelo projeto, operação ou manutenção



Projeto



Operação



Resultado



Manutenção



# **Evitar:**

Gestão de Ativos Classe Mundial

e

Gerenciamento da Manutenção Fundo de Quintal.

## **3D World**









**Decarbonisation** 

Digitisation

**Decentralization** 

# **4F Organizations**

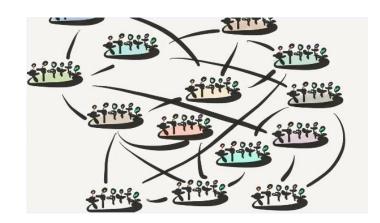




**Fast** 



Fit



Flat



Free

# **3P Principles**



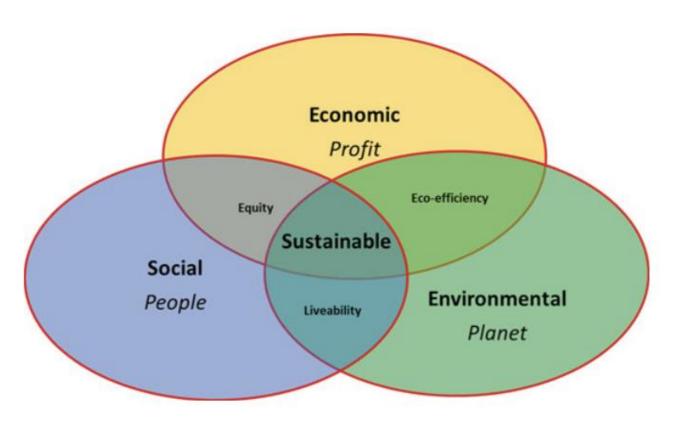


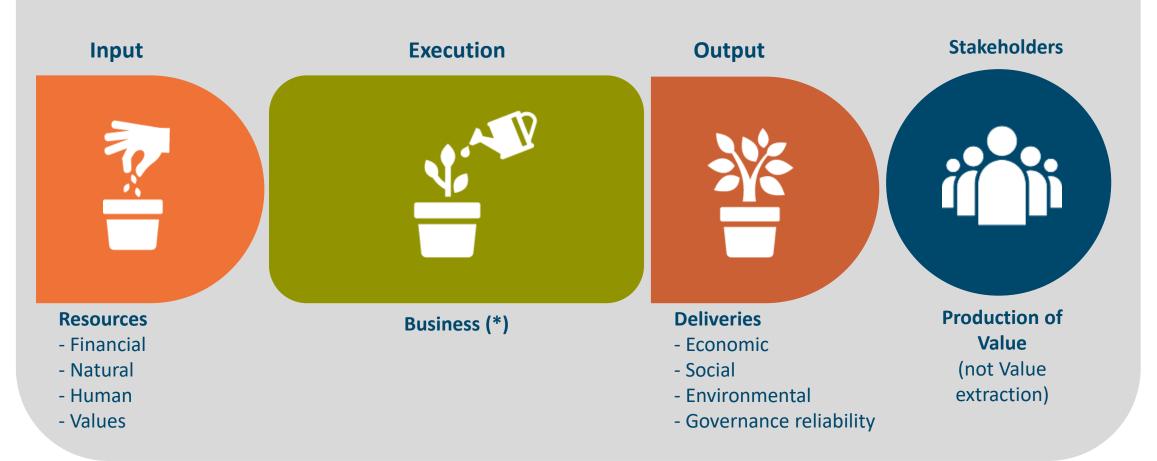
Fig. 2.1 The three dimensions of sustainability

ESG or 3P - People, Planet, Prosperity (original profit).

#### **Business (& Asset Management)'s reason for being**



### Trends, Environments, Scenarios and Responsibilities



(\*) Organizations, public and private companies, of any size, sector and nature; governments and institutions

### Value Generation x Value Extraction



A growing number of examples show that sustainability initiatives are a great catalyst to creating profit as well as new business opportunities

**Conscious Culture** 

We are committed to creating

a great place to work by

promoting and instilling a healthy workplace culture.

A model of capitalism should be reinvented (**CONSCIOUS CAPITALISM** – John Mackey et all from Chicago School together with Milton Friedman), so that it rewards value creation, not value extraction.

Achieving this vision is central to our ability to run our businesses profitably and generate long-term value

Reinventing capitalism to reward:

- true value creation, not value extraction;
- building long-term resilience;
- and taking a regenerative approach to business sustainability.

#### **Higher Purpose**

Our ambition is to positively change the perception of the IT professional by cultivating environments of trust for all our stakeholders.

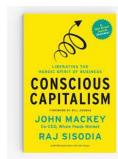


#### **Conscious Leadership**

We model and grow servant leaders who embrace personal awareness and the guiding priciples of our business.

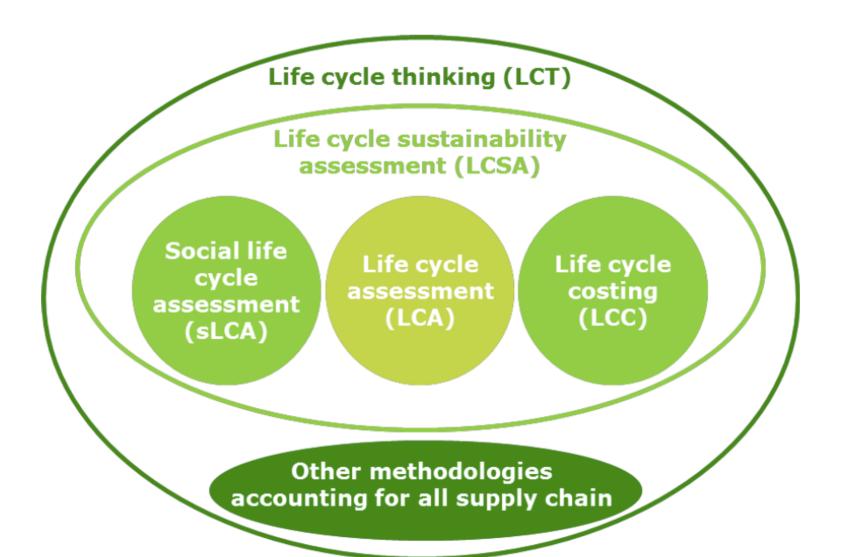
#### Stakeholder Orientation

We place an emphasis on creating value for ALL involved in Improving's ecosystem.



## **LCT - Life cycle thinking**





# **LCT - Life cycle thinking**





# Commitment to the WORLD: the UN SDGs

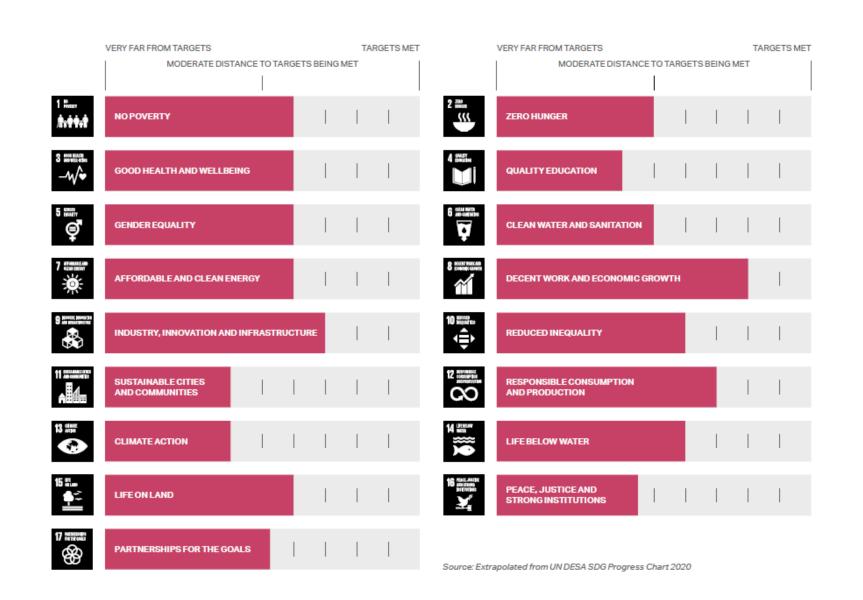


The **SDGs (Sustainable Development Goals)** represent the **goals of the UN 2030** Agenda, which aims at a profound transformation of the world in which we live. They take into account the Millennium Goals and what has not been achieved. They are the dimension of daring that is necessary to set the world on a sustainable and robust path.



#### OVERVIEW OF SDG PROGRESS (EXTRAPOLATED FROM UN DESA SDG PROGRESS CHART 2020)





### **Mapping ESG to asset management**



#### Pathway to ESG

**ESG: Typical Elements** 

#### Environment

- Energy Use
- Waste
- Pollution
- Resource Utilization

#### Social

- Supply Chain ESG
- Community Engagement
- Employees(H&S)
- Customer (Quality)

#### Governance

- Transparency
- Reporting
- Stakeholder Engagement
- Conflict of Interest

#### Related AM Aspects

#### Environment

- Performance Assessment
- Asset Condition
- Asset Strategy
- Optimization

#### Social

- Criticality Assessment
- Risk Profiling
- Operational Excellence
- Employee Engagement

#### Governance

- Program Implementation
- · Performance Measurement
- Management Oversight
- Scorecards and Dashboards

#### Programmed Success

#### Assess Present State

- Operational Practices
- Work Management
- Reliability Programs
- Performance Programs
- Planning
- · Strategic Alignment

#### Identify Strengths and Weaknesses

- Maturity
- Best Value Opportunities
- Cost
- Change Challenges

#### Roadmap/Journey

- Timing and sequence of change
- Articulation of Plan

Source: Asset Management Enabling Environment, Social, and Governance (ESG) Principles, ALLIED RELIABILITY & MACNEIL ASSET PERFORMANCE MANAGEMENT, 2021

# Mapping ESG to asset management competencies



# ENVIRONMENT

#### Reduced energy consumption:

- Optimizing processing
  - Controls
  - Monitoring
  - Analytics
- Reducing energy losses
  - Losses Monitoring
  - Efficiency Programs
- Optimizing Maintenance
- Performance Management

#### Waste Reduction

- Better use of raw material:
  - Controls
  - Monitoring
  - Analytics
- Enhanced operational practices
- Competency based training
- Performance Management

#### Pollution Reduction

- Emissions Reduction
  - Controls
  - Monitoring
  - Analytics
- Maintenance Optimization
- Competency based training
- Performance Management

#### Resource Utilization:

- Continuous Improvement
- · Optimizing Maintenance
- Work Prioritization
- Risk Identification
- Risk Based Decision Making
- Climate Adaptation Planning
- Performance Management

Source: Asset Management Enabling Environment, Social, and Governance (ESG) Principles, ALLIED RELIABILITY & MACNEIL ASSET PERFORMANCE MANAGEMENT, 2021

# Mapping ESG to asset management competencies



# SOCIAL

#### Employee Health and Safety:

- Criticality Assessment
- · Asset Condition
- Risk Determination
- Program Design
- Maintenance Strategy Design
- Operational Excellence
- Performance Management

#### Customer - Product and Service Quality:

- Criticality Assessment
- Asset Condition
- Risk Determination
- Risk Based Decision Making
- Continuous Improvement
- Performance Management

#### Community:

- Criticality Assessment
- Asset Condition
- Risk Determination
- Risk Based Decision
- Climate Adaptation Planning
- Operational Excellence
- Performance Management

#### Supply Chain:

- Criticality
- Risk Based Decision Making
- Performance Management

Source: Asset Management Enabling Environment, Social, and Governance (ESG) Principles, ALLIED RELIABILITY & MACNEIL ASSET PERFORMANCE MANAGEMENT, 2021

# Mapping ESG to asset management competencies



# GOVERNANCE

#### Transparency:

- Maintenance Strategy Design
- Program Design
- Risk Based Decision Making
- Comprehensive Measures
- Data Management

#### Reporting:

- Independent Report Generation
- Automated Reporting
- Self-Audit Built into Programs
- Rigorous Management Review Process

#### Stakeholder Engagement:

- Maintenance Strategy Design
- Risk Determination
- Risk Based Decision Making

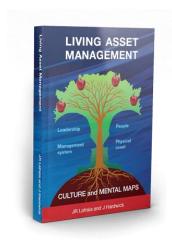
#### Conflict of Interest:

- Risk Based Decision Making
- Self-Audit built into core Programs
- Data Management
- High Degree of Automated Reporting

Source: Asset Management Enabling Environment, Social, and Governance (ESG) Principles, ALLIED RELIABILITY & MACNEIL ASSET PERFORMANCE MANAGEMENT, 2021



## **Asset Management Think Tank**



The Living asset Management Think Tank Inc. is a group of internationally based, passionate asset management professionals who firmly believe in the value that asset management as a discipline, can provide asset intensive organisations.

The Think Tank provides a forum where fresh ideas and concepts that enhance that value are discussed and social outcomes – for organisations and individuals alike across the globe.

The Think Tank recognises that thought leadership is this discipline is not bounded by geography or professional background and so encourages participation from anyone with a similar passion.







John Hardwick



Martin Kerr



Michael Killeen



Peter Kohler



Sally Nugent



# Muito obrigado(a)!

