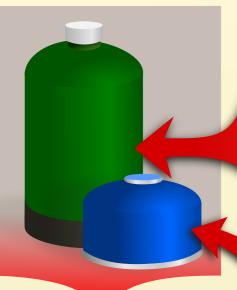
Are disposable gas canisters a viable low-impact alternative to wood stoves or campfires?

DISPOSABLE GAS CANISTERS



EXTRACTION

Mining ore for steel. **Drilling for gas. Extracting chemicals** paint, plastics, inks. **Wood for for labels**

MANUFACTURING

Making steel. **Producing cylinder.** Refining gas. **Produce and apply** paint, plastics, label.

DELIVERY

Shipping materials for assembly. **Shipping product** materials (paper, plastics, inks) Fuel for shipping.



ENERGY

Electricity, water, fossil fuels and materials required for extraction, manufacturing and delivery.

CARBON FOOTPRINT

One use canister requires significant resources and creates hazardous waste, Burns fossil fuel.

Once used canisters must be disposed of as hazardous waste. (No manufacturer recommends refilling and recycling is not widely available*)

* Federal law forbids transportation of this size of cylinder (type 39 DOT cylinder) if it has been refilled, therefore refilling is not practical or recommended. In 2009 one manufacturer a included venting key with canisters to aid recycling. Unfortunately the program was not accepted by any recycling agencies and discontinued.



EXTRACTION

Mining ore for steel. **Extracting chemicals** paint, plastics, inks. Wood for for labels, shipping boxes, etc.

MANUFACTURING

Making steel. Producing stove.

DELIVERY

Shipping materials for assembly. **Shipping product** materials (paper, plastics, inks) Fuel for shipping.







ENERGY

Electricity, water, fossil fuels and materials required for extraction, manufacturing and delivery.

Can be used for years. If it becomes unusable the materials can be readily recycled.

CARBON FOOTPRINT

Production of the stove requires resources but has a much longer useful life. Wood is also a carbon neutral fuel source.

CAMPFIRES



EXTRACTION

None*

MANUFACTURING

None*

DELIVERY None*

Sunlight and and the naturally occurring elements of photosynthesis. **ENERGY CARBON FOOTPRINT**

* Not including the source of ignition (Matches, lighters, etc.)

Although campfires emit greenhouse gases the fuel source renders them carbon-neutral.

More fuel required an a wood stove Over many campfires the impact may be greater than using a wood stove

- Convenient, easily lit.
- Alternative where fires are

- Lasting product uses resources more sustainably.



- Lightweight.
- Equal to canister stoves in weight when fuel is factored in.
- Efficient use of fuel.



- No carry weight.

- Provides warmth, cheer and



- Heavy use of resources. - Burns fossil fuel.
- Creates hazardous waste.
- Cannot be recycled.
- Less convenient than gas. - Problematic in wet weather.
- Smoke and soot.
 - Best sustainable choice for most camping situations
- Less convenient than gas.
- Problematic in wet weather.
- Smoke and soot.
- Heavier site impact
- Less efficient use of fuel.



- **Camping skills and outdoorsmanship**
- Gear reviews and advice
- Practical help for Scout volunteers

