Project Management e sostenibilità: analisi nel contesto Healthcare

Giulio Iachetti – Teresa Iorfida

PM expo 2025

Istituto Italiano di Project Management

presenta:

PMexpo

Roma, 14 novembre 2025

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Giulio Iachetti | LinkedIn

Laureato in Ingegneria Meccanica Biomedica ha conseguito Master in Management Sanitario, Master di Specializzazione in Ingegneria Clinica e Master in Business Administration.

Ha sviluppato competenze in Servizi di Gestione di grandi parchi tecnologici nei primi 10 anni di percorso professionale, specializzandosi nei successivi 10 in ambiti di realizzazione e conduzione di Servizi complessi - Alta Tecnologia e sviluppando soluzioni aziendali di Project e Portfolio Management.
E' docente di Project Management per ALTEMS – Università Cattolica e Coordinatore Scientifico dell'AIIC - Associazione Italiana Ingegneri Clinici per i corsi di Project Management

E' Direttore della UOC Coordinamento Investimenti e Progetti dell'Ospedale Isola Tiberina - Gemelli Isola

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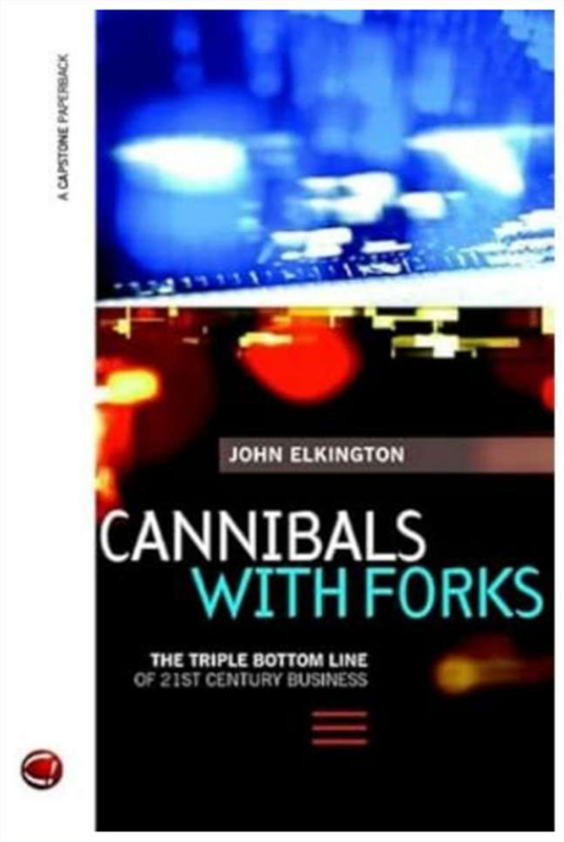
Oltre 25 anni di esperienza nell'Industria Farmaceutica, Consumer Healthcare e Cosmesi, ha ricoperto ruoli manageriali in ambito R&D, Qualità, Affari regolatori, Portfolio, Program & Project Management, PMO, Business Strategy and Transformation, Merge&Acquisition, Risk Management.
Ha guidato con successo progetti strategici di innovazione e change management, in contesti multiculturali e in complesse organizzazioni a matrice e realizzato programmi aziendali finalizzati alla crescita di maturità di Project Management.
Ha coordinato a livello nazionale e internazionale le attività dei 'Women Employee Resource Groups' in promozione della cultura di Diversity Equity & Inclusion.
Attualmente svolge attività di consulenza, docenza, progettazione di percorsi di formazione manageriale nell'area di Project Management, Leadership e DE&I.
Relatrice e autrice, collabora con Università e Associazioni professionali.

Intro

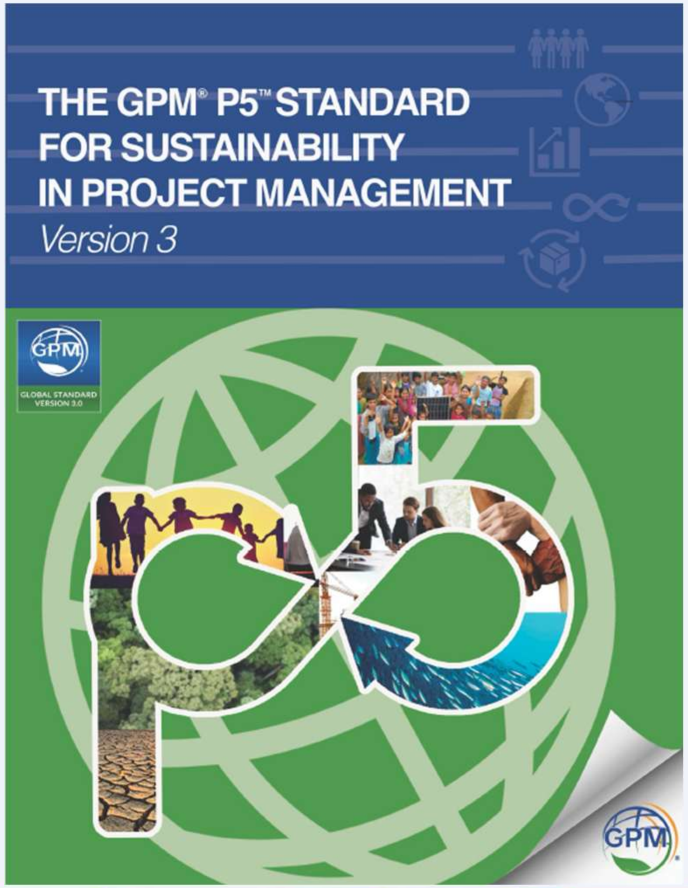
At the top of the corporate agenda…



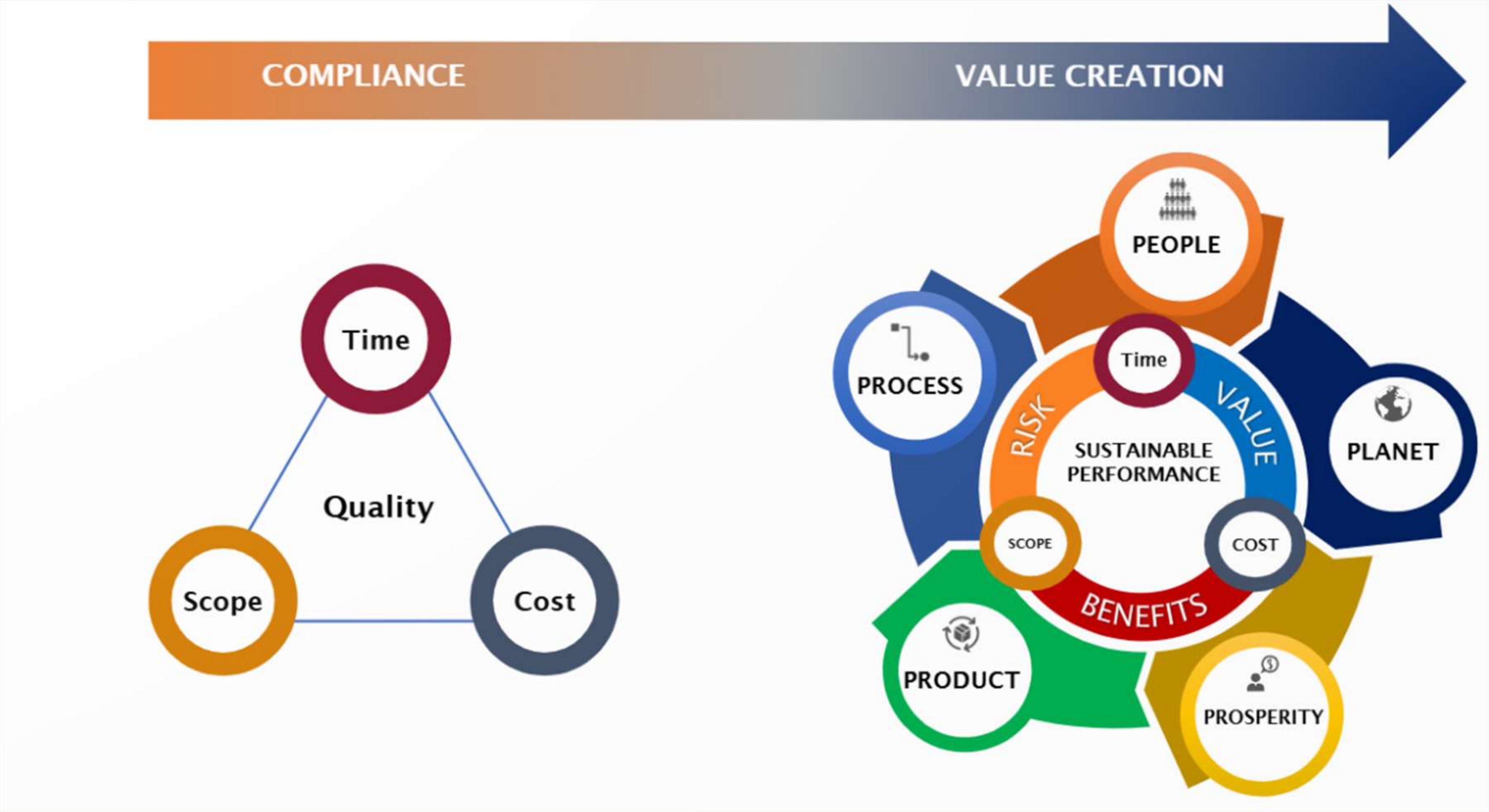
Ed. Capstone Publishing Ltd - 1997

Standard

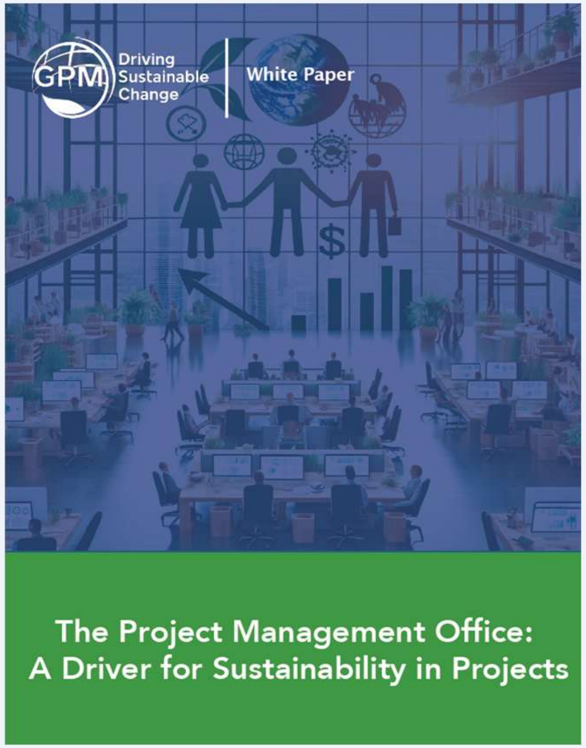
PM Standard


THE GPM® P5™ STANDARD
FOR SUSTAINABILITY
IN PROJECT MANAGEMENT
Version 3
GPM
GLOBAL STANDARD
VERSION 3.0
GPM

5 P Sustainability Project Management – Keyword: value



PMO Principle



Principle 1: Senior Management Sponsorship and Engagement. The scope and effectiveness of the PMO is defined by the level of sponsorship and engagement from senior management.

Principle 2: Governance Alignment. The structure and function of a PMO is designed to fit within and actively support overall organizational governance. The PMO needs to agree with its sponsor about its mandate and the decisions it is authorized to make. It must ensure alignment with the departments involved in delivery such as Research & Development, Engineering, Finance, Manufacturing, Procurement, and Human Resources

Principle 3: Consistent, Accurate, Timely, and Transparent Information. The PMO ensures consistent, accurate, timely, and transparent information to underpin decision-making. In order to be recognized and accepted as the custodian and champion of project, program, and portfolio information, the PMO must ensure transparency from source to the point of delivery.

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Principle 4: Trusted Challenge Partner. The PMO provides support for objective, rational, and constructive challenges of project, program, and portfolio issues. The goal of this principle is to ensure key decision points receive appropriate scrutiny and challenge. The role of the PMO is to help the decision maker by ensuring they understand the alternatives, the implications of the decisions, and the expected outcomes.

Principle 5: Adaptive Capabilities and Services. The capabilities and services provided by the PMO must be tailored to the needs and culture of the organization in which they operate. The size, structure and services provided by a PMO is always contingent on its environment. All PMOs are required to adapt their services to the environment in which they operate and the people within that environment.

Principle 6: Leads by Example. The PMO exhibits appropriate behaviors and demonstrates the value of recommended processes and systems. PMOs need to be able to provide examples of the successful use of its services, and coaching on why alternatives would lead to a less successful outcome.

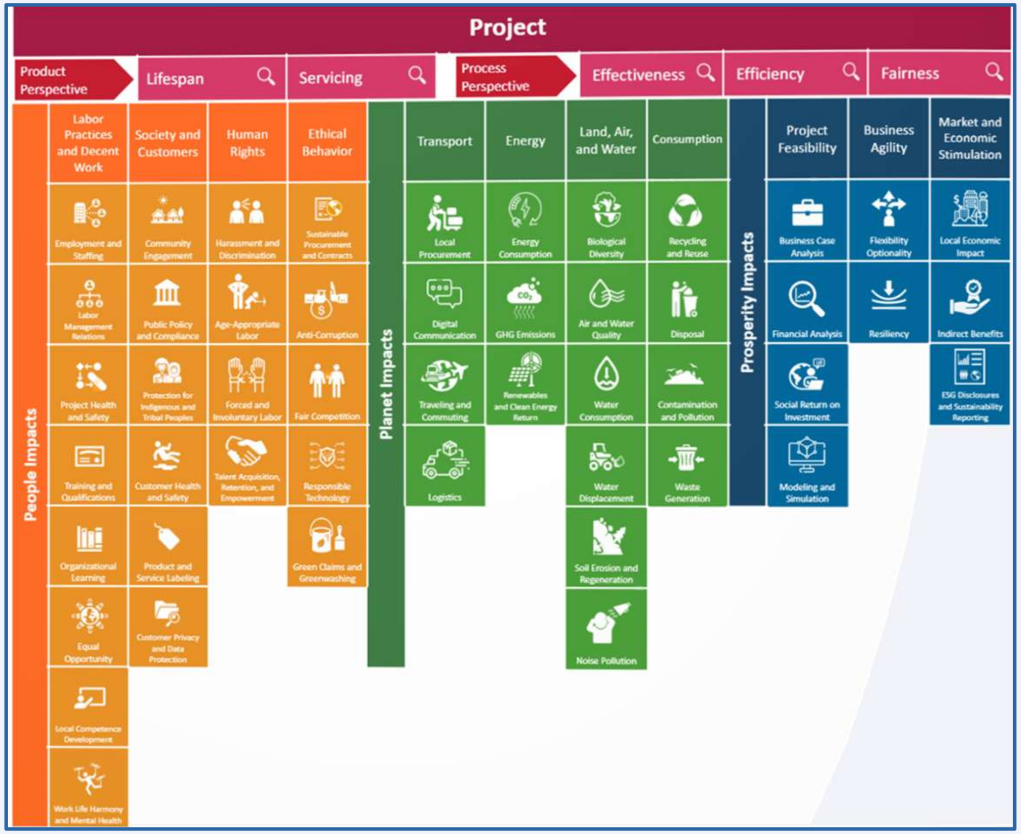
Principle 7: Continuous Improvement Mindset. The PMO looks to improve itself and its contribution to successful outcomes through continuous improvement of its services. In improving the effectiveness of a service, the aim is to increase the impact fullness of the service for each and every PMO client. Sometimes the effectiveness of one service is improved by introducing one or more additional services. Improvements can also provide the opportunity to demonstrate or pilot a new methodology, or part of a methodology, or a new tool or technique.

Project Management & Sostenibilità. Radici lontane

Founded in **2009**, GPM® is the world's leading organization driving sustainability within the project management profession and advocating for the project profession within the sustainability domain

Since **2013**, GPM has been an active member of the UN Global Compact, becoming the first project management organization to join this global initiative

GPM P5 Standard for Sustainability in Project Management

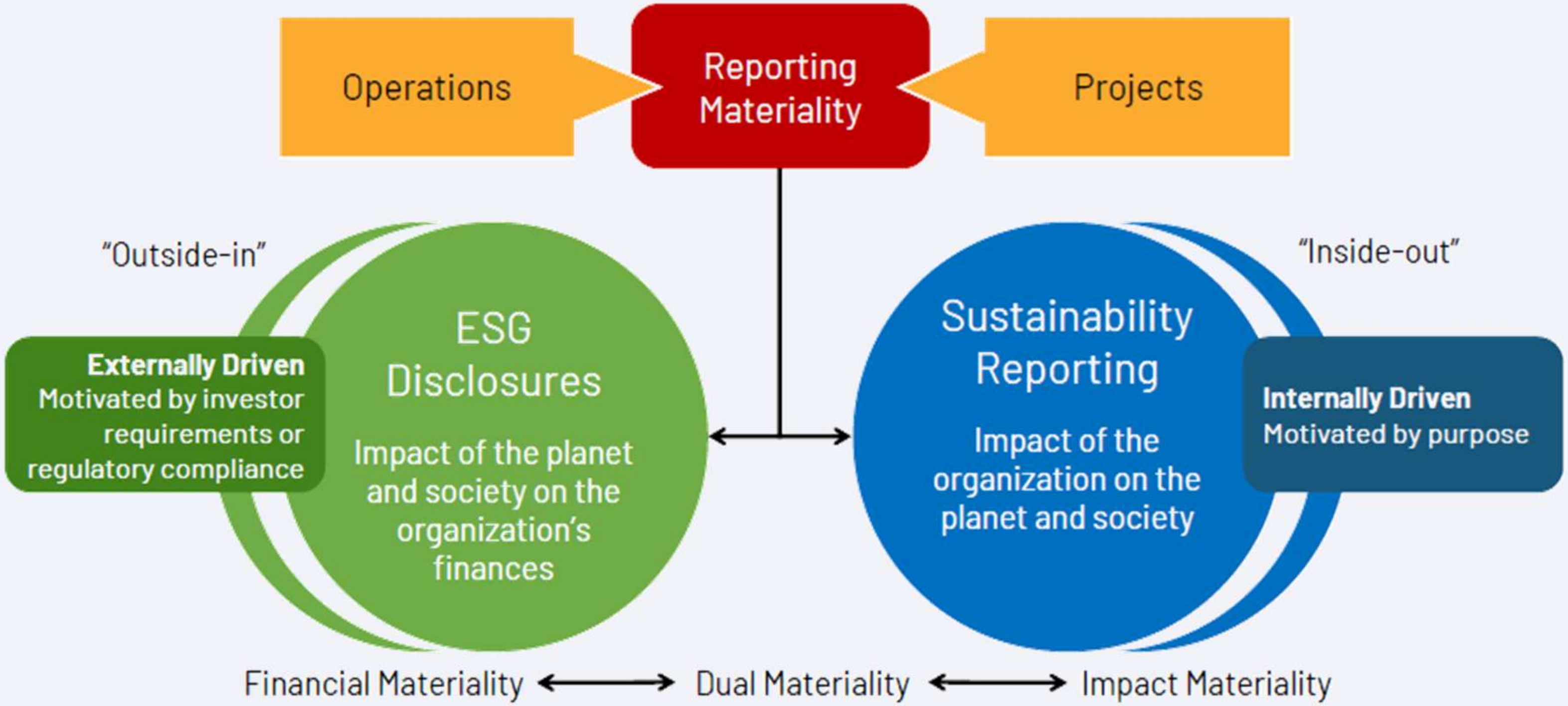


https://gpm.org/

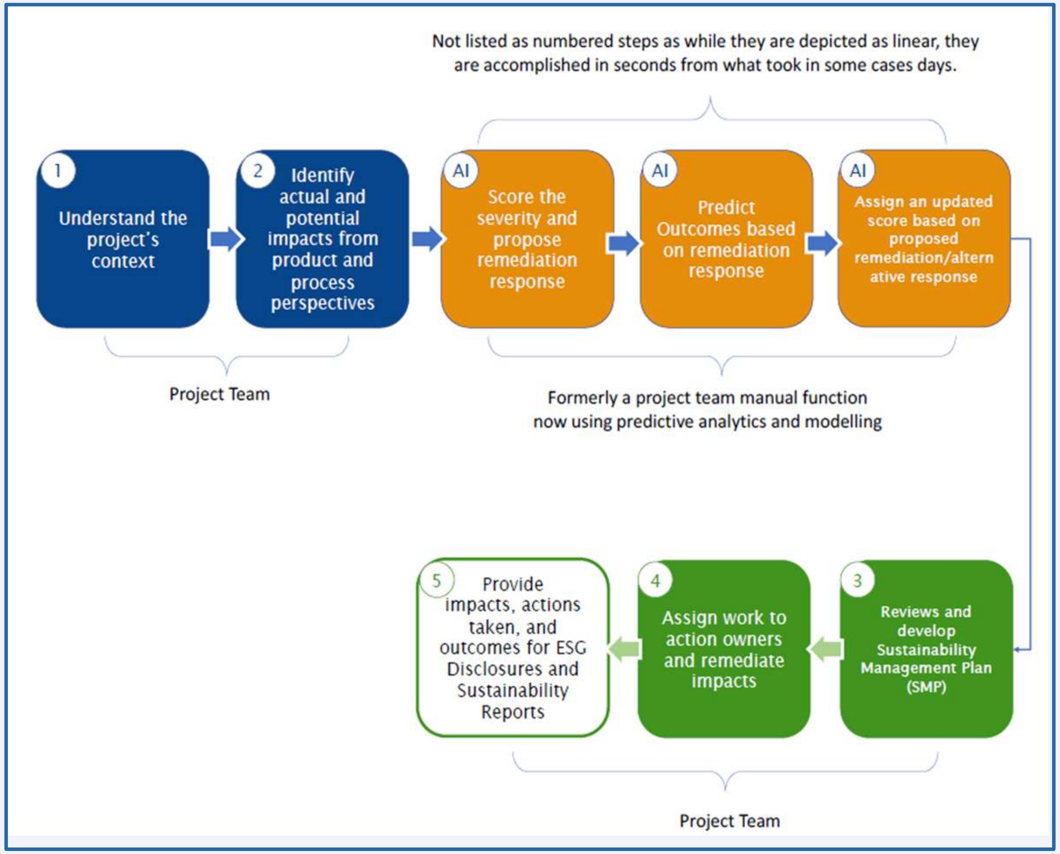
https://www.un.org/sustainabledevelopment/news/communications-material/

The Sustainable Development Goals are a call for action by all countries – poor, rich and middle-income – to **promote prosperity while protecting the planet.** They recognize that ending poverty must go hand-in-hand with strategies that **build economic growth** and address a range of social needs including **education, health, social protection, and job opportunities**, while **tackling climate change and environmental protection.**

Operations & Project in Sustainability



PM, Predictive Analysis & AI



GMP - Future-Proofing Projects: The Role of Predictive Analytics in Sustainability

Agile & Sustainability

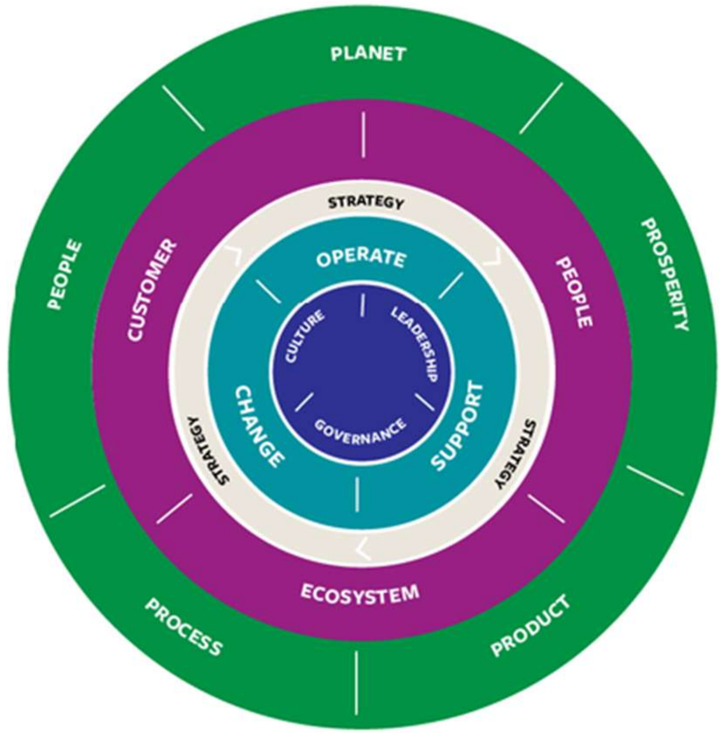
Sustainable Agile Culture
“Being sustainably agile”, in an organisation’s culture, leadership and governance

Sustainable Agile Process
“Doing sustainable agility”, in business operations, change and support processes.

Sustainable Agile Strategy
Ensuring strategic hypothesising, experimenting and learning

Sustainable Agile Value Delivery
Ensuring value is delivered by the organisation to its customers, its staff and its ecosystem

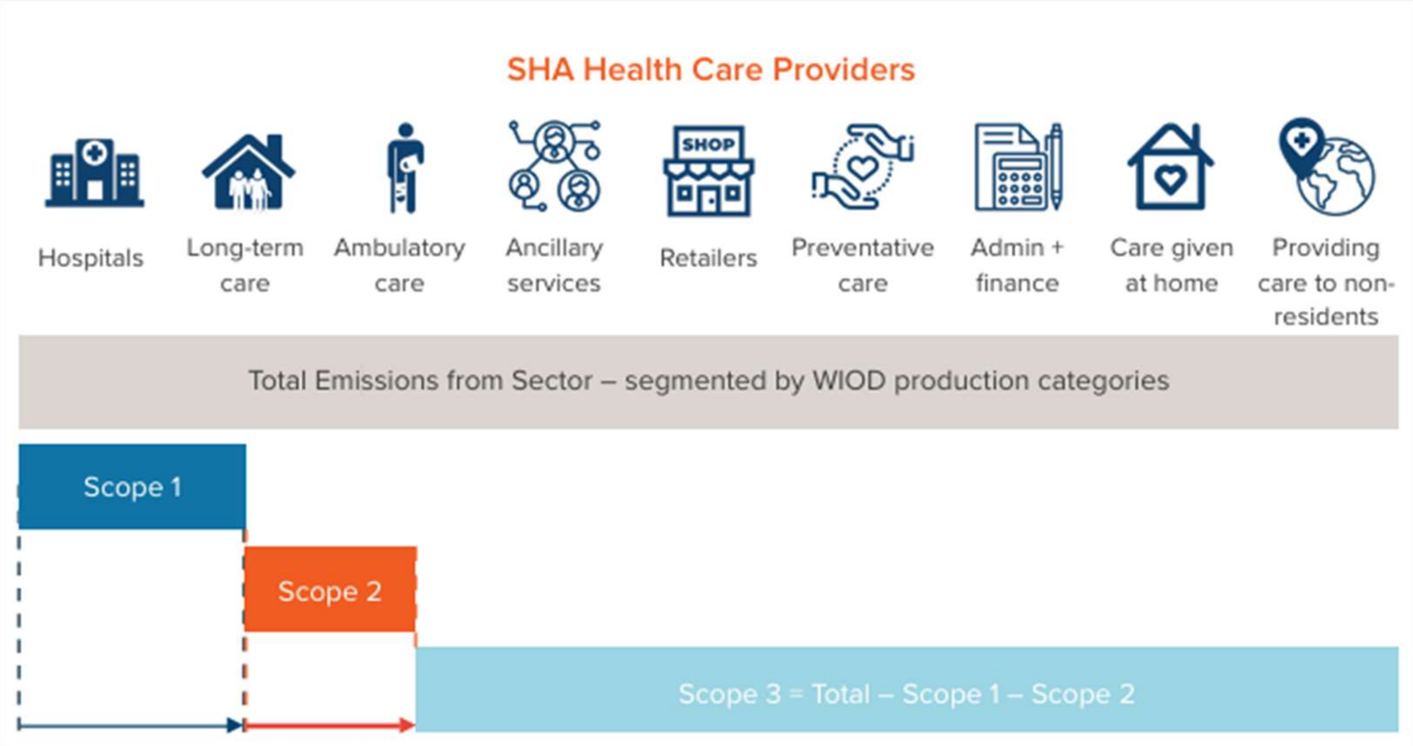
Sustainability Impacts
Business Impacts to People, Planet, Prosperity, through products and process.



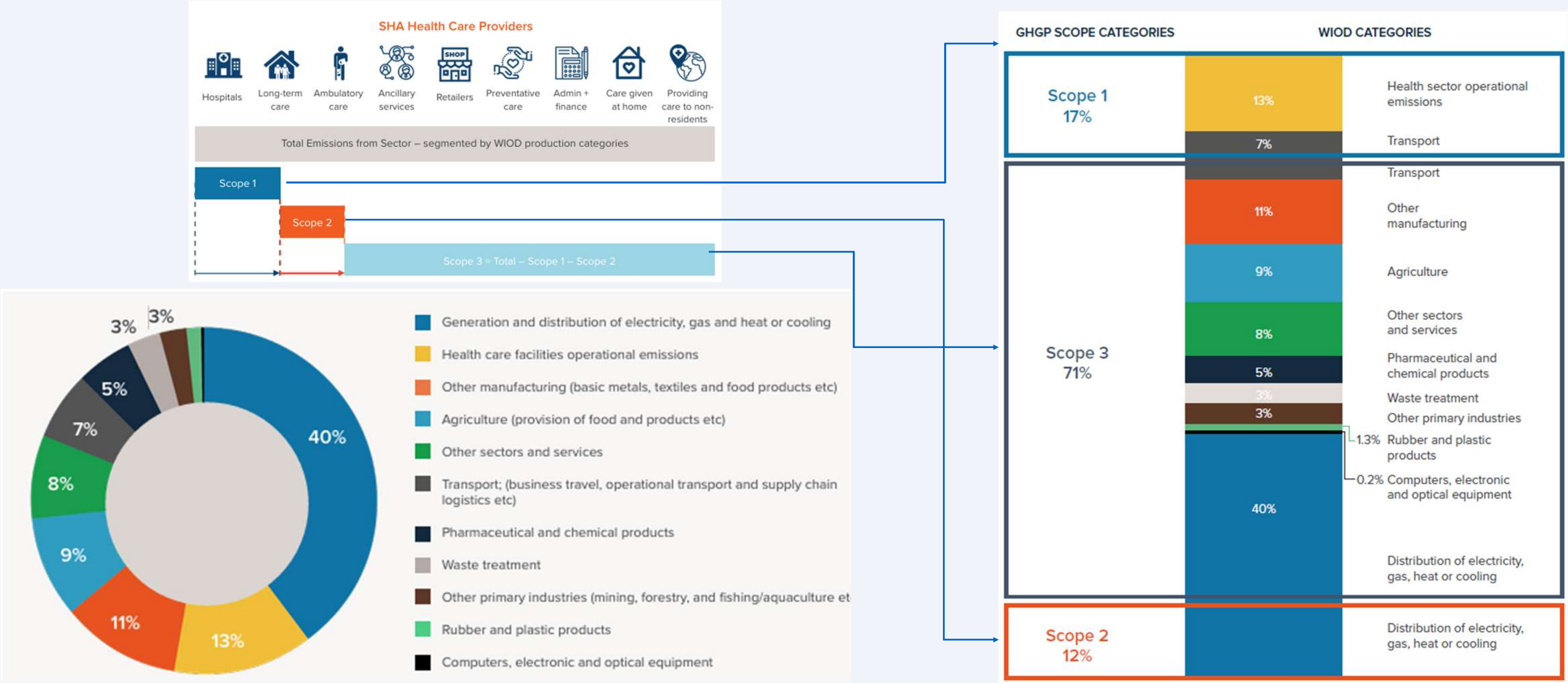
Impatto

Our footprint

SHA (WHO) - climate footprint assessment model



SHA (WHO) - climate footprint assessment model



IMPATTO AMBIENTALE DELL'INDUSTRIA FARMACEUTICA

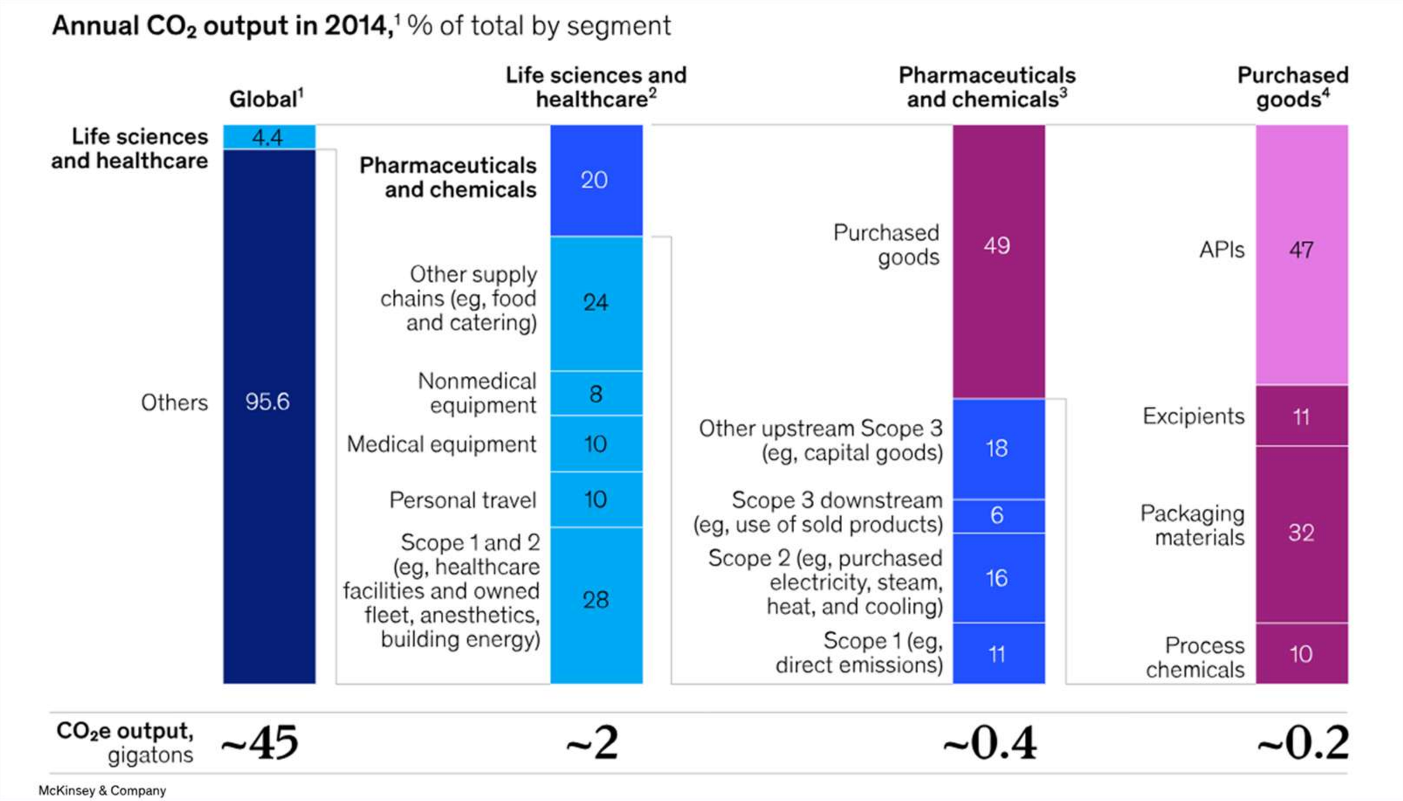
- Contribuisce a circa il **4-5% delle emissioni globali di gas serra**
- Secondo lo standard del Greenhouse Gas Protocol, si distinguono:

  Scope 1, emissioni **dirette** generate da fonti di proprietà o controllate dall'azienda;

  Scope 2, emissioni **indirette** legate **all'energia acquistata**;

  Scope 3, emissioni **indirette lungo l'intera catena del valore**, al di fuori del controllo diretto dell'azienda

Aspetto cruciale nel settore farmaceutico


Annual CO_2 output in 2014,[1] % of total by segment
Global[1]
Life sciences and healthcare[2]
Pharmaceuticals and chemicals[3]
Purchased goods[4]
Life sciences and healthcare
4.4
Others
95.6
Pharmaceuticals and chemicals
20
Other supply chains (eg, food and catering)
24
Nonmedical equipment
8
Medical equipment
10
Personal travel
10
Scope 1 and 2 (eg, healthcare facilities and owned fleet, anesthetics, building energy)
28
Purchased goods
49
Other upstream Scope 3 (eg, capital goods)
18
Scope 3 downstream (eg, use of sold products)
6
Scope 2 (eg, purchased electricity, steam, heat, and cooling)
16
Scope 1 (eg, direct emissions)
11
APIs
47
Excipients
11
Packaging materials
32
Process chemicals
10
CO_2e output, gigatons
~45
~2
~0.4
~0.2
McKinsey & Company

IMPATTO AMBIENTALE DELL'INDUSTRIA FARMACEUTICA

- In ambito farmaceutico, le emissioni "Scope 3" comprendono **tutte le fasi del ciclo di vita del prodotto**:

Produzione
Distribuzione
Utilizzo da parte del paziente
Smaltimento

- **Contaminazioni ambientali, generate dalla dispersione di principi attivi**

Accumulo nei suoli e nelle acque, alterazione degli equilibri ecologici e alimentazione fenomeni di resistenza antimicrobica

- **Gestione inefficiente dei rifiuti**
- **Uso massiccio di imballaggi monouso**, in gran parte **in plastica**

Azioni

Health Care Without Harm

2024 GLOBAL IMPACT REPORT

Healthcare's Climate Imperative

If the global health sector were a country, it would be the **5th largest greenhouse gas emitter**

The health sector produces pollution equivalent to **514 coal-fired power plants**

1.2 billion people could be displaced by climate change by 2050, straining healthcare facilities already at their limits.

1 in 12 hospitals worldwide could face total or partial shutdown from extreme weather by 2100, with Southeast Asia facing the highest threat.

6 million tons of waste is generated annually by the health sector, most of it plastic.

OUR PROGRAMMES

HCWH Europe advances its mission to transform the healthcare sector through three interconnected programmes: Climate-Smart Healthcare, Circular Healthcare, and Safer Pharma. Across these programmes, we implement projects, campaigns, and advocacy initiatives in collaboration with our members and partners.

The European healthcare sector is transformed into a net zero carbon and climate-resilient sector.

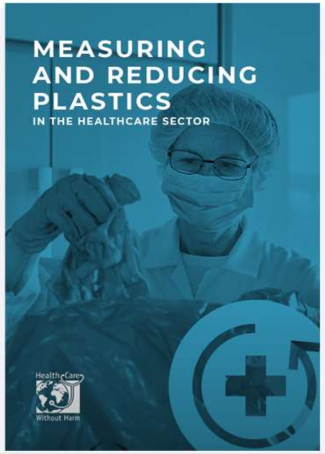
European health systems drive markets towards toxic-free products that minimise waste.

Pharmaceutical pollution and its contribution to antimicrobial resistance (AMR) is minimised.

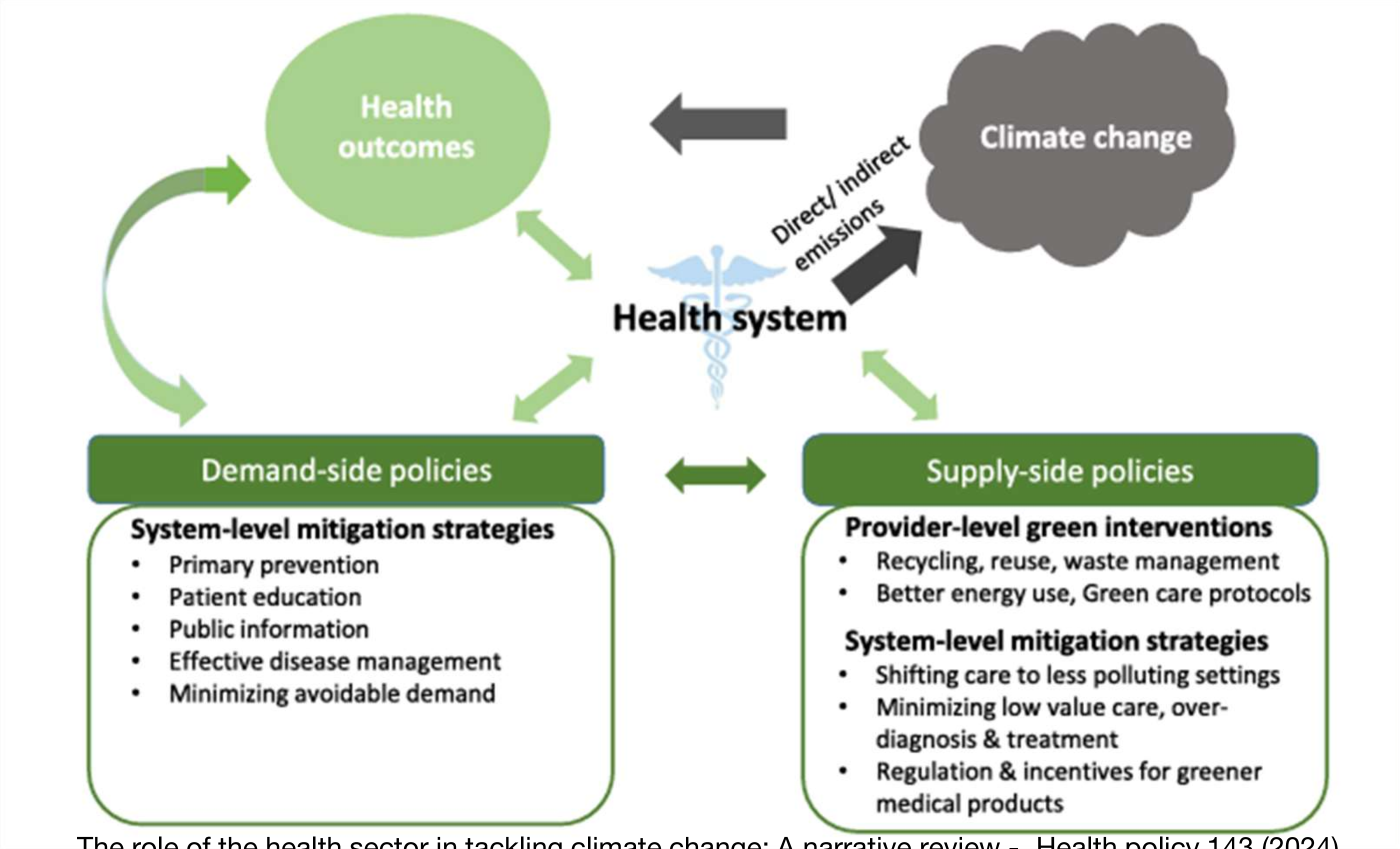
CLIMATE-SMART HEALTHCARE

CIRCULAR HEALTHCARE

SAFER PHARMA

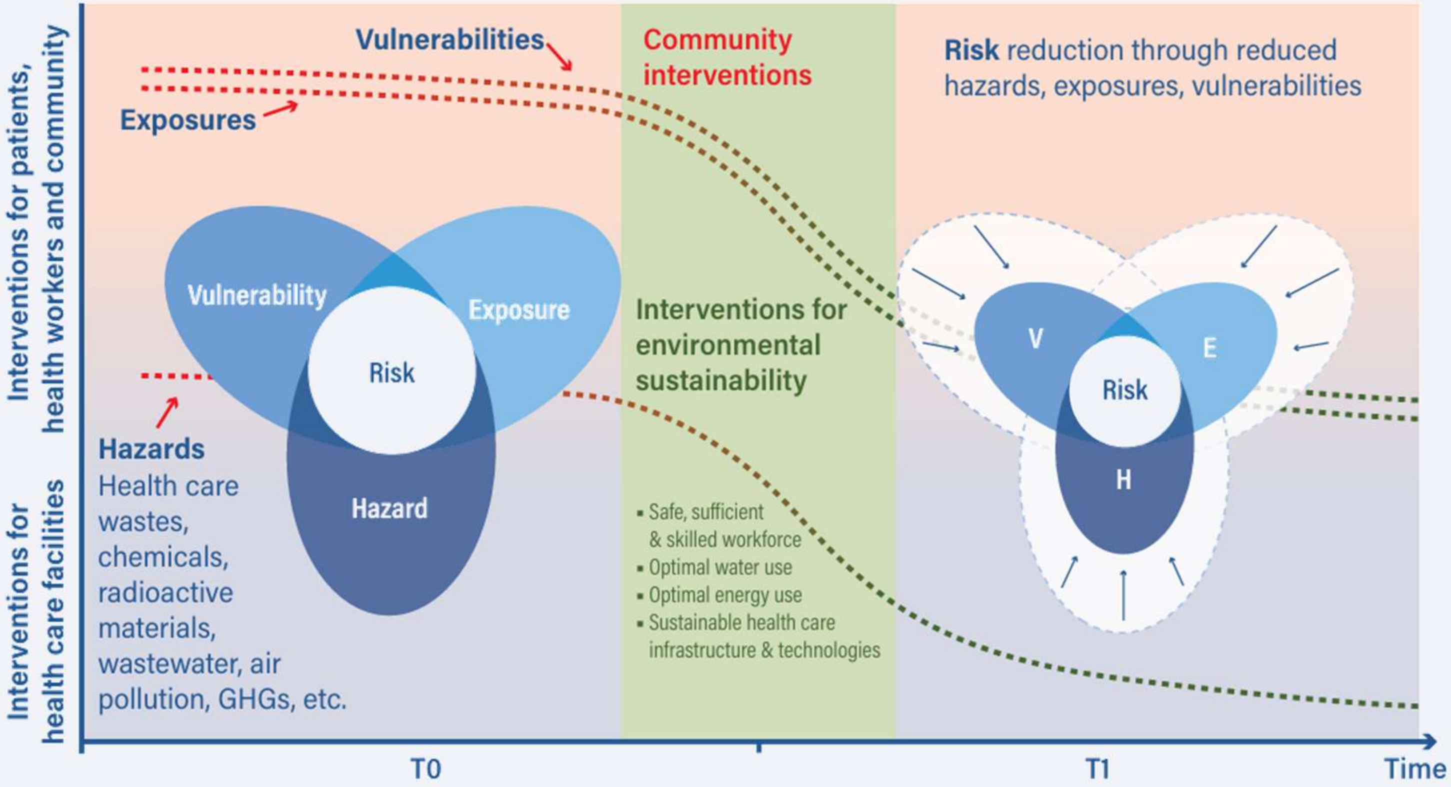


Demand- & Supply-side policies



The role of the health sector in tackling climate change: A narrative review - Health policy 143 (2024) 105053

Dimensioni di impatto nelle progettualità reali



WHO guidance for climate-resilient and environmentally sustainable health care facilities - World Health Organization (2020)

PM in action - Dimensioni reali di azione

1. RIFIUTI
   a. Implementare la raccolta differenziata e la riduzione dei volumi;
   b. Ridurre l'uso della plastica: rivedere il packaging del materiale sanitario, diffondere impianti di distribuzione acqua potabile;
   c. Riconsiderare modalità di smaltimento dei rifiuti sanitari: valutare impianti di sterilizzazione onsite.
2. ENERGIA
   a. Risparmio energetico: diffondere utilizzo luci a led, prevenire spreco illuminazione ambienti (es. con rilevatori di presenza)
   b. Utilizzare fonti alternative: fotovoltaico, eolico
3. PRESIDI/DISPOSITIVI
   a. Favorire utilizzo dei tessuti tecnici riutilizzabili (TTR) vs. tessuto non tessuto disposable (TNT) (per es. in sala operatoria)
   b. Favorire utilizzo di strumentario/presidi risterilizzabili
4. FARMACI
   a. Recuperare residui tossici (es. chemioterapici in UFA)
   b. Selezionare gas anestetici (es. eliminare quelli inquinanti con effetto serra)
   c. Prevenire danni da formalina: utilizzare dispositivi sicuri e /o impianti di captazione
5. ACQUA: MISURARNE E RIDURNE IL CONSUMO
6. CIBO: RIDURRE LO SPRECO

Da PS – Panorama della Sanità ANNO XXXVII • N. 7 LUG 2024 pagg. 20-23 IN VIAGGIO VERSO IL GREEN HOSPITAL di Lorenzo Sommella

PM in action - Purchasing

MEDICAL EQUIPMENT PROACTIVE ALLIANCE FOR SUSTAINABLE HEALTHCARE

SUSTAINABILITY CRITERIA FOR PURCHASING MEDICAL IMAGING DEVICES

LIST OF RELEVANT CRITERIA

MAY 2024

COCIR

COCIR GUIDELINES ON ENERGY SAVING ON CT

JANUARY 2014

CONTRIBUTION TO HEALTHCARE ENVIRONMENTAL SUSTAINABILITY

COCIR

COCIR GUIDELINES FOR USERS ON SAVING ENERGY

GOOD ENVIRONMENTAL PRACTICE

MRI

MAY 2015

Medical Equipment Proactive Alliance for Sustainable Healthcare

- COCIR (*www.cocir.org*)
- HEALTHTRUST PERFORMANCE GROUP (*www.healthtrustpg.com*)
- VIZIENT INC (*www.vizientinc.com*)

Sustanability – new dashboards to add

Metric	Units	U/S Production	U/S Use	CT Production	CT Use	MRI Production	MRI Use
Global warming: air	kg of CO2 eq. gases	0.5	0.6	4	2.7	6.1	13.7
Acidification: air	kg of SO2 eq. gases	2.60E-03	4.40E-03	2.00E-02	1.90E-02	3.10E-02	1.00E-01
Human health criteria: air	kg ofPM10 eq. gases (production);kg of PM2.5 eq. gases (use)	7.80E-04	2.70E-04	6.10E-03	1.10E-03	9.40E-03	6.30E-03
Eutrophication of air	kg of N eq	7.10E-05	0	5.30E-04	6.10E-08	8.50E-04	2.50E-07
Eutrophication of water	kg of N eq	3.40E-07	2.30E-06	2.50E-06	9.70E-06	4.10E-06	5.00E-05
Ozone depletion: air	kg of CFC-11 eq	9.10E-07	2.90E-08	3.00E-06	1.20E-07	1.10E-05	6.30E-07
Smog: air	kg of O3 eq. released	3.80E-02	3.00E-02	3.00E-01	1.00E-01	5.00E-01	7.00E-01
Ecotoxicity	kg of2,4-D emitted to continental water eq. (production); kg of 2,4-D emitted to continental soil eq.(use)	4.80E-05	5.00E-12	3.90E-04	1.10E-10	5.80E-04	7.90E-10
Human health cancer	kg of benzene emitted to urban air eq.	5.20E-04	3.80E-06	4.10E-03	1.60E-05	6.30E-03	8.20E-05
Human health: non cancer	kg of toluene emitted to urban air eq.	8.00E-01	5.10E-06	6.10E+00	2.20E-05	9.80E+00	1.10E-04

GLOBAL ELECTRONICS COUNCIL

Sustainability for a Connected Future

STATE OF SUSTAINABILITY RESEARCH

Medical Imaging Equipment

Prepared for Medical Equipment Proactive Alliance

Final

SFIDE E OBIETTIVI DI SOSTENIBILITA'

NET ZERO IMPACT ON CLIMATE

Il Green Deal europeo fissa l'obiettivo della neutralità climatica entro il 2050
Il pacchetto Fit for 55 impone un taglio del 55% delle emissioni entro il 2030

Coniugare innovazione, regolamenti europei e riduzione dell'impatto ambientale

La strategia UE per un'industria farmaceutica sostenibile si articola su 4 pilastri:

- **Accesso equo e risposte alle esigenze mediche insoddisfatte**
- **Competitività, innovazione e sostenibilità**
- **Preparazione alle crisi e sicurezza delle forniture**
- **Leadership normativa globale dell'UE**

AREE DI AZIONE

Catene di fornitura più sostenibili: dalla scelta delle materie prime fino al packaging, dalla produzione fino allo smaltimento.
Es. riduzione materiali di imballaggio (Scope 1&2), accordi di fornitura secondo standard di sostenibilità (Scope 3).

Decarbonizzazione: adozione di soluzioni tecnologiche e organizzative che favoriscano l'efficienza energetica, l'uso di fonti rinnovabili e la riduzione dell'impatto dei processi produttivi.
Es produzione di energia 'on site' attraverso l'istallazione di pannelli fotovoltaici, utilizzo di turbine a vento. (Scope 1&2); Transizione da vie di trasporto aeree verso via mare (Scope 3).

Gestione responsabile dei rifiuti farmaceutici: ridurre l'impatto degli scarti e promuovere modelli di economia circolare.
Es: utilizzo degli scarti per generare energia (Scope 1&2); utilizzo di biomasse vegetali di scarto per la produzione di attivi

Eco-Design: progettazione di prodotti e processi che tengano conto sin dall'inizio del loro impatto ambientale e sociale.
Es. Integrazione di tecnologie per migliorare i processi di sintesi di Active Pharmaceutical Ingredients (GreenChemistry) e di analisi di attivi e prodotti finiti (GreenLAB) (Scope 1, 2 &3); Utilizzo di blister in unico materiale.

Valore aziendale: sostenibilità come componente centrale della strategia e dell'identità aziendale.
Es: diffusione della cultura, obiettivi inseriti nel programma aziendale e risultati monitorati nella scorecard di performance.

Conclusioni

Conclusioni

FUTURO DELL'INDUSTRIA FARMACEUTICA

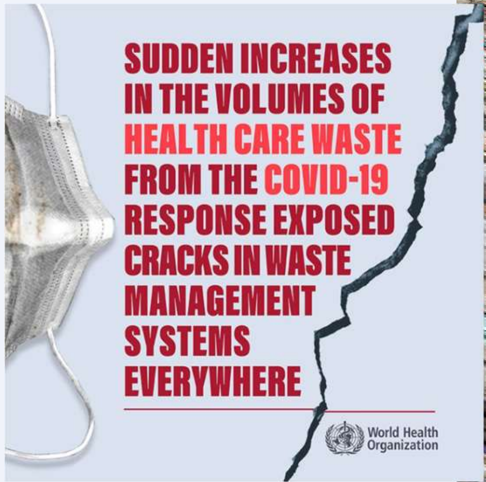
Innovazione scientifica e sostenibilità ambientale e sociale diventano forze convergenti nella trasformazione profonda imposta dalle sfide globali del cambiamento climatico

Non si tratta solo di sviluppare nuovi farmaci, ma di farlo in modo etico, trasparente e responsabile.

Conclusioni

Il principio che coloro i quali sono affidati a noi devono, prima di ogni altra cosa, non essere danneggiati, dev'essere riconosciuto altrettanto fondamentale per l'educazione, di quanto lo è per la medicina.

Karl Popper



Grazie per l'attenzione!

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Roma, 14 novembre 2025