Mobile enabling net zero manufacturing

gsma.com/climate

The manufacturing sector needs to reduce CO_2 emissions by

8.6 GIGATONNES

by 2030 to be on a path to net zero by **2050**

The GSMA have forecast smart factories will account for...

16%

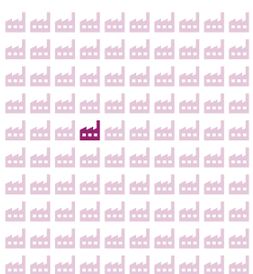
...of the required reduction

which equates to 1.4 gigatones of CO_2

The remaining portion will come from several factors, much of which are part of a 'circular economy'

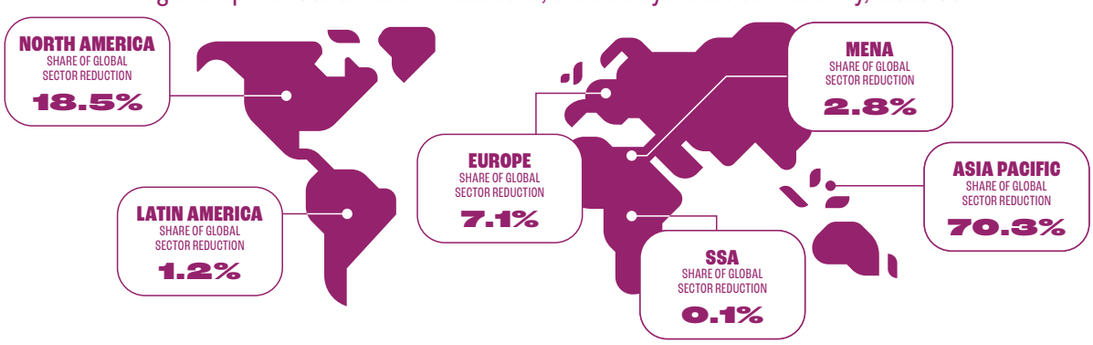
- Use of recycled materials in production
- Re-use of waste products and base materials (steel, cement) at end of life
- Renewable energy to power factories and material construction

GSMA have forecast that smart factories would reduce emissions that **is equal to manufacturing...**



Of the world's **9 MILLION FACTORIES** only **1%** are currently **SMART**

Regional split of CO_2 emission reductions, enabled by mobile connectivity, 2020-30



Connected factories enable integrated technology that improves productivity

IoT sensors connect machinery and production parts for analytics dynamically adjusting production on factory floor

Connected robotics substitute manual labour, freeing up time to spend on design, innovation and other skilled tasks.

Augmented reality, virtual reality and digital twins enable remote equipment and plant maintenance

Automated storage and retrieval systems enable better inventory management