ENVIROPLAZ

PASSIONATE ABOUT OUR BUSINESS, FROM BOTH AN ENVIRONMENTAL AND ENGINEERING PERSPECTIVE

OUR EXECUTIVES

PETER BARROW

**Shareholder,
Managing Director**

Peter is an Engineer, the Founder of the business and inventor of the technology. Peter is recognised as a leading developer of plastic products in NZ.

ALISTER LAWRENCE

Shareholder, Executive Director

Alister is an experienced businessman, having held a number of senior positions with large corporations. Alister is also a Chartered Fellow of the NZ Institute of Directors in NZ and has extensive contacts throughout the ASEAN region.

MIKE SMITH

Shareholder, Asia Managing Director

Mike is a Chartered Professional Engineer. He has a wealth of experience at Director and senior executive level in major engineering and construction companies through 25+ years of living and working in Asia.

BRENDAN MEECH

**Shareholder,
Chairman & Director**

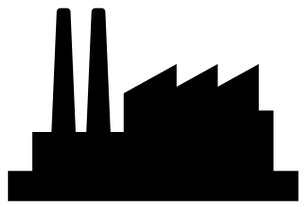
Brendan is a Commercial Lawyer with extensive experience in the areas of business banking, property finance, corporate finance, debt restructuring, insolvency law and enforcement of securities. Brendan was formerly a partner at a leading law firm and recently founded Baker Meech, an Auckland based boutique law firm.

ENVIROPLAZ

PLAZROK

THE PROBLEM

300 MILLION TONNES OF PLASTIC PRODUCED GLOBALLY EACH YEAR



20 MILLION TONNES OF PLASTIC ENDS UP IN THE WORLDS OCEANS

220 MILLION TONNES OF PLASTIC ENDS UP IN LANDFILL

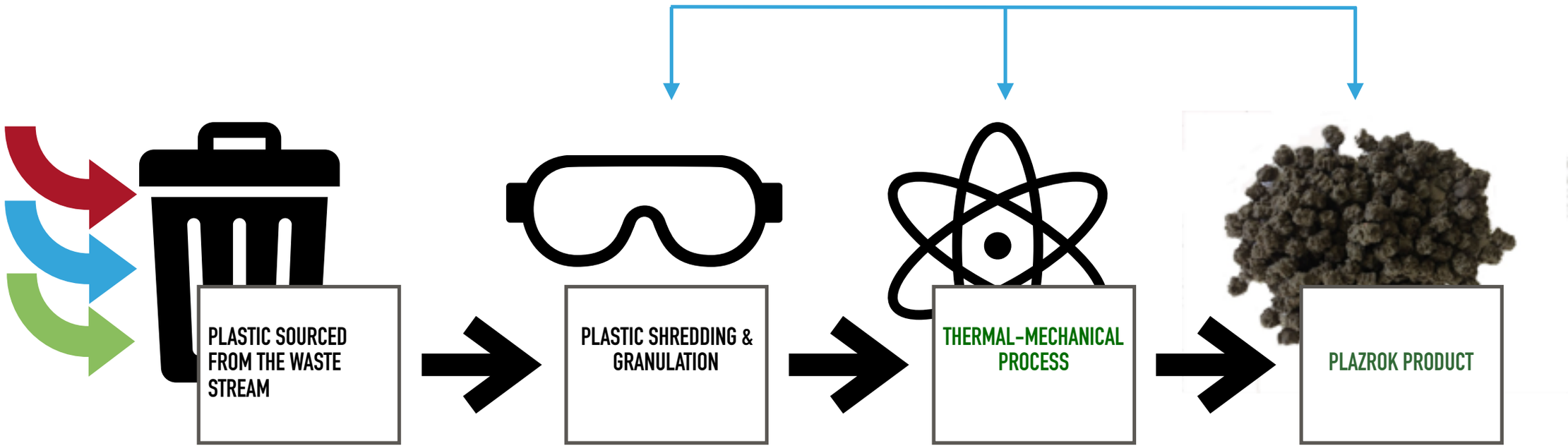
THE BALANCE IS RECYCLED, REMAINS IN USE OR GOES UNREPORTED

THE PROBLEM

Comm

A SOLUTION – THE PLAZROK PROCESS

Enviroplaz
intellectual property
and technical
expertise



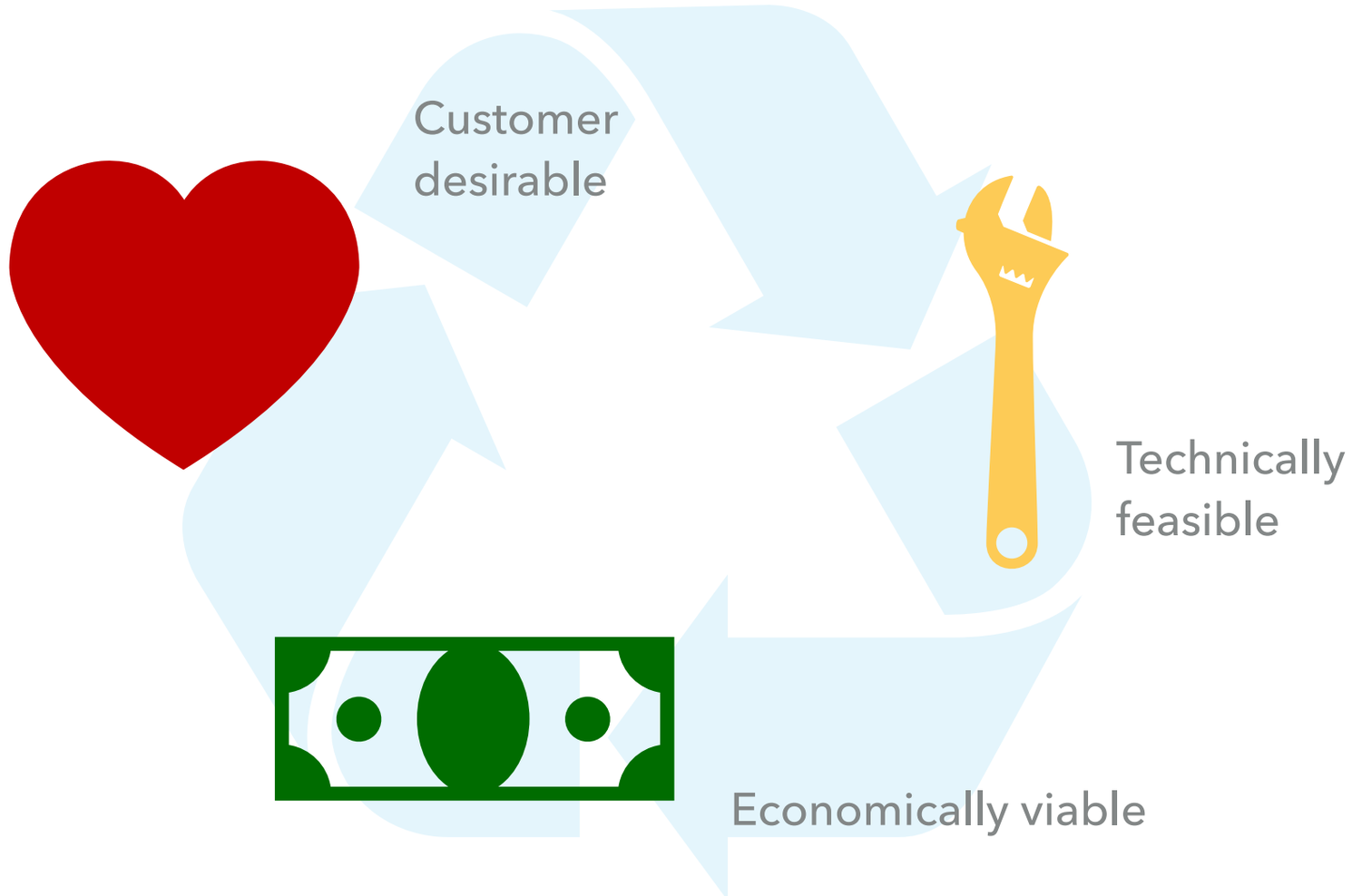
PLAZROK IS MANUFACTURED USING A COMPLETE CO-MINGLED MIX OF WASTE PLASTIC THAT WOULD OTHERWISE END UP IN LANDFILL

WHAT IS PLAZROK?

Plazrok is a **unique** lightweight composite concrete aggregate additive that is manufactured from co-mingled waste plastic. Plazrok has been produced in small trial quantities in New Zealand and the USA and the technology is now ready to be commercialised into the concrete industry.

Testing undertaken to-date has demonstrated that concrete produced using Plazrok is a viable alternative to conventional concrete and due to its **lightweight** and **environmental** properties, Plazrok will have **competitive advantages** in the market.

WHAT IS PLAZROK?



Plazrok is a unique lightweight technical aggregate additive that can be used as an additive or replacement aggregate in concrete.

Plazrok is a composite of waste stream plastics and minerals with a modified surface which allows for good adhesion into the cement matrix.

Plazrok is a technically viable socially acceptable long term solution to the waste plastic disposal problem that can be rolled out globally and profitably with benefits for both the environment and concrete industries.

WHAT IS PLAZROK?

Performance characteristics of Plazrok - "helping bring concrete out of the stone age"

Compressive Strength

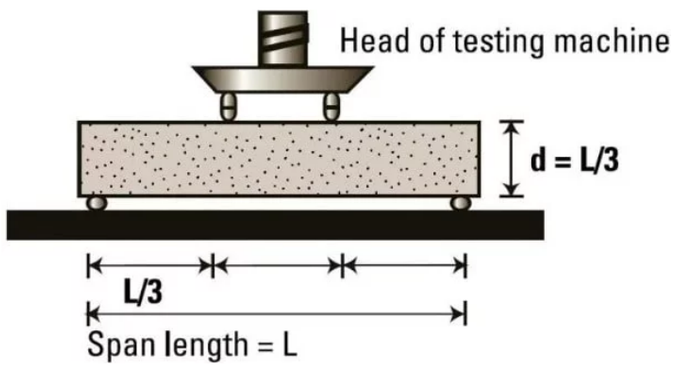
Concrete produced using Plazrok has achieved compressive strengths in excess of M25 (25Mpa) and can be used in a wide variety of mix designs.

Impact resistance

Concrete produced using Plazrok has a high impact and shatter resistance.

Flexural / Tensile Strength

Concrete produced using Plazrok has excellent flexural / tensile strength. Plazrok can be used in applications where flexural performances is a key requirement.



WHAT IS PLAZROK?

Performance characteristics of Plazrok - “helping bring concrete out of the stone age”

Weight / Density

Concrete produced using Plazrok can be made up to 40% lighter than standard concrete. Significant weight saving from conventional aggregate additives will enable lower transport and logistical costs.

Plazrok is non porous without water absorption like conventional lightweight aggregates.

1kg of Plazrok

1kg of common limestone aggregate

WHAT IS PLAZROK?

Performance characteristics of Plazrok - “helping bring concrete out of the stone age”

Insulation

Concrete produced using Plazrok is expected to have superior thermal and acoustic performance over conventional lightweight air-entrained and alternative porous lightweight aggregates.

Compatibility

Plazrok provides opportunities for reduced energy impact and use of sustainable materials in building projects compatible with sustainable solution ratings.

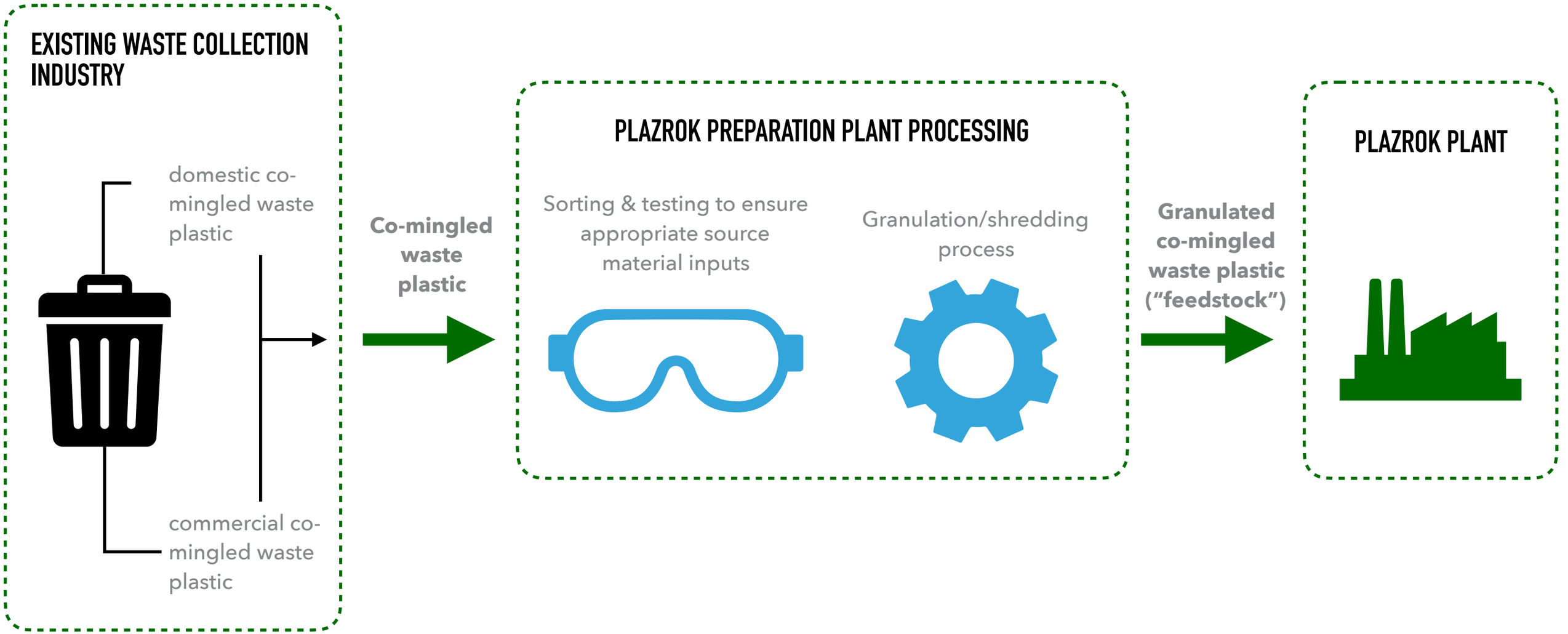
Plazrok is compatible with existing concrete batching plants.

PLAZROK FOR THE CONCRETE INDUSTRY

Customer desirable alternative aggregate additive with economically viable advantages

Unique product advantages enabling higher economic returns	Plazrok reduces weight of concrete without sacrificing strength, thermal or acoustic properties . Allows higher productivity for pre-cast and early strength applications and potential lower cement and water use. Provides for a lightweight early strength concrete solution with opportunities to reduce transportation costs in comparison to conventional aggregate.
Sustainable and fits within a circular economy	Use of Plazrok provides opportunities for LEED, EDGE, TREES, GREEN MARK and other sustainable solution ratings. Non porous hence lower water use, and better curing and environmental control. Reduces landfill usage as Plazrok provides a sustainable alternative. A zero waste initiative enabler.

SOURCE AND PROCESSING OF PLAZROK FEEDSTOCK



MARKET SIZE & OPPORTUNITY

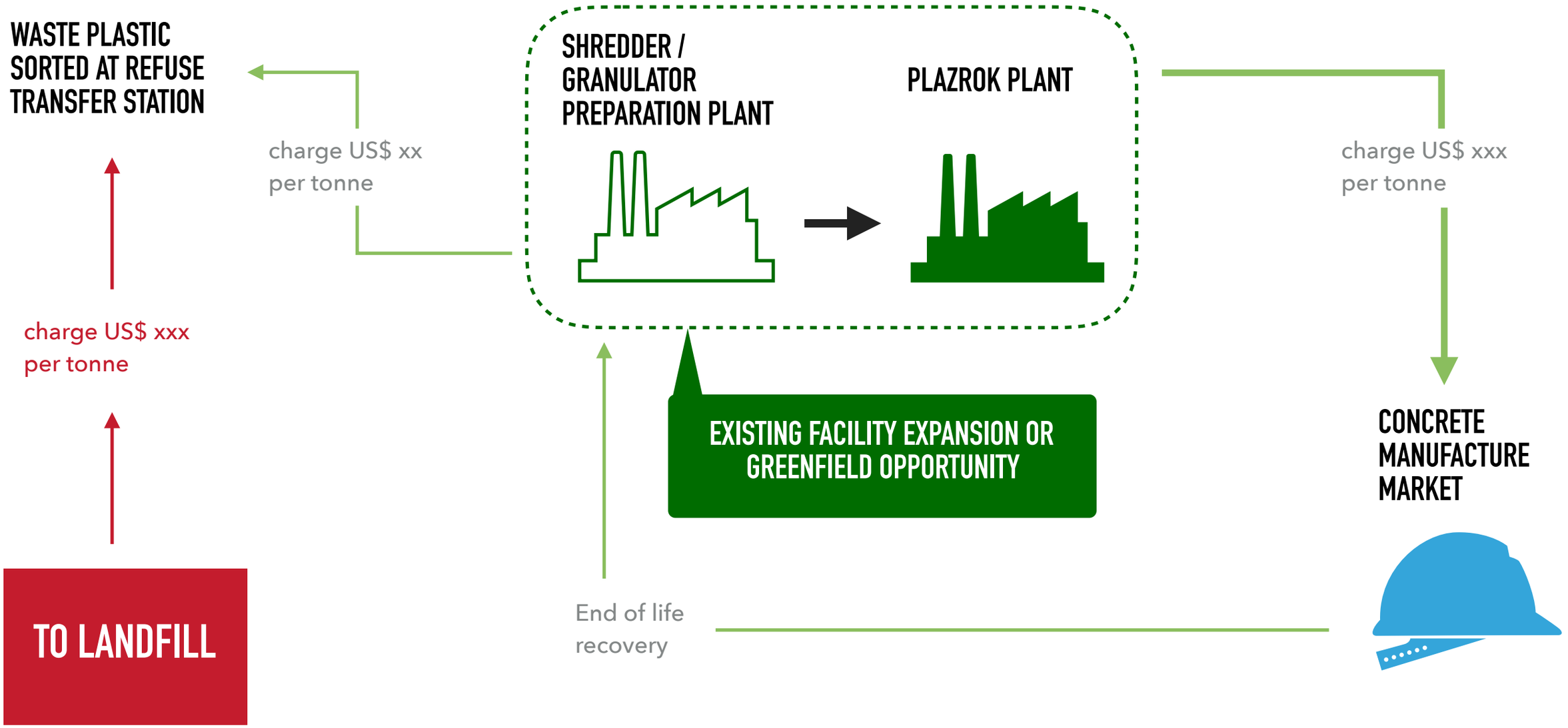
Plazrok is a unique product, however the market where Plazrok will ultimately be sold - the concrete aggregate and additives market - is well established globally with sophisticated supply chains and trade routes.

Cement production is reported in over 150 countries and exceeded 4.1 billion tonnes in 2018. As a rule of thumb, for each tonne of cement, the building industry requires six to seven times more tonnes of sand and gravel.

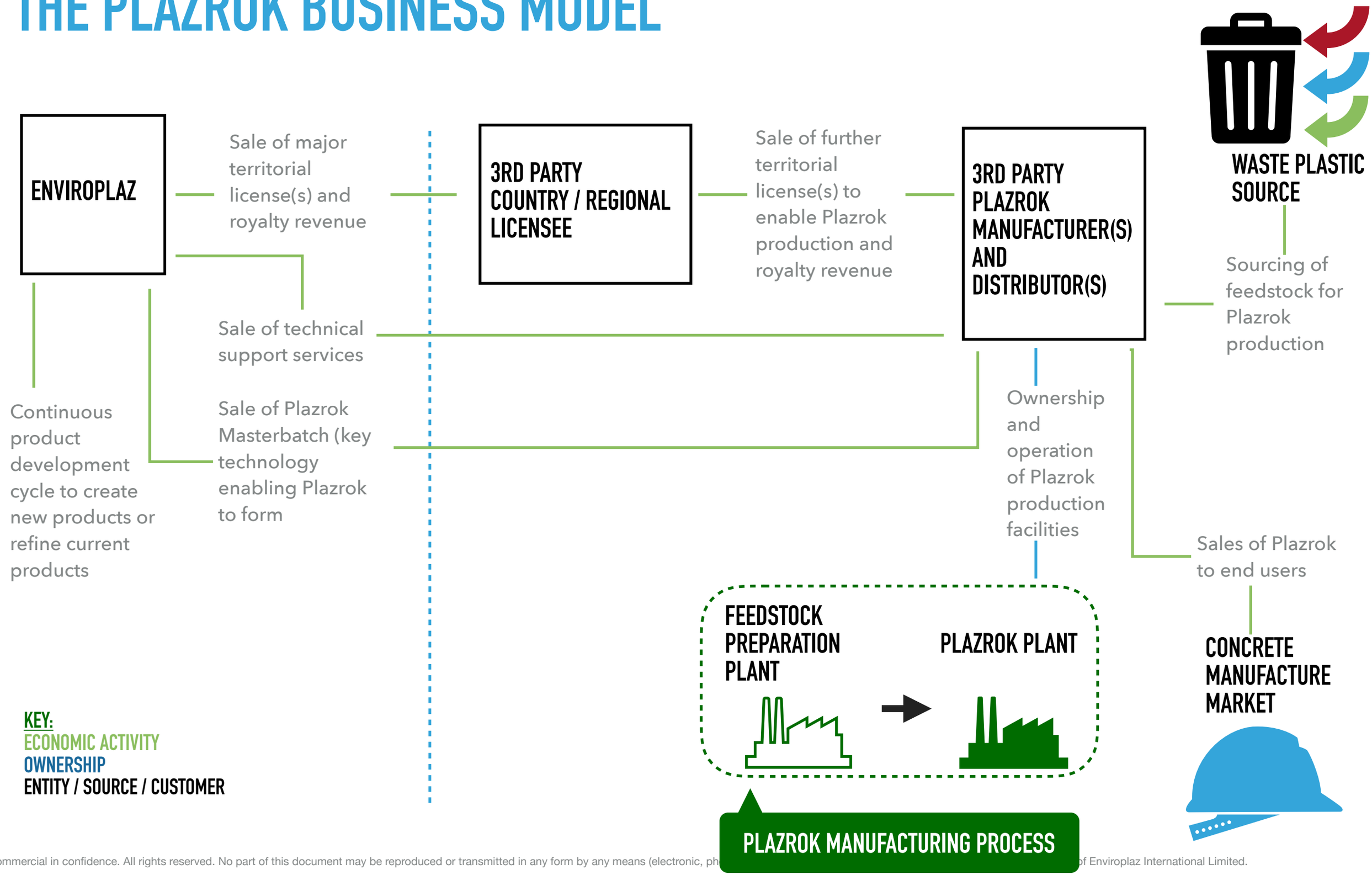
Therefore, the world usage of aggregates in concrete can be estimated at 25 to 30 billion tonnes.

Current global plastic production estimated at 0.3 billion tonnes.

SUPPLY CHAIN – IMPACT



THE PLAZROK BUSINESS MODEL



LICENSE VALUE DRIVER: WASTE ANALYSIS PROTOCOL ("W.A.P.")

CORE ASSUMPTIONS

Tonnage of waste plastic available

Estimated recoverable plastic from waste stream for use as Plazrok

Plazrok plant production metrics

Sales forecasts and Royalty metrics

DRIVERS OF W.A.P. VALUE

License, royalty, and masterbatch metrics

Population levels

Country development status

FOR FURTHER INFORMATION PLEASE CONTACT:

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