

### **Clean Bio Fuel Cooking Solution**







### firedragonfuel.com



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# Long, Trusted History

- 1854 Started in business
- 1914 BCB Ltd registered as a company
  - 1979 BCB International Ltd registered

Browns Cough Bottle = BCB As supplied to British troops in the Crimea

#### YOUR CHALLENGES, WE SEE AS OPPORTUNITIES, WE CAN HELP YOU





Our Mission Statement: 'Saving & Protecting Lives in Hostile Environments'



# **Award Winning**

- 2 x Queens Award for Export achievement
- 3 x Soldier Technology Awards
- Sunday Times Best company to work for
- 2 x Welsh Innovation Awards
- Business Language Champion



The Queens's Award for Export Achievement







# **Prime contractor**

BCB have established good, long-term relationships across Military, Marine & Leisure sectors, including relationships lasting over 60 years with DE&S, UK MoD, RFD & more than 30 years with the UN.



Ministry of Defence



Ministry of Justice

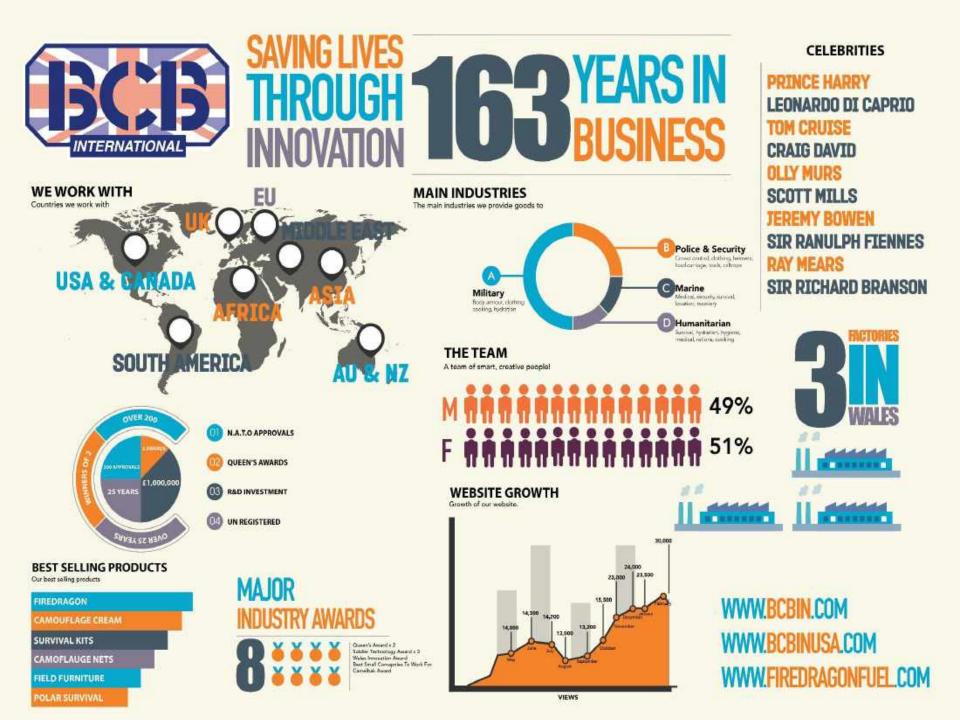


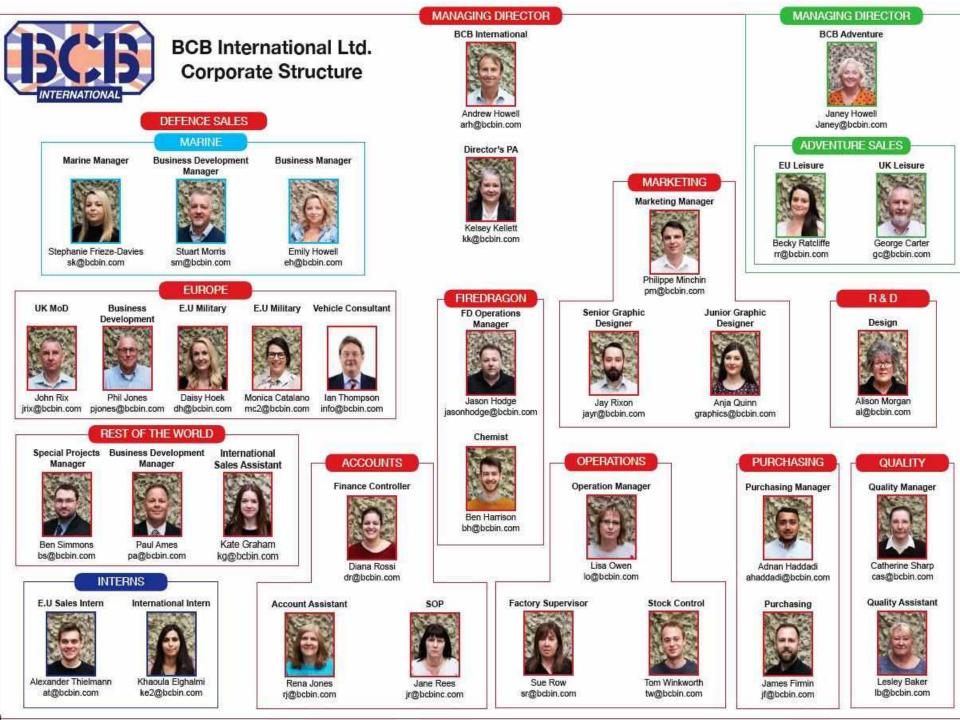
### BAE SYSTEMS













# **Quality Assured**

- Accredited to ISO 9001:2015
- ISO Approved to since 1993
- Over 400 N.A.T.O. approvals & many SOLAS approvals











safe europe



#### Certificate of Approval

This is to certify that the Management System of:

#### **BCB** International Ltd

Lamby Industrial Park, Wentloog Avenue, Cardiff, CF3 2EX, United Kingdom

has been approved by LRQA to the following standards:

ISO 9001:2015

David Derrick - Area Operations Manager UK & Ireland Issued by: Lloyd's Register Quality Assurance Limited

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

Current issue date: 21 August 2018 Expiry date: 31 January 2020 Certificate identity number: 10119979 Original approval(s): ISO 9001 – 21 August 2018

Approval number(s): ISO 9001 - 00015709

#### The scope of this approval is applicable to:

Manufacture of cosmetic and skincare products, sewn items, tentage repair, maintenance and associated training, tools and light engineering products, rations, first aid kits and survival equipment. Wholesaling and distribution of defence, security, humanitarian aid items, camping and marine and survival equipment. Manufacture, subcontract manufacture and wholesaling of marine survival equipment, including search and rescue security equipment. The distribution of wholesale or retail safety, survival and outdoor leisure goods for use by the general public including solid and gel fuel.



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# **Prime Manufacturer**







**Camouflage Cream** 



Sewing & heavy textiles





# **BCB operates in four market sectors**





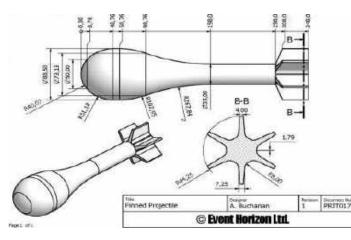
# **Research & Development**

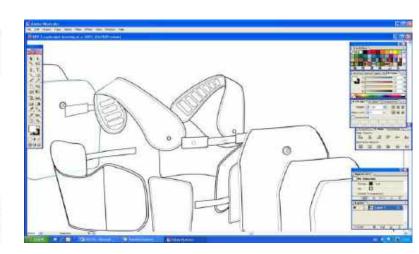






- Over £1 million invested into R&D in the last few years
- Collaborative university & business partnerships
- Diverse expertise
- Rapid prototyping
  - Cradle to grave, invention, trialling, innovation & manufacture
- Continuous And Never Ending Innovation CANEI
- Military focus user group















"All life on Earth now depends on us..." Sir David Attenborough

Based on bio-ethanol, FireDragon is sustainable & not a fossil fuel.

It is a safer fuel for both the user & the environment.



Clean, Green

**Sustainable** 

The secret is in the chemistry....

Ethanol has a very short chemical chain = easy to release the energy Ethanol contains its own oxygen = hotter more complete combustion = less fuel needed

FireDragon's bio-ethanol purity is very high at approximately 96%.





Hand Cleanser

All-Weather





Quick & easy to light

Clean burn



FireDragon gives off very little smoke, soot or smell when burnt



# Key Features - FREDRAG®N

- Quick & easy to ignite with just a spark from a flint, lighter or match.
- ✓ Works when wet can be used in the rain, snow & extreme weather conditions.
- ✓ Air transportable UN Class 4.1. Packing Group III.
- Easy to store & handle Extremely lightweight & safe to be packed with food.
- Waterless antibacterial hand cleanser A natural disinfectant & can be used as a waterless soap.
- ✓ Does not affect the taste of food.
- $\checkmark\,$  Low risk of fire or explosion
- Halal

FireDragon had an average ignition time of 2 seconds when lit with a flint.

Solid fuel is:

- > Safer & easier to add more to your fire
- > No burning spills running everywhere
- Non-toxic safe to handle
- Easier & safer to transport & store
- > Safer & easier to use than gel or liquid

FireDragon can be used with most stoves







# Renewable Fuel - FREDRAG®N

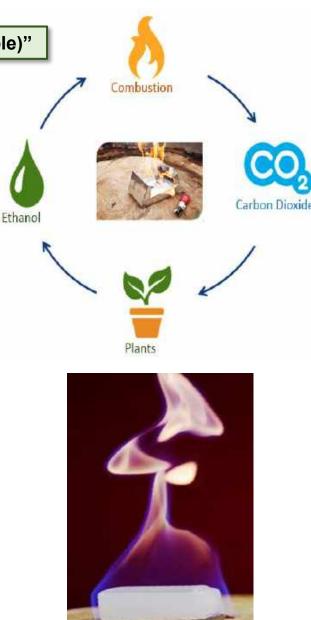
#### "Ethanol is the cheapest amongst the clean fuels (modern & renewable)"

- ✓ Made from dissolving & fermenting waste plant biomass material.
- ✓ A truly renewable fuel
- Non-toxic & odourless burns without copious quantities of noxious or toxic fumes, very little soot, smell or smoke.

We use ethanol from waste vegetation



Fire Dragon fuel = Gold Standard of Carbon Credits

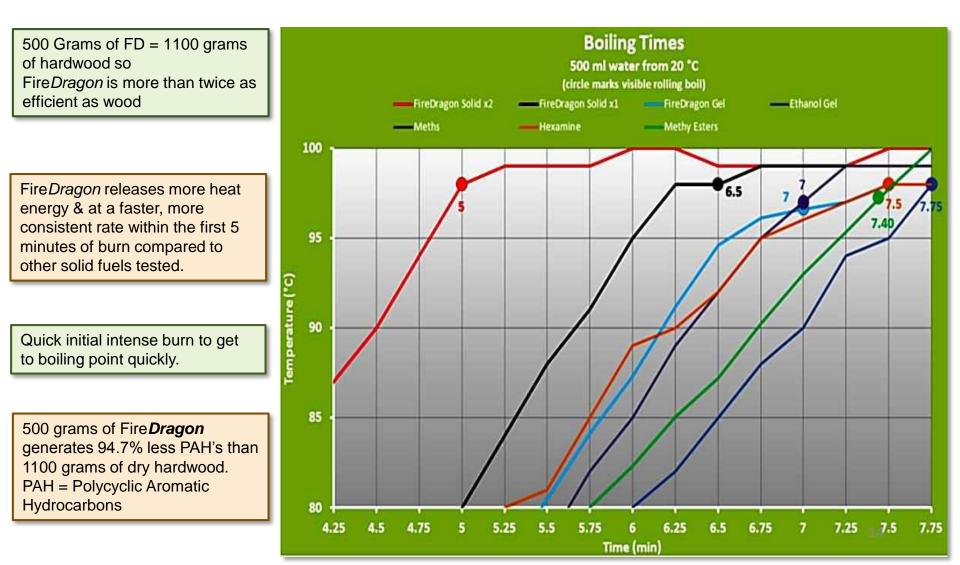






Fire Dragon is more efficient (28 MJ/Kg) than kerosene, methyl esters, or paraffin.

In extensive field & laboratory testing by the British Army, FireDragon proved to be the best of all solid fuels tested.





## **SCIN** Intense**Burn** - Ethanol dumps its energy very quickly

Non-Toxic	Hexamine X	Trioxane X	Butane Gas	Methyl Ester	FireDragon	It offers the fastest water boil time of any solid fuel we have tested.
Renewably sourced	х	х	х	1	1	
Suitable for extreme conditions(wind & rain)	х	1	$\checkmark$	1	1	FireDragon is over 2 minutes faster than the second best performing fuel.
Burns whilst wet	х	х	$\checkmark$	х	<ul> <li>Image: A second s</li></ul>	
Easy to ignite	х	х	1	х	1	
Low odour	x	х	1	x	1	
Hand cleanser	х	х	х	х	$\checkmark$	Meths boiled the same amount of water in 7 minutes, hexamine in 7.5 minutes &
Low soot	х	х	х	х	1	liquid ethanol in 7.75 minutes.
Long shelf life	1	1	1	1	1	
Air transportable	1	1	х	1	1	
Indoor & outdoor use (provided suitable airflow)	х	х	1	х	1	Performance varies depending on cooker
Low luminosity flame	х	х	1	х	1	& weather conditions, however a block of FireDragon burns for approximately 8 minutes (2 blocks - 12 minutes) & boils 500ml of water in just 5 minutes.
Made in the UK	х	х	1	х	1	





GEL

FIRELIGHTER

SAFER SOLID FIRELIGHTE

NFW

### **NEW retail packaging**

SAFER SOLID FIRELIG

**Gel Fuel Pouches** The pouch is robust, and quick & easy to open. Ideal for packing in your rucksack. Available in 200g or 1 litre.

IGHTER

NON-TOXIC

ODOURLESS

Solid Fuel Pouches

NEW

Eco-friendly, recyclable & attractive pouch which can be conveniently displayed either stacked or hanging. Lightweight, low-bulk, easy to store & open. Available in pouches of 6 or 18.

#### **Firedragon Cooker** Designed specifically for use with firedragon solid fuel. Compact, lightweight, folding design. Compatible with many other fuels.

1 Litre





### Solid fuel blocks

Packaged in a handy pouch which can be conveniently displayed in its shelf display outer or hanging on euro hooks. These packs are then packed a convenient shelf display box.

### Available in 2 attractive retail pack sizes.

Containing either 6 or 18 large individual 1 oz (27g) blocks



Each large block is individually wrapped

- 1 oz (27g) portioned cube
- Lightweight
- Easy storage
- Recyclable packaging

### **Gel pouches**

FireDragon Gel is supplied in two sizes: 8.8oz (250g) & 35oz (1kg) with integral handle on the larger pouch.

Then packed in a shelf carton for display.

Convenient to squeeze out.

Ideal for use in multi-fuel outdoor cooking stoves & barbecues, as well as for lighting indoor or outdoor fires.

- In driving rain, the freezing arctic or searing heat, the fuel will perform in extremes of conditions.
- Perfect for packing in your rucksack.
- Folds flat when empty.
- Less waste.



\* Safer than liquid or gel fuels





### Other items in the range

### (1Litre) 35oz Liquid Fire Lighter



- **Fire Dragon** Liquid fuel is an ideal companion for all outdoor pursuits. Whether in driving rain, the freezing arctic or searing heat, the fuel will perform in extreme conditions.
- Can be used in multi-fuel outdoor cooking stoves & barbecues as well as all ethanol stoves.
- Easy to light.
- With child-safe cap & pouring nozzle.

### **Fireball flint & striker Grand**



- Comfortable, safe & easy to use
- Includes a small liquid filled button compass in the handle
- The flint & striker slide & lock together
- The long flint gives a great shower of hot sparks
- ✓ Quick to light FireDragon
- Use many thousands of times
- Non-hazardous to ship unlike matches or lighters

### **Multi Fuel Cooking System**

#### The 5 piece Dragon System includes:

- Drinking cup
- Canteen 950 ml (3oz) water bottle
- Cooking cup
- Multi-fuel cooker
- Belt-mounted compact carrying pouch
- Quick, efficient cooking fuel
- The metal cup is hard-anodised, giving it an easy-to-clean finish
- The compact pouch has belt loops



### **Folding Cooker**

- Compact & low cost
- Easy & quick to use
- Lightweight (110g)
- Retractable side walls
- Supplied with a removable windshield to enhance extreme weather performance
- Efficient cooking
- ✓ NATO approved







## **Current packaging for cash & carry**





**Sustainable** 

Fue



## Within 3 months Packaging for major retailers







FIR = DRAG 😪 M

FIRELIGHTERS

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NON-TOXIC

ODOURLESS

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100% NATURAL



## **Retail promo**

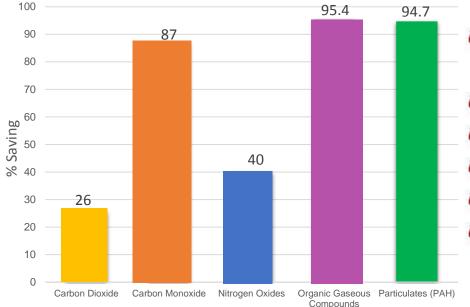








### Greenhouse Gas Emissions % of savings of using Fire *Dragon* compared to hardwood



- 1 kilo of wood burnt, gives off the same amount of level 1 (the worst) PAH carcinogenic compounds as 27,333 cigarettes.
- The compound, benzo (a) pyrene, can travel 1000 km & once deposited can remain in land or water for years
   Burns clean, very little smoke, smell or soot given off
   Made from sustainable natural bioethanol
   Does not affect the taste of food
   Non-toxic
- 🥸 Odourless burn



**FireDragon** – Very little soot given off

500 grams of FD = 1100 grams of hardwood = same heat output

BSRIA Report 26<sup>th</sup> September 2019

The American EPA estimates that a fire burning for 1 hour, will burn @ 4.5 kilos of wood & will generate 4,300 times more carcinogenic polyaromatic hydrocarbons than 30 cigarettes.