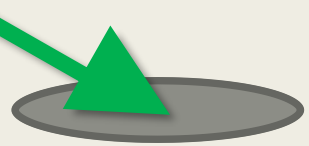
PROJECT NAME AND LOGO: ESPIRRP

Envirobnmental **S**ystem for **P**atching **P**otholes **I**n **R**oads and **p**avements



Company purpose

- Our mission is to make scientific solutions to road problems. We shall do this by using our considerable intellectual knowledge and our postions as leading professors in Turkey to experiment on different ways of using science to solve every day problems
- We have formed a company to do this.

Problem & solution

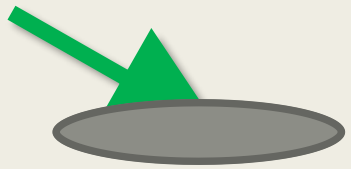
- Many motorists have damaged their vehicles because of the poor state of the roads they travel on. Public authorities do not have the money to repair the holes after every winter, so more holes appear every year. There are consequently millions of holes in Europe
- We can solve this problem by creating a fast, easy to use compound made of a high integrity environmentally friendly recycled composite substrate with epoxy-based nanomaterial-based compounds used as plasticised binders to build the overall integrity into a roadmaking material that will stand vehicle use

References to problem

- T, McAdam – ‘Road Repairer’, December 2001
- A. Digger – ‘Tar Weekly’, January 1996
- P. Lastik – ‘Everyday Epoxy’, August 2011
- Prof. A, Freeway – ‘Techniques in Road Building’, (Report) March 1947
- European Commission report – ‘The state of European Transport’ 2013‘
- Bad Roads – an economic challenge’ – University of Warsaw, 2015
- ‘The Greek Approach to Potholes’ – Report, University of Athens, 2017
- ‘Why no spend on Potholes?’ Royal Automobile Association, UK (report) 2013

VALUE PROPOPOSITION

- Customers will value ESPIRPP because it is made from recycled material cheaper than tar-based compounds and there is nothing like it on the market
- The benefits our customers will get from EPSIRRP will be knowing that they are saving the planet by using recycled material even though it may cost more



Market opportunity & risks:

- The market is for the whole world – potholes are a problem everywhere there are roads. USA biggest market as they have more roads than anywhere else, but Europe has more rain and bad weather – so both are big markets
- Size of market is dependent on weather and how much governments spend on road rep[airs. We expect to get half of Europeam market after first year, then with income open up USA market
- As the product is unique, we see it as disruptive and will replace more conventional road repair techniques
- Main risk to our innovation is traditional nature of road repairers who may be reluctant to change

Competition

- Competition comes from road building companies that do road repairs:
  - *Bechtel Inc. (USA)*
  - *Léon Grosse S.A. (France)*
  - *Gülsan Holdings (Turkey)*
  - *Zeppelin Gmbh (Germany)*
  - *Tarmac Construction (UK)*
- Some patching compounds also exist, but they are not as good as ESPPIRPP

Business Model

- How do we make money? We currently make money from our professorships and part-time consultancy. When we are successful in our bid for Accelerator funding we shall switch to part-time teaching to get the company off the ground
- Revenue model:
  - *We shall price at below the cost of conventional patching material*
  - *We shall contain our costs below the cost of conventional repair materials*
  - *On this basis we expect immediate profitability because we shall offer a better, cheaper solution to users*
  - *We expect a profit of $2m in year 1 and we expect it to double ever year after that*

Commmercialisation and marketing strategy

- We plan to reach customers in several ways. First of all we shall use Accelerator money to build a website. We have access to many clever students who are good at this. We shall also produce a brochure for circulating to road making companies all over the world. We hope to attract TV interest and we will use their videos to promote ESPRIP, the same goes for press coverage. An important market approach will be to give scientific papers in academic journals and conferences where we have a l;ot of influence.
- Time to market will depend on the Accelerator grant – we have had no success with banks so far – we have a laboratory facility and we can use students to produce 50 bags of ESPIRRP each day. Bigger quantities will involve using more students or buying a factory. In this way we can have an immediate market presence.

Financial projections

- These are contained in our proposal
- Working on 50 bags per day we can produce around 20,000 bags per year. As we shall use university premises and student labour lour costs are very low and selling at €150 per bag will give us €100 per bag profit @ 20,000 bags = €2m profit
- Accelerator funding of €250,000 will be used for purchase of raw materials and marketing
- Even at these low-cost and highly profitable levels, the risk-averse banks have not come up with any funding and the project is stalled until we get Accelerator funding

TEAM

Our highly respected team will share the running of the business, it consist of:

- Professor Erdal – widely published on transport issues, particularly regional rail and airport connectivity
- Professor Chatzikostas – a leading authority on geological structures in relation to road building and oil exploration
- Professor Sowden – wide experience in the automotive industry and well published on car and truck mass-prodction

Conclusion

- ESPIRIP IS THE RESULT OF OVER 100 YEARS OF ACADEMIC ACHIEVEMENT. WE BELIEVE IT OFFERS A DISRUPTIVE SOLUTION TO BIG TYRANSPORTATION PROBLEMS IN THE WORLD