



Connecting Abrasive Innovation with Sustainability

REDUCING YOUR ENVIRONMENTAL FOOTPRINT, PROFITABLY

JUNE 10, 2025

OUR MISSION

To empower people through sustainable engineering and scientific innovation that harmonizes well-being, environmental stewardship, and economic progress.

WHAT WE DO



Your Partner in Safer, Smarter, More Sustainable Surface Preparation:

At 10X, our superoxalloy abrasives eliminate a major health hazard for blasters in marine maintenance without compromising performance.

When deployed in maritime environments, our engineered processes not only boost team productivity and profitability but also significantly reduce the environmental footprint of surface preparation work.



THE IMPACT OF 10X ABRASIVES

**LOWER COST
PER SQ FT**

26%-81%

**MORE
PROFITABLE**



**HIGHER
BLASTING
SPEEDS**

70%-250%

FASTER



**LESS
MATERIAL
FOR DISPOSAL**

30%-80%

LESS WASTE



**LESS
CLEAN UP
TIME**

40%-90%

LESS TIME



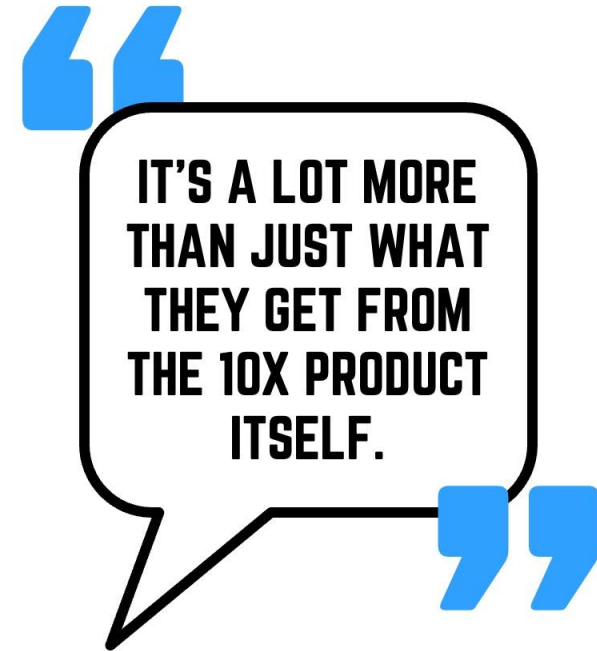
**DELAYED
RUST BLOOM**

3+ DAYS

PROTECTED



ARROW MARINE'S EXPERIENCE (A GREEN MARINE MEMBER) WITH 10X ENGINEERED MATERIALS



BENJAMIN KENDALL
ARROW
ARROW MARINE SERVICES LTD.

A GREEN MARINE MEMBER'S RESULTS

COPPER SLAG

40 tons of abrasive per vessel

KINETIX

10 tons of abrasive per vessel

DYNAMIX

8 tons of abrasive per vessel

Operational Efficiency

- 90% less front-end loader usage during blasting with 10X (minimal cleanup required)
- Significantly reduced diesel fuel consumption
- No mid-process cleanup interruptions

Material & Waste Savings

- 20 gallons less paint thinner per vessel blasted with 10X
- 5 gallons less paint per vessel blasted with 10X
- Eliminated 3 spray system flushes per project by switching to 10X

Labor & Time Savings

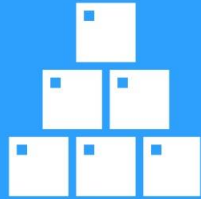
- 45 hours to 15 hours of nozzle time on average
- 4-5 week turnaround to 1-2 week turnaround
- Cleaning labor decreased from 25 hours to 6 hours per vessel with 10X

IT'S A LOT MORE
THAN JUST WHAT
THEY GET FROM
THE 10X PRODUCT
ITSELF.

BENJAMIN KENDALL
ARROW
ARROW MARINE SERVICES LTD.

REDUCTION OF RESOURCE INTENSITY PER UNIT OF PRODUCTIVE OUTPUT (VESSEL)

ABRASIVE USE



From **40 tons** of copper slag to **8 tons** of DynamiX (80% reduction)

COATINGS WASTE REDUCED



20 gallons of thinner and **5 gallons of paint** saved per vessel

DIESEL SAVED



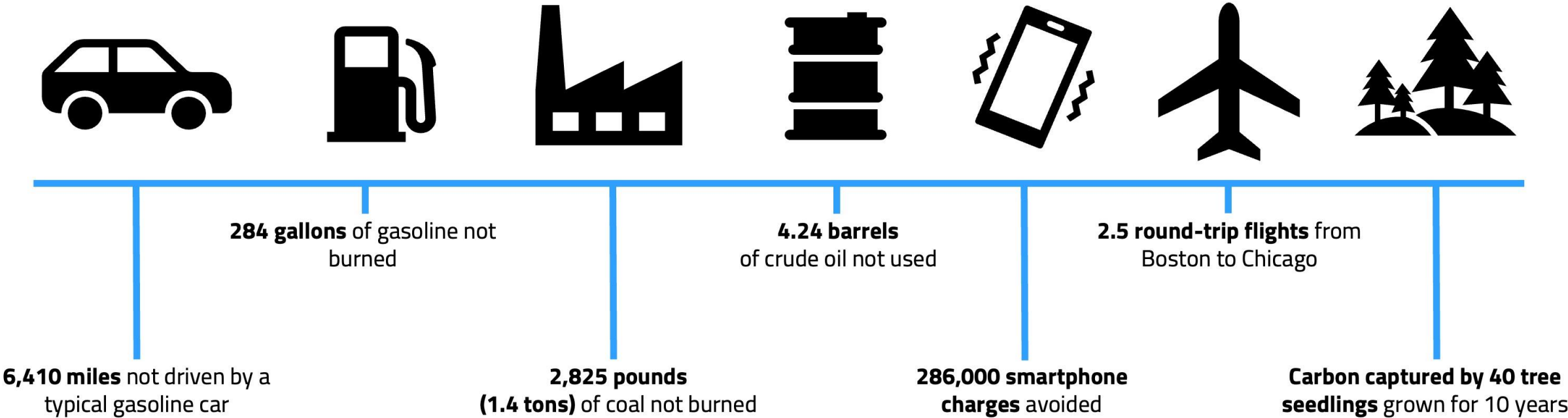
80.75 gallons avoided = **824 kg CO2** emissions prevented

ENERGY SAVINGS

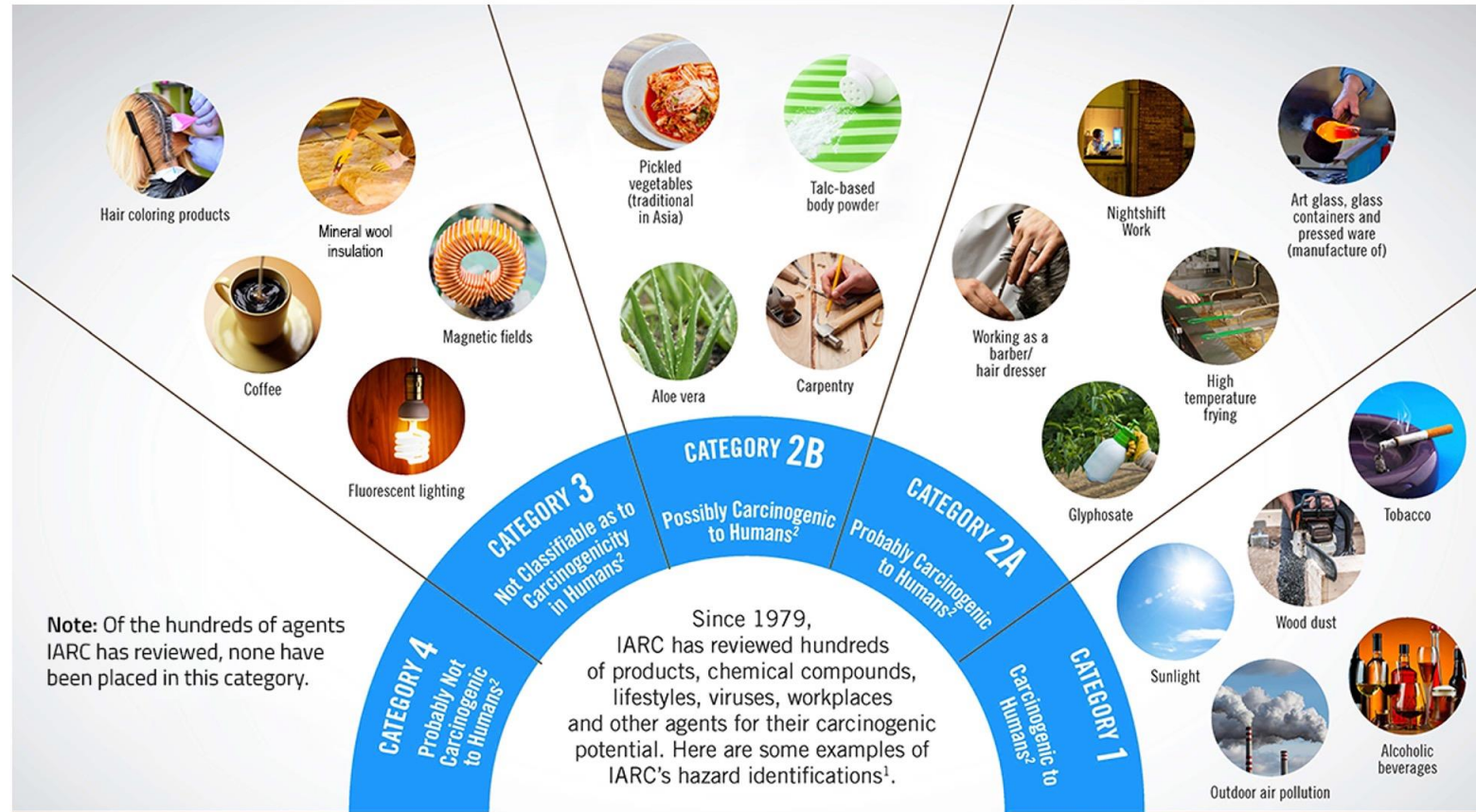
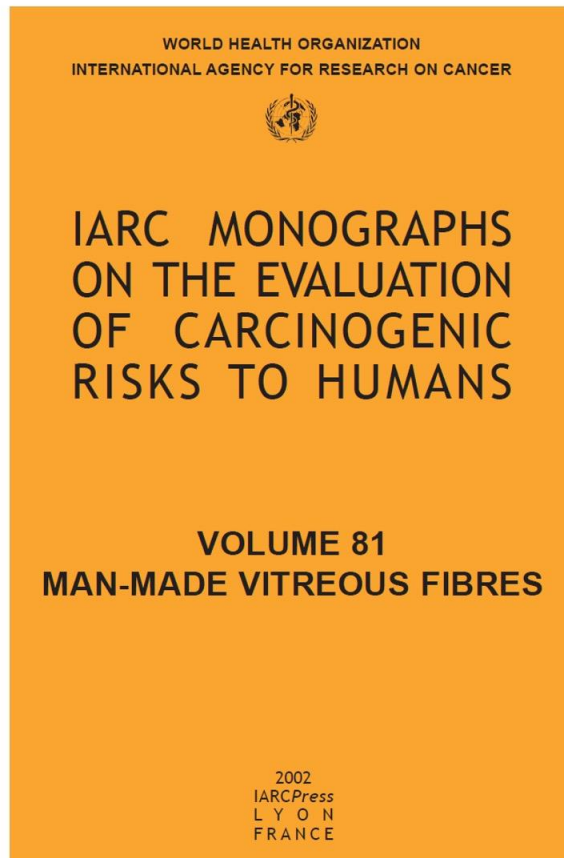


2,727 kWh avoided = **1,742 kg CO2** emissions prevented

REDUCTION OF RESOURCE INTENSITY PER UNIT OF PRODUCTIVE OUTPUT (EQUIVALENCY)



MINERAL WOOL MATERIAL IS AMONG THE MOST TOXICOLOGICALLY STUDIED IN HISTORY – IT IS PROVEN NOT TO CAUSE LUNG DISEASES OR CANCER



No other abrasive can provide this level of safety verification

THANK YOU!

