# BORDERSIONFORD



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WHO ARE WE?

WHAT DO WE DO?

HOW DO WE DO THIS?

HOW CAN I HELP?

(CLICKTOISKIPTOIA SECTION!)

Engineers Without Borders UK is an organisation that creates massive small change by empowering thousands of new engineers to remove barriers to human development.

Engineers Without Borders Oxford is affiliated to this national organization. We aim to deliver sustainable solutions to problems in development, both locally and further afield.

# FACILITATING HUMAN DEVELOPMENT THROUGH ENGINEERING

## WHATOOWLDO?

#### OURBPROJECTS

# OxFuels Heating Oxford's Homeless

Oxford is home to many local restaurants and vendors who produce vast amounts of waste cooking oil. However, this can be regarded as a valuable resource, since it can be transformed into biodiesel through the simple process of transesterification. Thus Oxfuels aims to exploit this potential by producing second generation biodiesel for the purposes of assisting development focussed and charitable organisations in meeting their energy demands.

As an initial focus, we aim to look at using the biodiesel as a fuel supplement for organisations using oilbased heating systems (such as homeless shelters, which are in dire need to keep costs down to cope with budget cuts).

#### OURDROJECTS

#### Women in Engineering

In partnership with OxFEST, we are integrating a broad based initiative to promote women in STEM trades by implementing our Decoding Programming in girls schools, hosting and supporting lectures and seminars, and actively seeking projects which address global gender equity in STEM. In partnership with OxFEST, we are integrating a broad based initiative to promote women in STEM trades by implementing our Decoding Programming in girls schools, hosting and supporting lectures and seminars, and actively seeking projects which address global gender equity in STEM.

## WHATEDOWEDO?

#### OURDROJECTS

# Developing Oxford Engaging The Oxford Community With Engineering Development

The aim of this project is to promote EWB and EWB Oxford amongst students and academia from Oxford and further afield. The aim is to first ensure that we have a strong technical foundation from which to grow. Following from this the project will seek to enable the group to flourish by providing a facility for essential cross-discipline discussions and debate, to ensure that all projects are sustainable economically, environmentally and socially.

## WHATOOWLDO?

OURBPROJECTS

#### H2Ox Providing clean water for all

Partnering with existing water filtration NGOs, we will design cheap water filtration techniques attainable with local resources at the point of need. Our aim is to produce a working prototype and work with a target community to test and implement the end solutions.

### WHATOOWLDO?

#### OURBPROJECTS

#### Decoding Programming Empowering Youth Through Code

The aim of this project is to develop a system to give basic programming skills to secondary school students in the UK with a view to then taking the concept abroad and encouraging people to learn how to code.

#### Global Waste

Currently in talks with a plastic recycling start up, we aim to produce publishable research and substantial technical contribution to the waste management sector.

## HOWDOWLEDOTHIS?

#### OURBAPPROACH

#### Holistic Engineering

We work with an interdisciplinary approach that takes into consideration the local knowledge, economy, culture and environment.

#### Active Partnerships

We build long term relationships and work in collaboration with communities and local organisations.

#### People Participation

We believe in demand-led development and participatory change.

### HOWEDOWLEDOWTHIS?

#### OURBAPPROACH

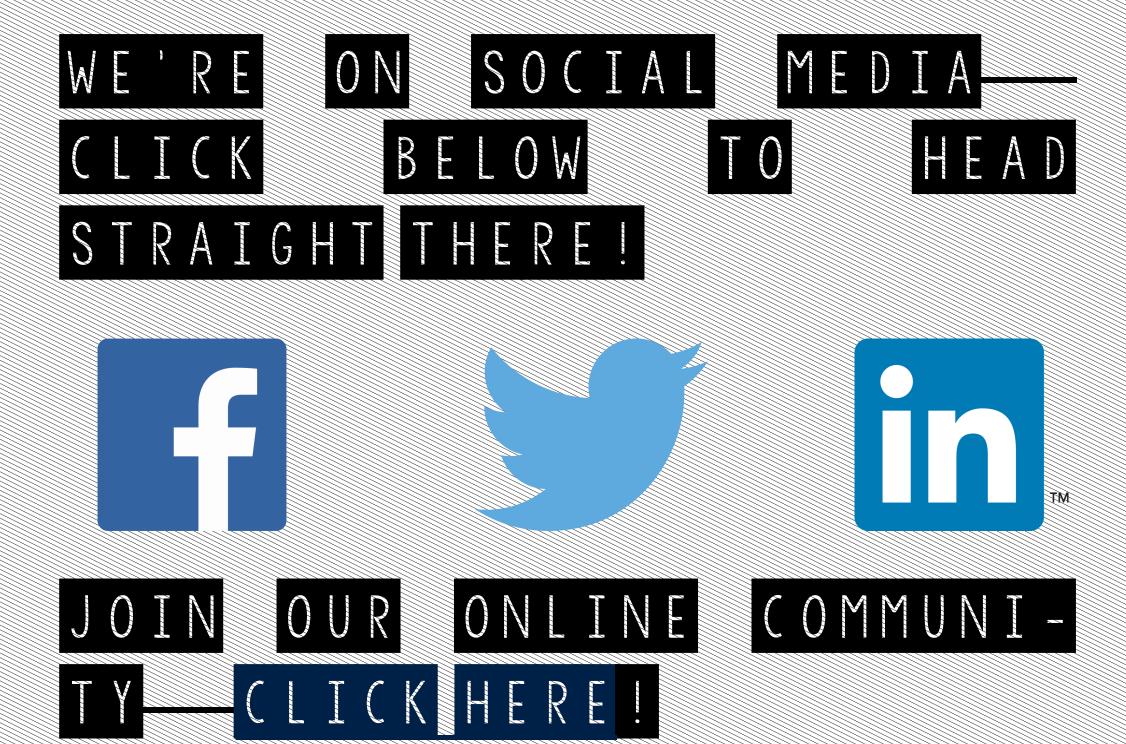
#### Small Footprint

We want to adopt a sustainable use of natural resources and minimise any impact to the local environment, biodiversity or global climate.

#### Appropriate Technology

We adapt existing low-risk technology and apply modern engineering methods.

# HOWICANIELD?



VISIT OUR WEBSITE TO FIND OUT MORE AT EXBOX. ORG