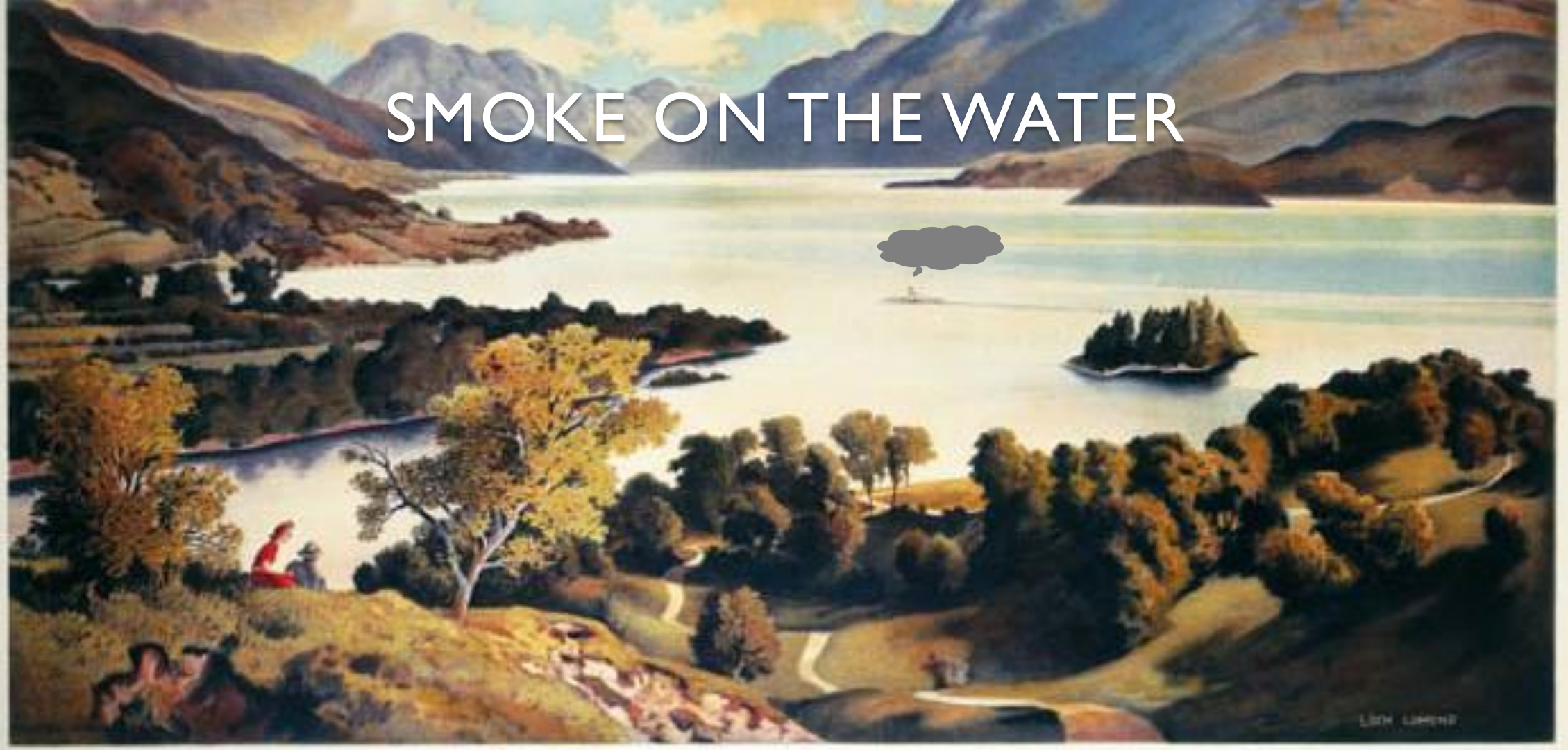
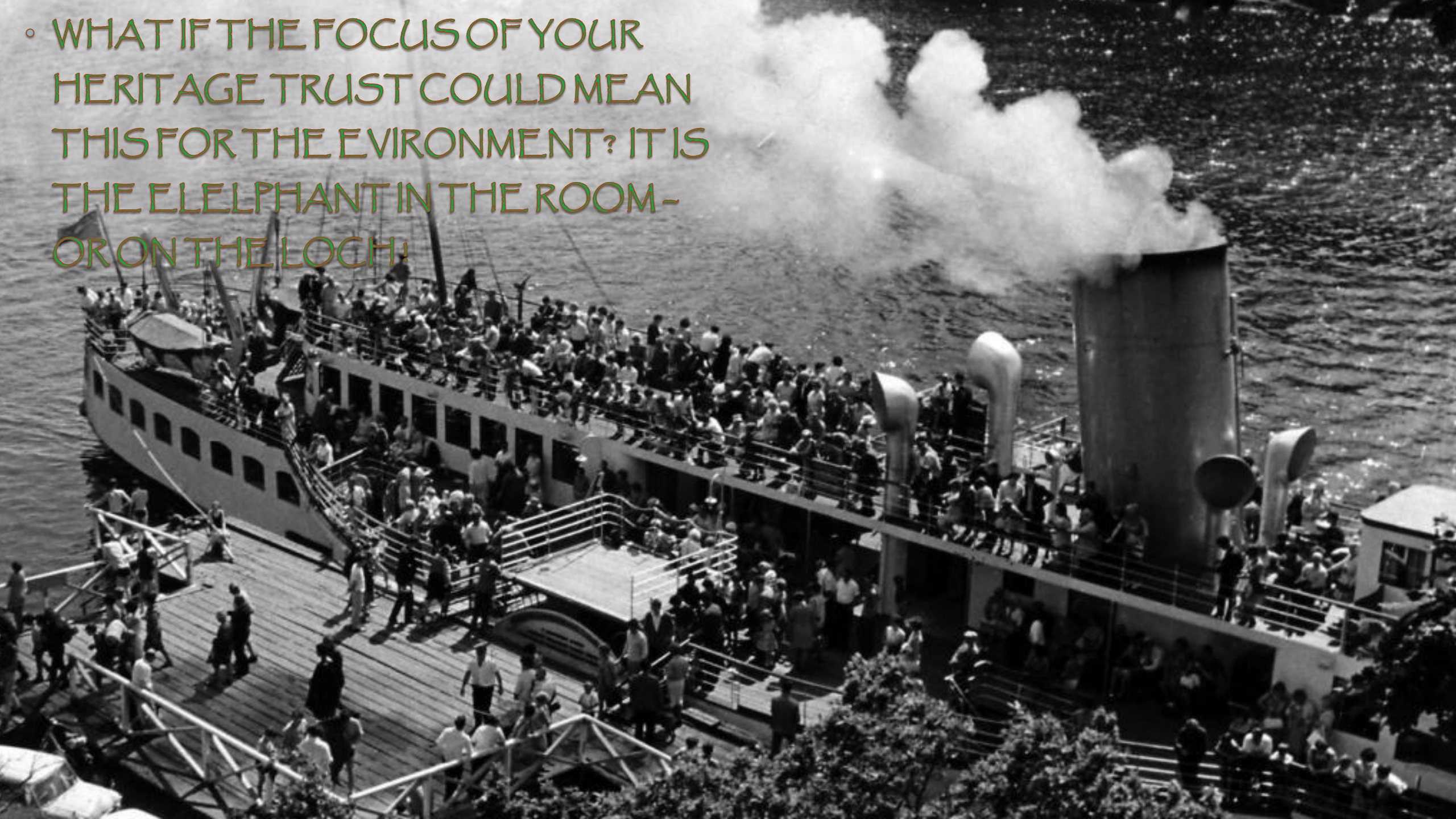
SMOKE ON THE WATER





- WHAT IF THE FOCUS OF YOUR HERITAGE TRUST COULD MEAN THIS FOR THE EVIRONMENT? IT IS THE ELELPHANT IN THE ROOM- OR ON THE LOCH!

THE WAY WE WERE

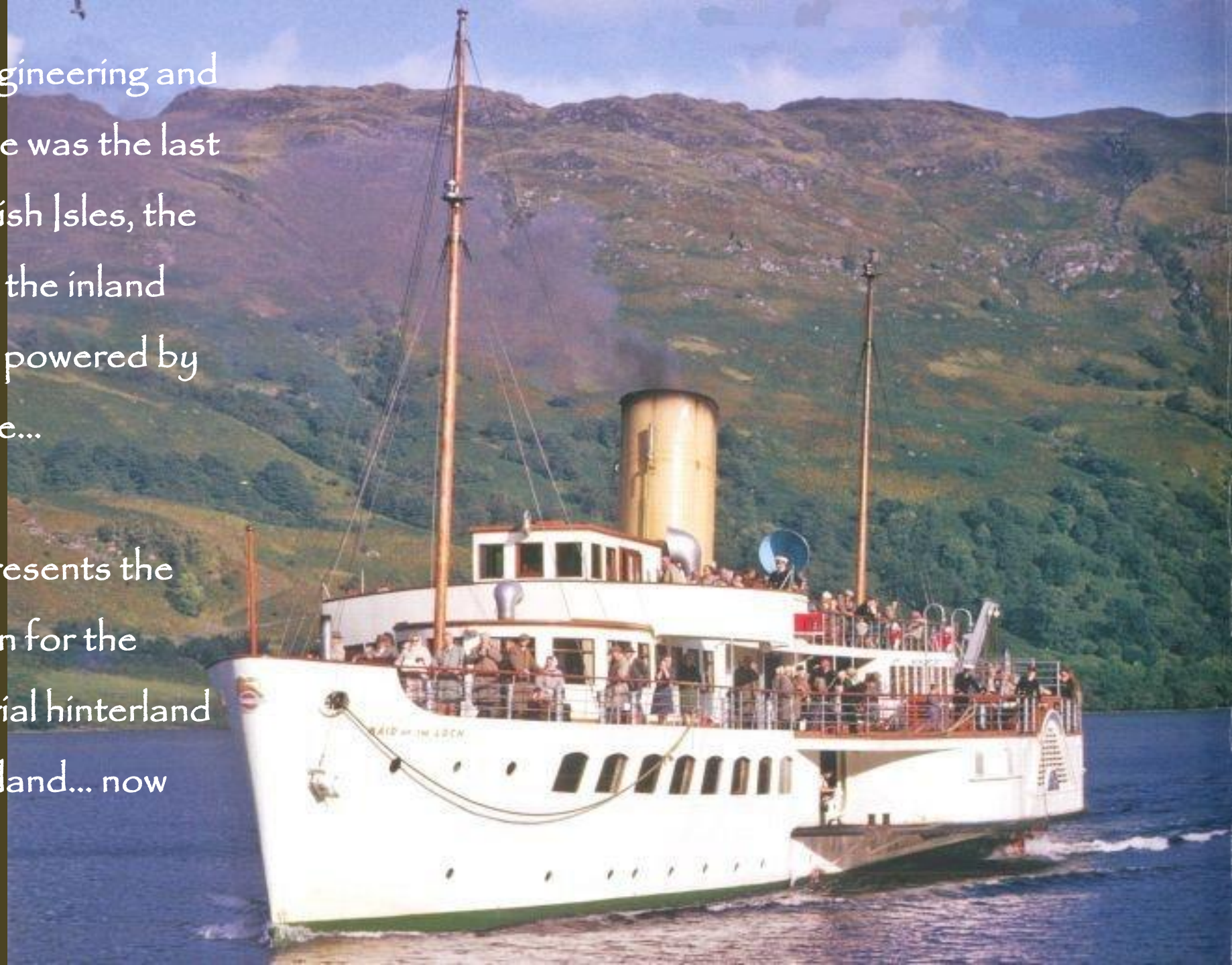
- During her time in service on Loch Lomond, from 1953 until 1982, the paddle steamer "Maid of the Loch" produced her steam in a heavy-oil fueled boiler. The galley was fired by coal
- The slipway which was and still is, used to service her, was steam powered and coal fired
- The ship's fuel oil was highly viscous and had to be steam-heated before it could be passed through the burners.
- heavy fuel oil contains deposits such as vanadium, sulphur, nickel, sodium, silicon etc. which are difficult to remove from boiler surfaces and of course were carried over in the exhaust to bedeck the Bonnie Banks by a cocktail of gases
-

THE WAY WE ARE...

- The ship lay, emissions free, for nearly 40 years, until 2019 when a temporary shore boiler once again powered the restored main engines. The boiler is fired by light oil... basically diesel, which although considerably cleaner than the original fuel is today seen as increasingly undesirable, with public transport heading towards being carbon neutral... how can we justify reboilering the ship to operate on the loch... adding to the emissions already being discharged on the nearby A82; the major trunk road serving the western highlands?

The “Maid” is a unique engineering and cultural heritage asset. She was the last of her kind built in the British Isles, the largest steamer ever to sail the inland waters of these islands... is powered by an engine of 1896 pedigree...

Most importantly, she represents the era of “rail to sail” excursion for the ordinary folk of the industrial hinterland of the central belt of Scotland... now lost on the Clyde



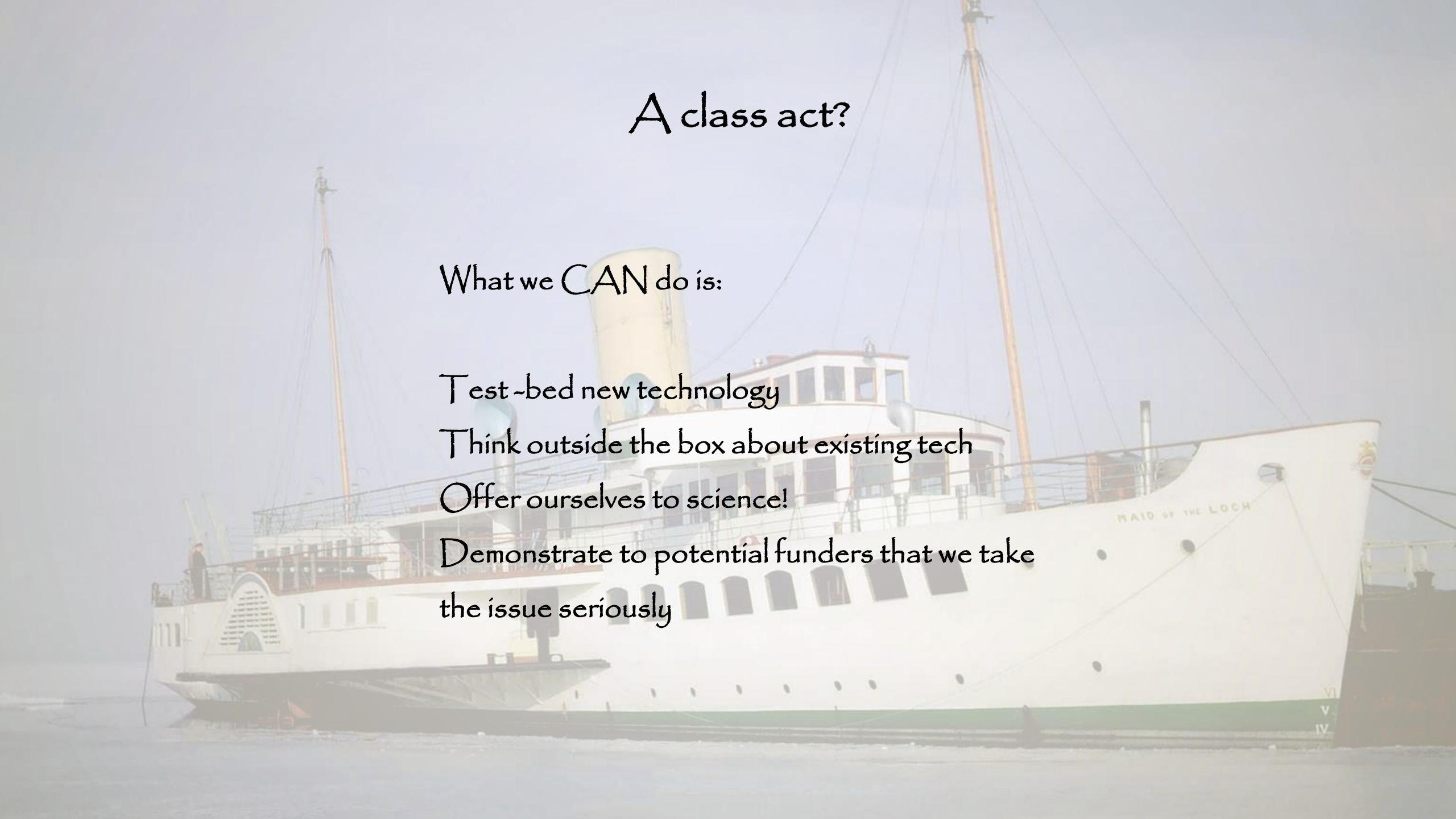
THE DILEMMA

- Is that enough?
- does her rarity and importance justify the emissions she will produce?
- In the great scheme of things, will she make much of a difference?
- After all, there are thousands of heavy-oil burning container ships, bulk carriers, tankers and indeed cruise ships plying our oceans – largely unseen by most of us but bringing the goods and materials to our shores that we all demand.
- We believe that "everyone else does it" is a flawed argument
- We must do everything we can to mitigate our emissions and to compensate with everything else we do – and keep abreast of rapidly changing technology

STOP-GAP?

- So how do we do that? Carbon offset as a tool is not a get-out-of-jail-free card and there are growing concerns that big polluters will not change their ways simply because they can afford to play that card.
- It is at best a stopgap until technology catches up or big polluters clean up their act
- So where does that leave the likes of us?

A class act?



What we CAN do is:

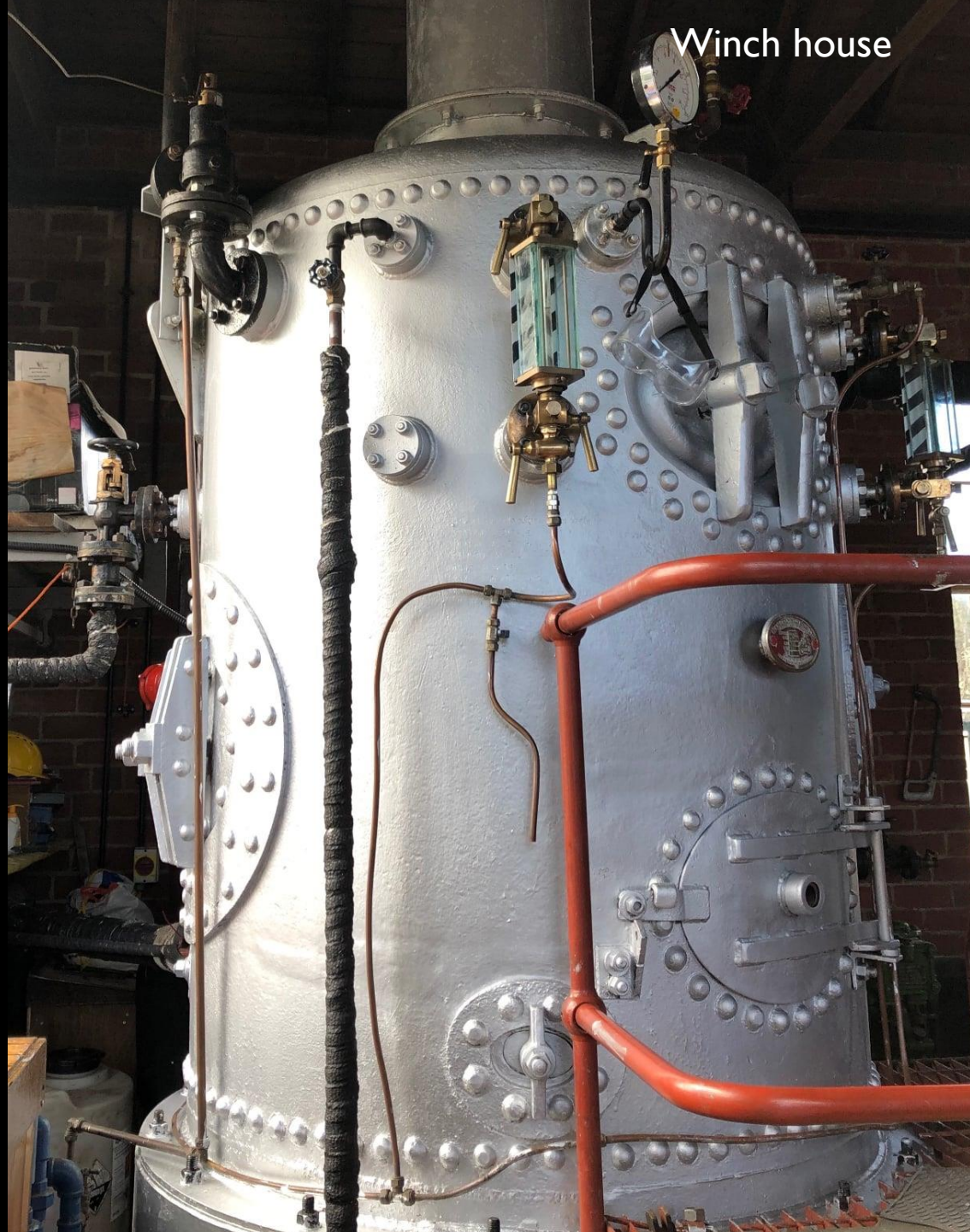
Test -bed new technology

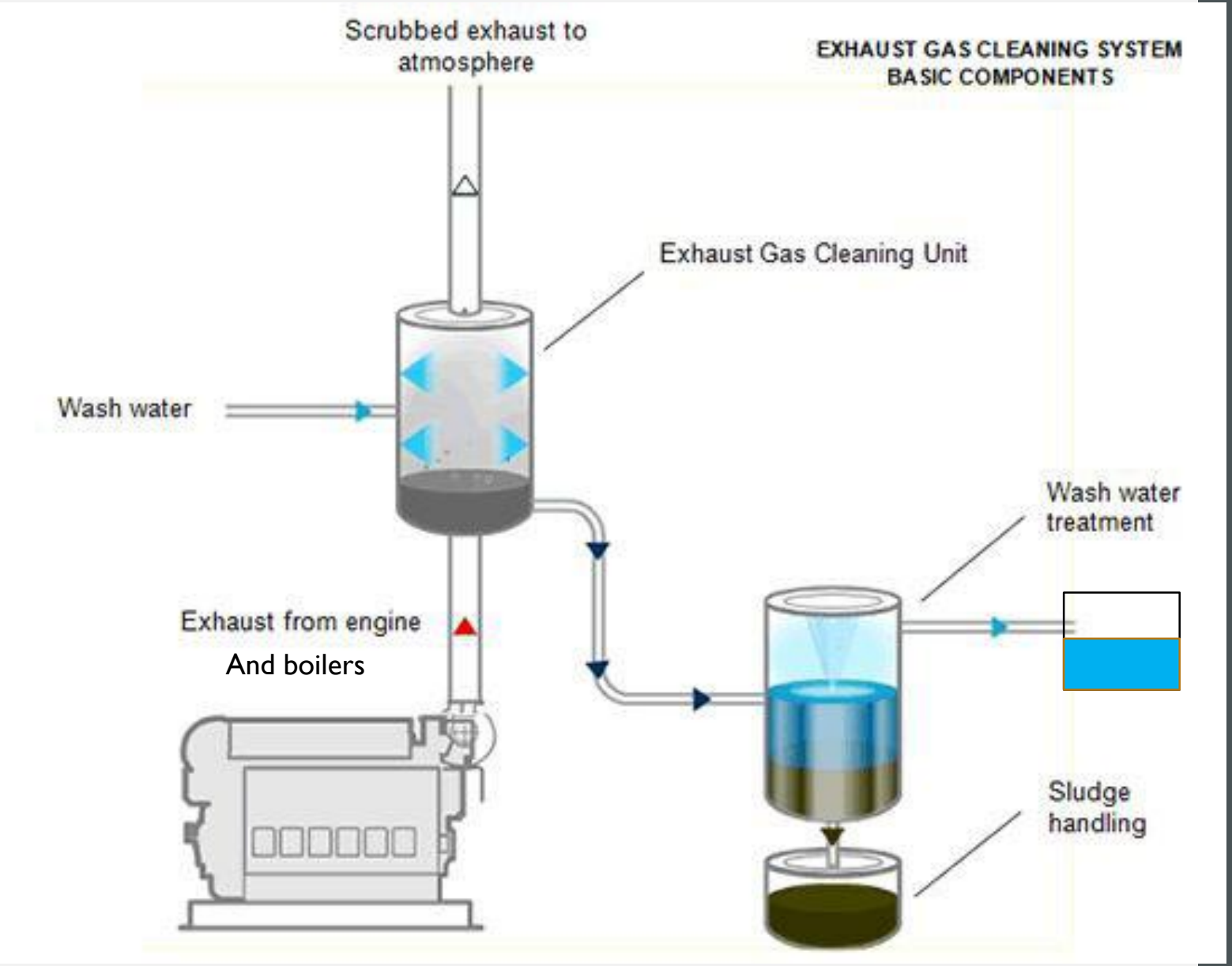
Think outside the box about existing tech

Offer ourselves to science!

Demonstrate to potential funders that we take the issue seriously

- Look at bio fuel use or indeed indirect hydrogen
- Look at carbon offset
- Involve engineering / nautical colleges in test-bedding energy
- saving / non-polluting innovations
- Look at improving steam boiler water pre-heating
- Look at using condenser cooling water to supplement domestic
- hot water heating
- Collaborate with NP on energy conservation and green projects
- Ensure "The Station structure" is environmentally sustainable
- (heat pumps?)
- Look at overnight battery charging to run selected equipment
- when cruising such as LED lighting
- Look at potable water UV treatment extracted from the Loch





A BIT OF EFFORT

- Example:
- Collaborate with an engineering college to design a small-package exhaust gas scrubber for boilers and generators

THE BEST THAT WE CAN DO

- We have a beautiful ship that's much more than steel and iron in a National park
- She is important historically and culturally
- But runs on Diesel fuel
- Do we lay her up as a floating café or mitigate the effects?
- We will Mitigate

- Thank you !
- Hope to welcome you aboard soon