



CENTER OF
REGENERATIVE
DESIGN &
COLLABORATION

PLASTICITY FIJI









The Second Chapter



PEDREGAL
BASE SOLIDA DE SU CONSTRUCCION

Environmentally Benign Industrial Feedstock

A close-up photograph showing a massive pile of plastic waste. The waste consists of numerous small, translucent and colored fragments of plastic, including clear, white, green, blue, and orange pieces. The pile is dense and covers the entire left half of the image.

THE BIG CHALLENGE

Tragic Plastic





Material Disinfection “Dry Cleaning”

$\text{CaO}-\text{Ca}(\text{OH})_2$

Organic Pozzolans

Supply Stream Logistics

Municipalities

Institutions

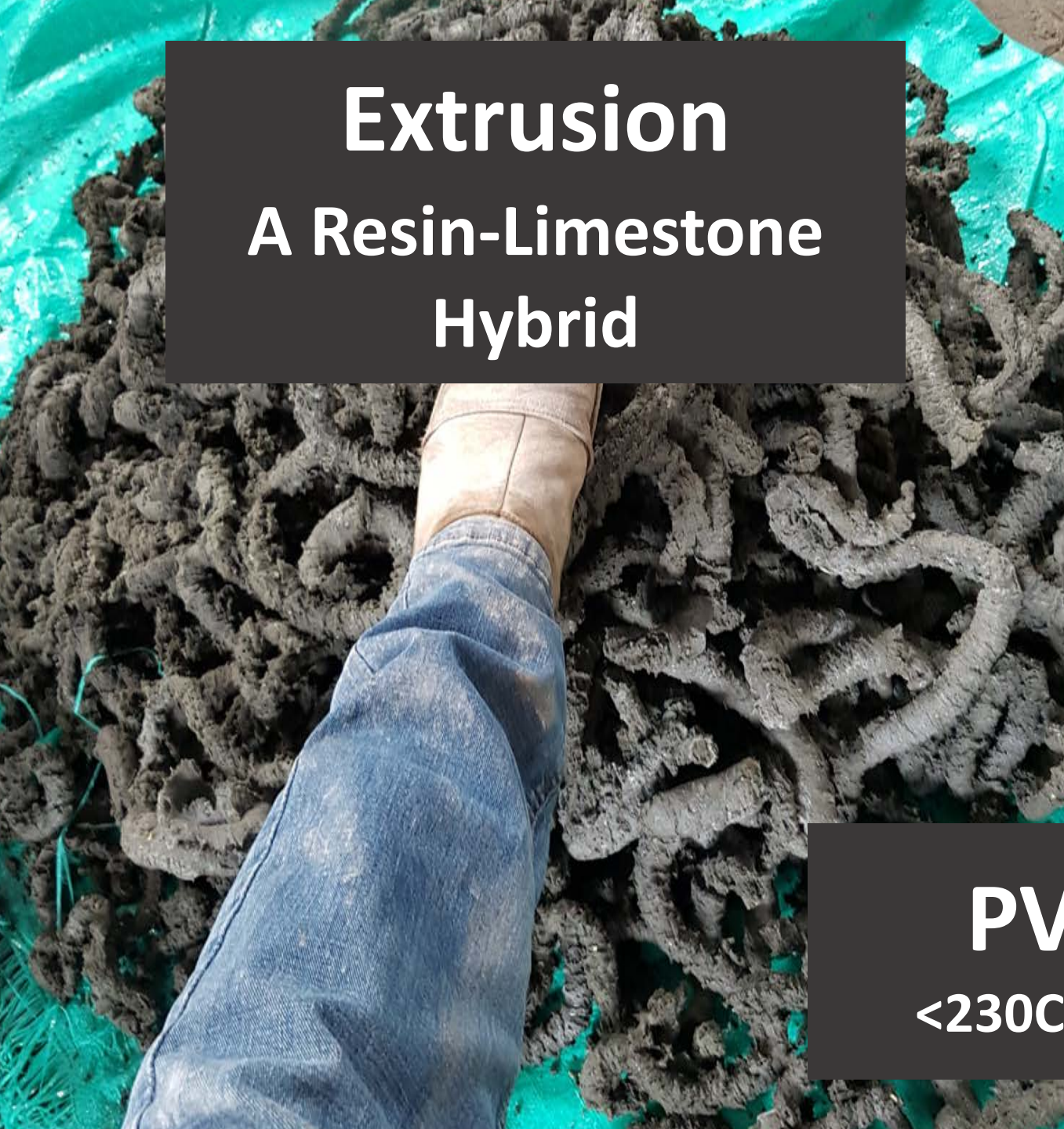
PEDREGAL

BASE SOLIDA DE SU CONSTRUCCION

Post Industrial

Environmental





Extrusion
A Resin-Limestone
Hybrid

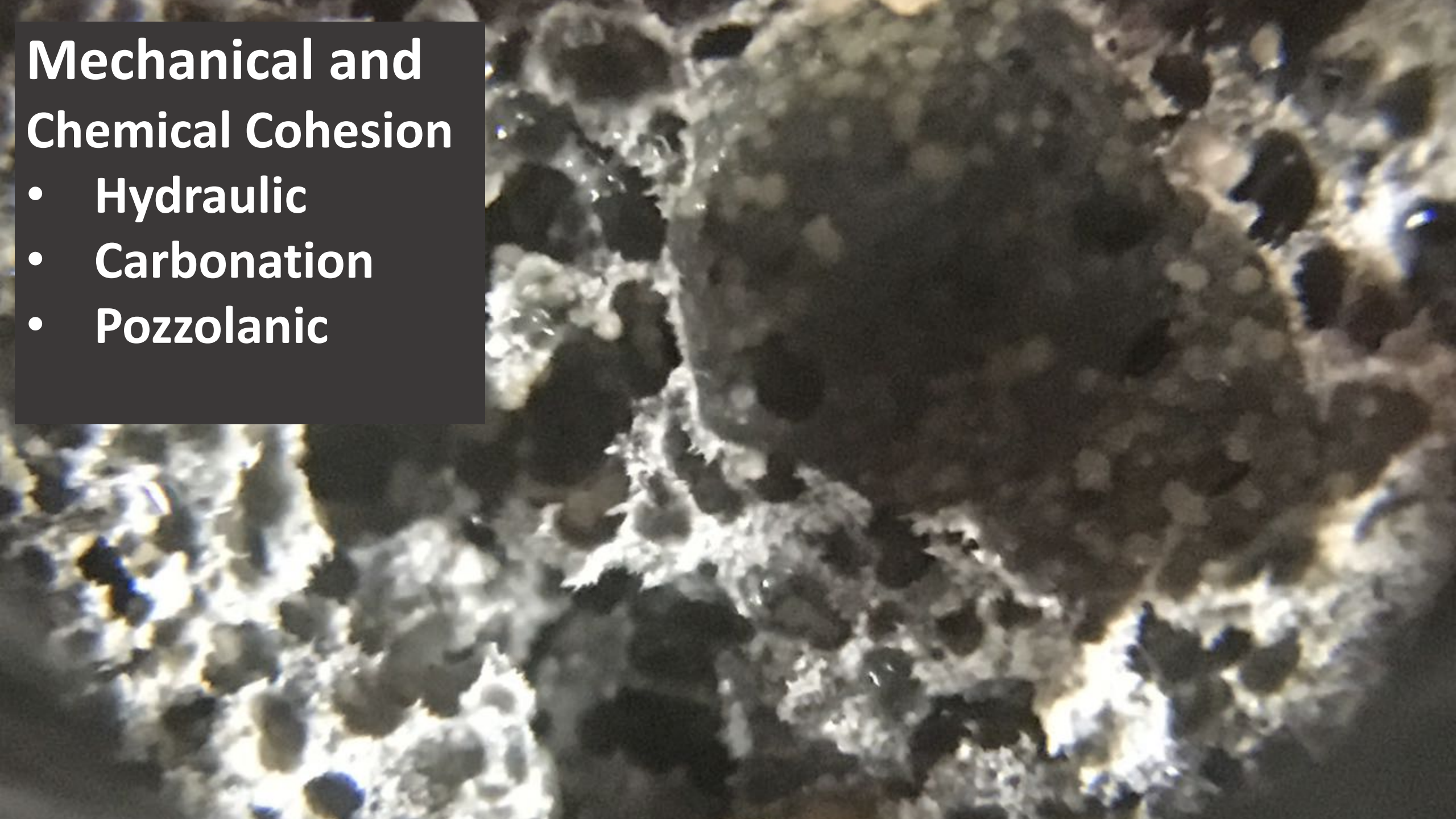


Crushing
Aggregate Gradation

PVC?
<230C CaCl₂

Mechanical and Chemical Cohesion

- Hydraulic
- Carbonation
- Pozzolanic





Improved Concrete Properties

\$375/ MT

**Caloric Value
Similar to Crude Oil**

4.2 Million units/ month
Immediate Potential:
500 gm/unit
80 MT/day (Pre-Sold)
24,000 MT/Year



Conclusion

If all the 260,000,000 + MT of waste plastic disposed of every year was converted to Resin Aggregate it would equal to only 3.8% global construction aggregate market.

If we assume the product market price could be gauged by the price of crude oil the current value of the plastic waste stream is almost \$100/billion per year.

The goal of the project is to take Zero Waste approach to the resin market and demonstrate its circularity or regeneration as prosperous.

RECOVER – ENRICH – APPRECIATE - PROSPER



