

SUPERPATCH

Innovation in Road Repair Technology



Pitch for Funding
Istanbul, May 2022



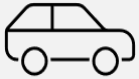
SUPERPATCH

- Start-up by 2 materials scientists
- Dedicated to finding innovative solutions for transport problems
- I am here to tell you about our first major product

Our Purpose

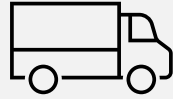
To provide transport solutions through new materials technology

The problem



Increasing road traffic

Number of vehicle journeys increased by 25% since 2019



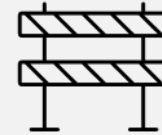
More and heavier vehicles

Number of cars will double by 2040



Roads wear out faster

Estimated annual cost of repairs is £11bn.
For UK



Repairs cause delays

Estimated at \$50bn.
In USA



Repairs cost money

Delays and repair costs estimated at \$61bn.

So, what's our
solution?



The Solution



Faster repairs

Repairs that cut down on road closure time and use fewer men and machines



New materials

Recycled materials that cause less damage to the environment



Lower cost

Faster repair time and lower labour costs result in savings



The Product



Core of Recycled plastics

Any plastics in size around 2 cubic centimetres



Specially developed resin bonding

Unique product developed by us



Self-levelling, any colour – dries in 15 minutes

Resin gives colour; solvent evaporates fully in 15 – 20 minutes.

Innovative new products for the roads of the future

Massive savings through materials innovation

The combination of The recycled plastic wastes adopted in the research include Polyethylene Terephthalate (PET), High Density Polyethylene (HDPE) and Polypropylene (PP) and associated styrene and phenolic compounds allied with the purified phenolic compounds from lignocellulosic biomass assisted by ionic liquid, polymeric resins, and supercritical CO₂.



Value proposition

There is a great opportunity for success!



**Project Investment
of €700k.**

Project cost is €1m, we
hope to get €300k. From
university and private
sector



€61bn. annual market

Figures shown earlier –
and increasing every year!



**€20m. profit after 5
years**

Our worst-case scenario!

Market opportunity & Risks

€61bn.

Current market – and it grows annually!

€1m.

Project investment
€700k from EIC, €300k
from university and
private sector

€20m.

Profit after 5 years.
Few competitors –
so very little risk

Competition

Convenient



SUPERPATCH

Expensive

Affordable



Inconvenient

Business model

How will we scale in the future

Phase 1 YEAR 1

- Undertake final research and product lab testing
- Identify vehicle equipment builder and commission trial set-up
- Identify sources of recycled plastic
- Identify trial road repair contractor
- Identify trial road authority

Phase 2 YEARS 2-3

- Apply *SUPERPATCH* on a number of trial road repairs
- Commission sources of material and bonding agent
- Build more trial vehicle equipment
- Build batch production facility

Phase 3 YEARS 4-5

- Expand business to meet global demand
- Commission more vehicle equipment
- Build plant to make more material
- More customers worldwide, starting in Europe

Commercialisation & Market Strategy

How will we scale up in the future?

Phase 1 YEAR 1

- Consolidate and test the product
- Commission design and build of vehicle-mounted equipment
- Identify organisations willing to trial material
- Train operator and apply first trial patches

Phase 2 YEAR 2-3

- Increase production of material and vehicle equipment
- Market and sell system to more organisations
- Target European market first
- Follow with US market, then other world markets. Customers will come to us when they see how effective the product is!

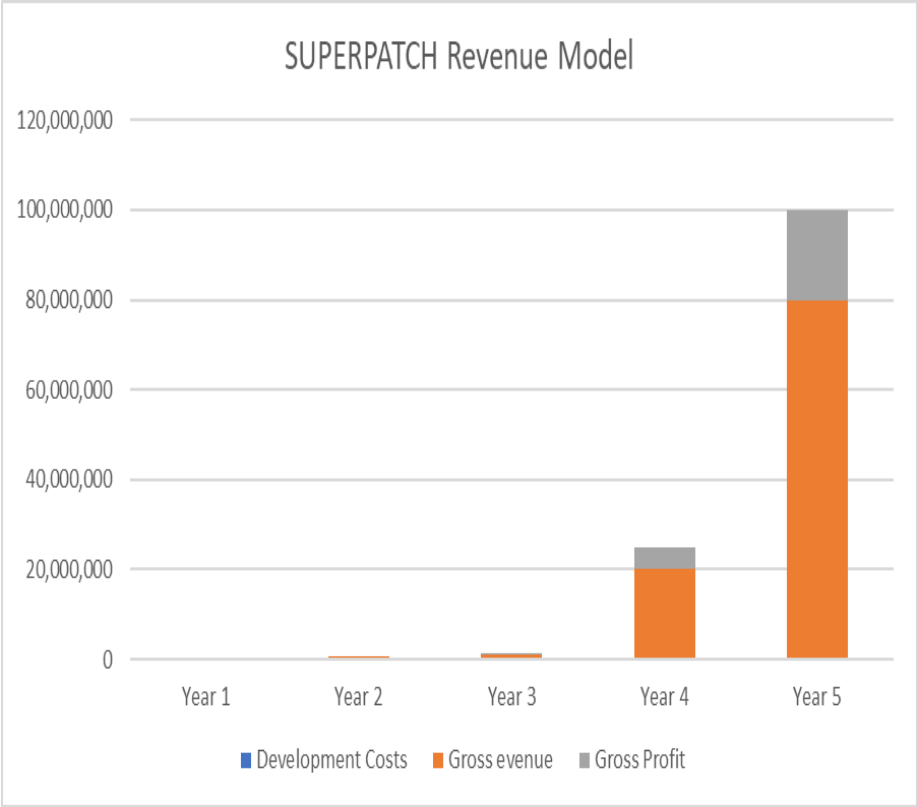
Phase 3 YEAR 4-5

- Consolidation of market share in European market
- Expansion into USA
- Plan for other global markets
- Possibly sell company to highest bidder

Financial Protections

As there is no competition, company will grow fast!

	Development	Sales @ €50,000	Gross revenue	Profit
YEAR 1	€500,000	0	€500,000	£0
YEAR 2	€300,000	4	€200,000	€0
YEAR 3	€150,000	20	€1,000,000	€200,000
YEAR 4	€50,000	500	€25,000,000	€5,000,000
YEAR 5	€0	2,000	\$100,000,000	\$20,000,000



Financials

COSTS	
Vehicle-mounted equipment	
Materials	
Customer training	
Average price per sale	
Revenue	
Gross Profit @ 20%	SEE PROPOSAL FOR DETAILS – ANY QUESTIONS?
EXPENSES	
• Sales & Marketing	
• Customer Service	
• Product Development	
• Research	

Our Team



**Dr John
McAdam**

Partner



**Dr Dusty
Rhodes**

Partner



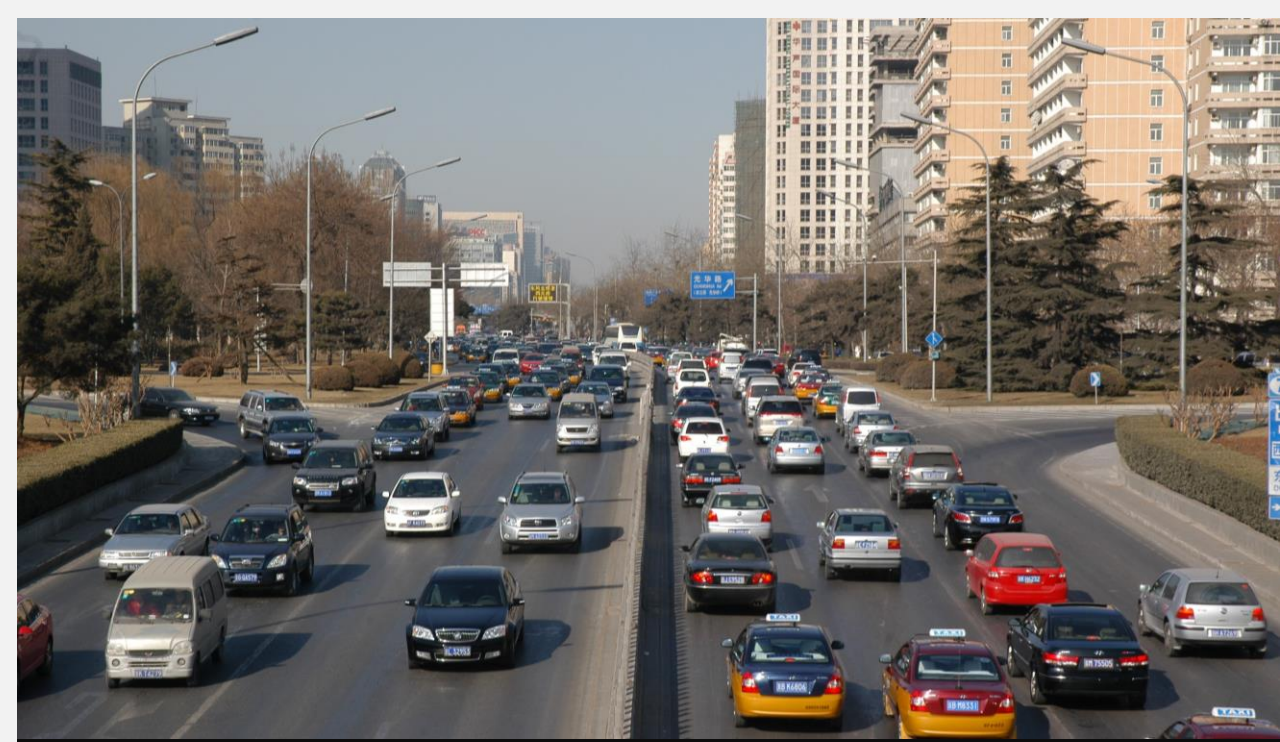
**Prof. Ivor
Buck**

Marketing Expert
(part time Advisor)



**Prof. C. T.
Streetz**

Town Planning Expert
(part-time advisor)



Summary

SUPERPATCH offers a unique and innovative road repair system

SUPERPATCH offers a unique road repair system that:

- Is highly innovative
- Is cheaper than conventional means
- Reduces road delays
- Needs less manpower
- Is self-levelling
- Uses recycled plastics
- Is easy to make
- Causes less harm to the environment
- Is easy to use, with unskilled labour
- Costs less to transport
- Has a global market
- Will produce healthy profits
- Is a good investment
- Has good scale-up potential