

## Technologies to boost efficiency - Vessels of the Future



We believe that innovation is the key to releasing untapped potential for greater prosperity & sustainability in Scotland's seafood industry

We champion projects which will make the greatest positive change for Scotland's seafood industry and the people driving it

We are a unique collaboration between seafood experts, government and scientists of all disciplines

We create a pre-competitive environment to connect the supply chain around shared opportunities to add value to businesses & communities



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### **Vessels of the Future workshop**

- Fuel prices & regulatory pressures = increased efforts to develop alternative methods of powering and operating vessels
- Focus on reducing ship emissions in the wider maritime sector BUT little explored through the lens of commercial fishing
- FIS workshop to help put industry expertise at centre of discussions
- 50+ delegates from Canada, Norway & throughout UK
- Explore energy efficient measures relevant to fishing vessels & how to make changes a reality in ways that benefit the seafood sector
- Skippers, vessel architects, fleet managers, policy makers, engineers aim to improve fishing literacy in carbon/clean tech sectors & vice versa





## **Vessels of the Future workshop**

"The fishing industry needs support to drive change at a pace and scale expected by customers, rather than waiting for infrastructure to develop."

#### Agreed need for:

- Commitment throughout supply chain & roadmap for sectors to meet clear goals
- Removal of regulation & policy obstacles
- Finance tools to support business case for transition
- Collaboration with ports, trainers, engineers, agriculture & transport
- Equity in transition for all fleet segments & locations, incl infrastructure & skills
- Stronger evidence base & benchmarking







# KNOWLEDGE EXCHANGE

### Low CO2 emission vessels in Norway !





Fisheries Innovation Scotland



A wrong move will mean serious consequences for the viability of the fishing industry. We can't increase prices to compensate for increased costs. We're at the mercy of the market. If the market isn't willing to pay, we have to accept what is offered – and this may not cover the increased costs of reducing reliance on traditional fuels.







We need to design concept vessels capable of running on alternative fuels then benchmark the designs - technically, financially, regulatory against the status quo of vessel design, to see how far we are from making this a reality.





### As a result...

#### New benchmarking project with Macduff ship design, with advice from Exeter Uni

- develop concept designs for vessels operating on net zero powering.
- investigate 3 vessel types typical of the Scottish fleets:
  - <24m whitefish trawler
  - ~15m Nephrops trawler
  - <10m creeler.
- compare concept designs against existing conventional vessels are they technically, financially & legally possible *now?* What needs to be done to make them become a reality?

#### **Scottish Nephrops Working Group**

Regulatory barriers & unintended consequences - how do we support people in doing the right thing?

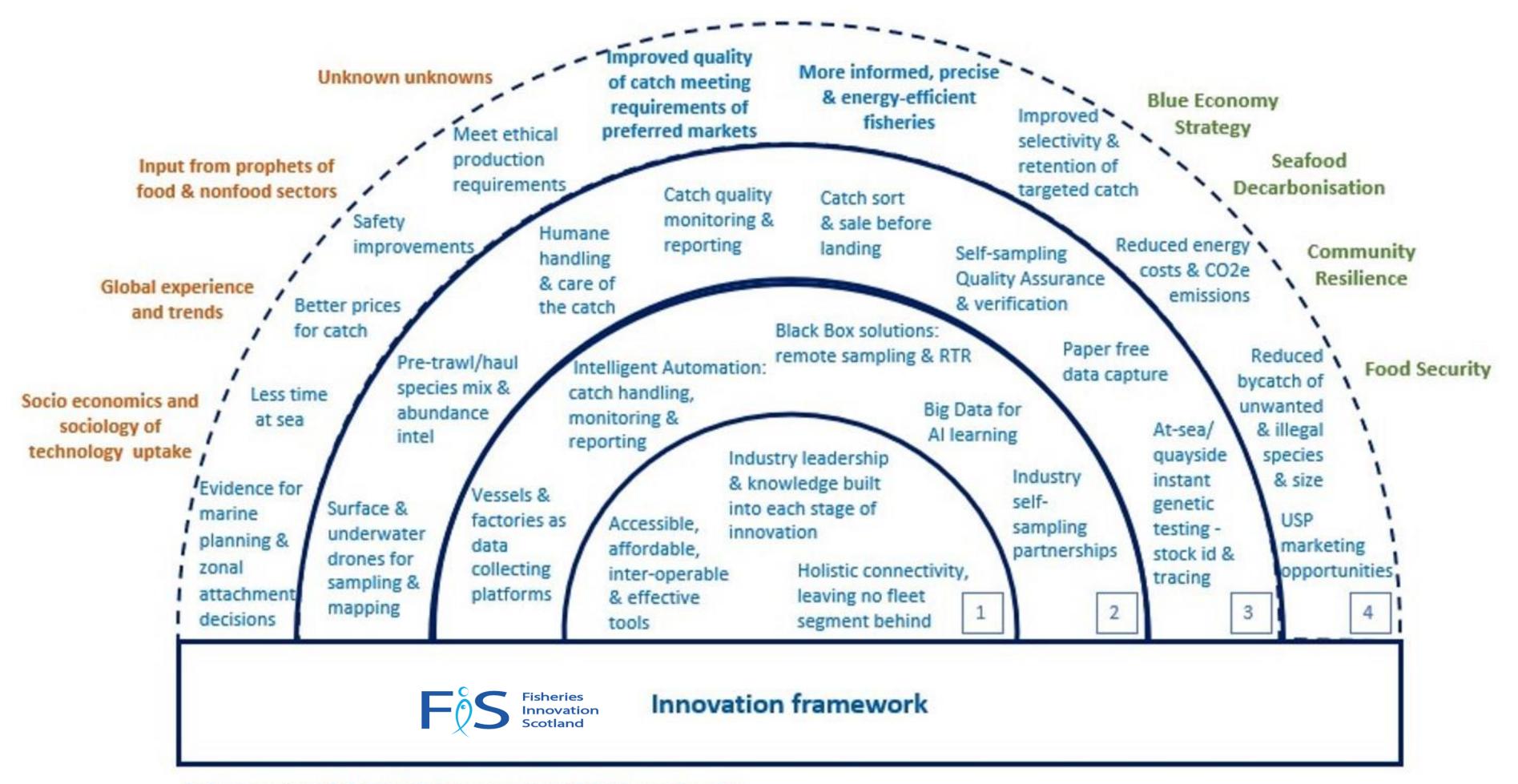
#### Clyde Fisheries Trust & Uni of Hull

Community knowledge & fisher-led experience in driving change – look *seaward* for skills & skilling up

#### Not all about technical changes to engines







1: Core principles 2: Toolbox 3: Project examples 4: End-game benefits

# THANKYOU



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