



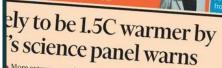


Global climate crisis: inevitable, unprecedented and irreversible

'code red' warning for

00

NANCIAL TIMES



dore extreme weather expected . Call for



"Climate change is the biggest global health threat of the 21st century"

## THE LANCET

## **HEALTHCARE**

in world's largest economies

4% of

global emissions

**AVIATION** 

2-3% of global emissions

2.4% of global emissions

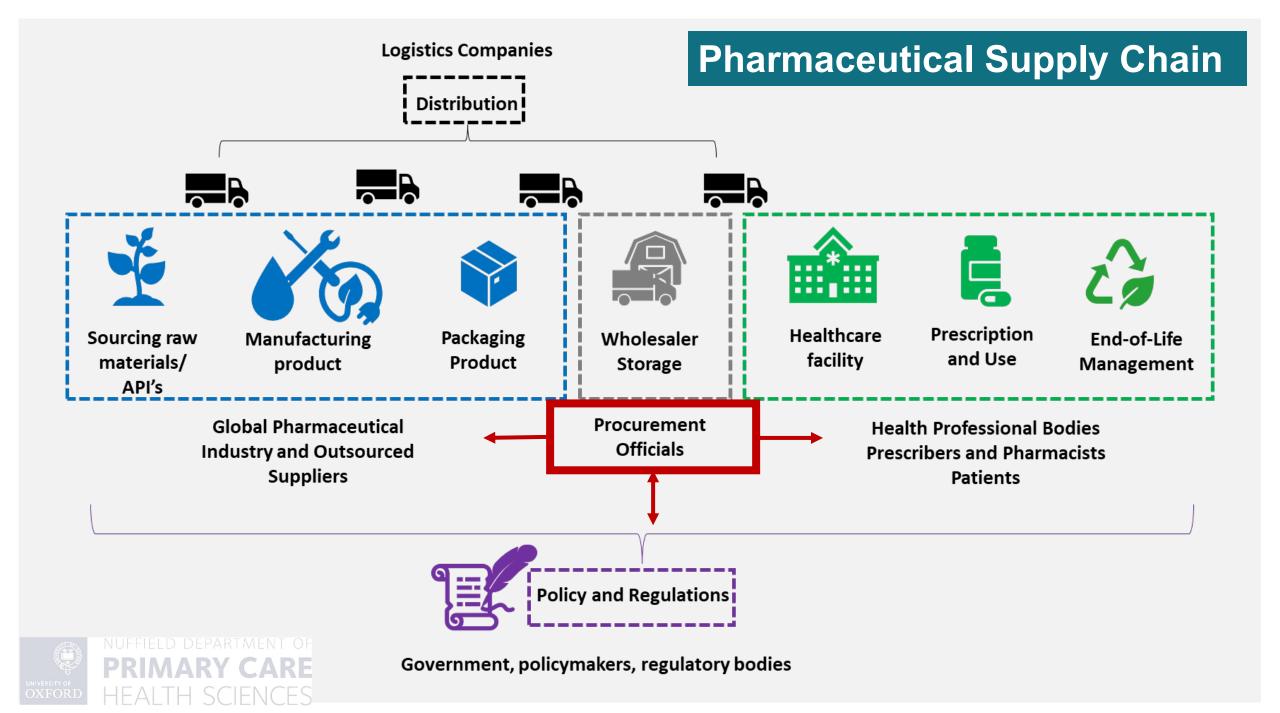
SHIPPING



+ / health organisations

from +50 countries

On the road to decarbonisation



### **Logistics Companies**

### **Pharmaceutical Supply Chain**

Distribution





Wholesaler Storage



Healthcare facility



Prescription and Use



End-of-Life Management

Procurement Officials

Health Professional Bodies
Prescribers and Pharmacists
Patients





Government, policymakers, regulatory bodies

Pharmaceutical Company Targets and Strategies to Address Climate Change: Content Analysis of Public Reports from 20 Pharmaceutical Companies

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Christopher C Winchester 2 and Sara E Shaw 1 and



### Sampling:

Largest 20 pharmaceutical companies by revenue

- Roche
- 2. Novartis
- B. AbbVie
- 1. Johnson and Johnson (J&J)
- 5. Bristol Myers Squibb (BMS)
- 6. Merck & Co./MSD
- 7. Sanofi
- B. Pfizer
- 9. GlaxoSmithKline (GSK)
- 10. Takeda

- 11. AstraZeneca
- 12. Amgen
- 13. Gilead Sciences
- 14. Eli Lilly
- 15. Novo Nordisk (NN)
- 16. Bayer
- 17. Boehringer Ingelheim (BI)
- 18. Astellas Pharma
- 19. Viatris
- 20. Teva Pharmaceuticals



### Data collection:

- Sustainability tabs
- 2020/2021 Company Reports



### Content analysis:

- Climate change targets
- Reported GHG emissions
- Emission reduction strategies

## **GHG Emissions**





**SCOPE 1** 

Emissions from owned sources



**SCOPE 2** 

Indirect energy emissions



**SCOPE 3** 

Other indirect emissions

## **Climate Targets**



### **Science Based Targets initiative**



### Net Zero Standard (April 2023)

### 1. Near-term target

$$\frac{Absolute\ reduction\ target}{Scope\ 1,2} = \begin{cases} Base\ year \leq 2020, & 4.2\% \times (Target\ year - Base\ year) \\ Base\ year > 2020, & 4.2\% \times (Target\ year - 2020) \end{cases}$$
 
$$\frac{Absolute\ reduction\ target}{Scope\ 3} = \begin{cases} Base\ year \leq 2020, & 2.5\% \times (Target\ year - Base\ year) \\ Base\ year > 2020, & 2.5\% \times (Target\ year - 2020) \end{cases}$$

### 2. Long-term target

a) Reduce scope 1, 2, and 3 emissions to zero or a residual level consistent with reaching net zero emissions (90%) with neutralisation of remaining emissions (10%), by 2050 or earlier.

### **Company Targets**

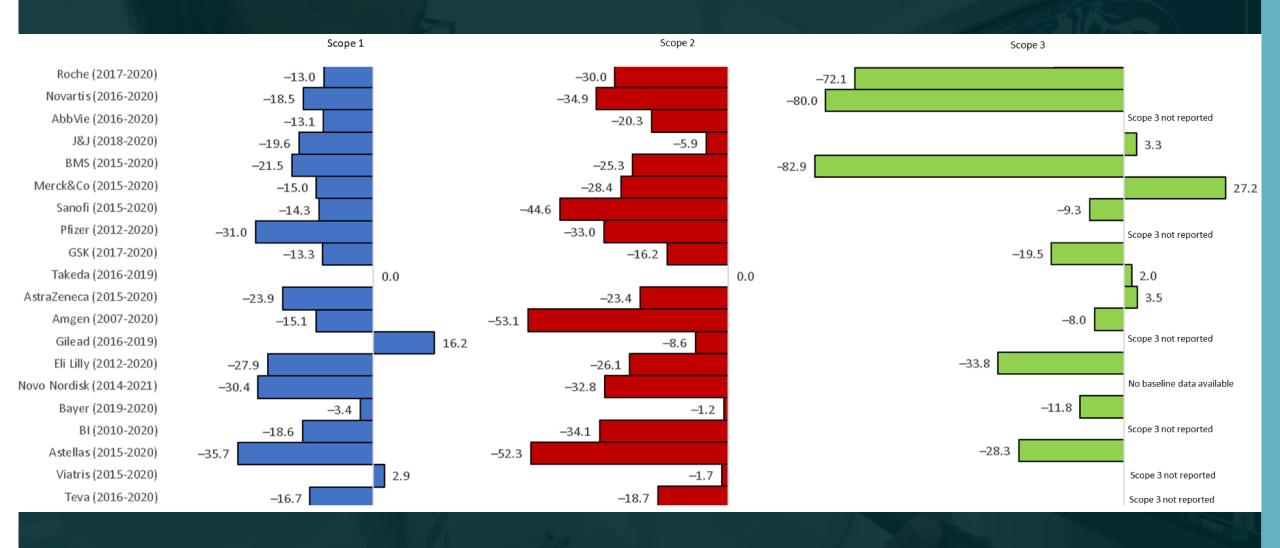
- 1. Do they have targets?
- 2. Do their targets cover all scopes (check footnotes!)?
- 3. Are their targets aligned with a 1.5\*C scenario (or at least 2\*C)?

2027 CARBON NEUTRAL Amgen (1, 2) 2030 **NET ZERO** Gilead (1, 2) 2030 **CARBON NEUTRAL** Johnson & Johnson (1, 2) Eli Lilly (1, 2040 2) Boehringer Ingelheim (1, 2) **NET ZERO** Novartis (1, 2, 3) Pfizer (1, 2, 3) Takeda 2040 (1, 2, 3)CARBON NEUTRAL BMS (1, 2) Merck & Co (1, 2) 2045 Sanofi (1, 2, 3) GSK (1, 2, 2030 3) AstraZeneca (1, 2, 3) Novo Nordisk (1, 2, 3)ABSOLUTE REDUCTION Teva (1, 2: -46%; 3: -25%) Viatris (1, 2: 2050 -42%; 3: -25%) Merck & Co (3: -52%) Johnson & Johnson (3: -16%) **NET ZERO** Roche (1+2) AbbVie (1, 2, 3) Bayer (1, 2, 3) Astellas (1, 2, 3)

\*Checked 01/06/2023

Only long-term target included where companies reported both near- and long-term

## **Company Emissions**



## **Company Strategies**

Renewable energy

Reduce employee/business travel

EOL programmes

Energy optimisation

Product eco-design

Supplier engagement

Sustainable logistics

Sustainable sourcing

Carbon offsetting\*



Sustainable Markets Initiative

© 20 September 2021

GSK announces major renergy investment and lov carbon inhaler programm alongside Life Sciences se Race to Zero 'breakthroug



# **RE100**

# EV100

# EP100



### **Considerations for Procurers**

- 1. Does the company report on ALL its GHG emissions?
- 2. Does the company use globally accepted guidelines to report GHG emissions e.g., GHG Protocol?
- 3. Has the company been able to demonstrate any reductions in GHG emissions?
  - a) Remember to check the baseline year.
  - b) Consider the baseline GHG emissions.
  - c) Consider the company's operations and the external context.
- 4. Do they have targets that cover all scopes and are aligned with a 1.5\*C scenario (or at least 2\*C)?
- 5. Do they have a detailed plan outlining how they plan to reach their target and reduce their emissions?





Health Care

Global

Make a Do

### **NET-ZERO SUPPLIER** ROADMAP

#### 'Taking Account of Carbon **Reduction Plans'**

All suppliers with new contracts over £5m per annum will publish a carbon reduction plan for direct emissions.

#### **Direct and Indirect Emissions**

#### **New Requirements**

Requirements will be introduced overseeing the provision of carbon foot-printing for individual products supplied to the NHS.

#### Supplier Framework

## Sustainable **Health Procurement Guidance Note**

DATA AND AWARDS

Green Public Procurement

### PRACTICE Greenhealth

SUSTAINABLE PROCUREMENT GUIDE

2023 Europe

Commi

**Environment** 

Home > Green Public Pro

2028

2030

**News and Events** 

### WHAT OTHER CRITERIA?



Kommersiellt obund sjukvårdspersonal

Start/ Beslutsstöd/ Läkemedel och miljö/ Pharmaceuticals and Environment

### **Pharmaceuticals and Environment**

**Enter substance** 

Sök

Here you can find information about the environmental impact of pharmaceuticals. You can search for a substance name. The environmental risk refers to the use of a pharmaceutical. The knowledge support is based on three sources:



- 1. environmental information from the European Medicines Agency's (EMA's) European Public Assessment Reports (EPARs)
- 2. environmental information on Fass.se
- 3. environmental risk assessments for certain substances based on concentrations measured in the environment in Sweden and effect studies.





### CONCLUSIONS

- ➤ Climate change solutions require input from all parties, including health systems.
- The pharmaceutical industry is taking up the fight; there is room for further action, novel solutions and collaborations to advance this agenda.
- There is a role for sustainable procurement to motivate upstream action and downstream sustainable prescribing; but more work needs to be done to develop procurement criteria and access data.

## THANKYOU



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