



GENerating Energy Secure COMMunities

The Sat Nav for
Green H2
Deployment







#### HYDROGEN TRIPLE ALLIANCE

PAUL MCCORMACK

#### **INNOVATION MANAGER BELFAST MET**



Hydrogen Triple Alliance





https://www.youtube.com/watch?v=FUQnxRpvbhQ&ab\_channel=TheHUGEProject



- In order to secure wider reach, extend to other communities and utilise data from other green hydrogen projects a unique green hydrogen triple alliance was formed Jan 1921
- GenComm, Sea Fuel and Huge combined their resources to enlarge the Ch2F, share expertise and amplify the DST to include data from all three projects.
- The combined CH2F is now be ' a three legged stool' and will deliver increased outputs for the 'GENerating energy secure COMMunities through smart Renewable Hydrogen' (GENCOMM), SEAFUEL and 'Hydrogen Utilization & Green Energy' (HUGE) projects and more importantly deliver enhanced benefits for the European communities.

**COHESION** 





# Hydrogen Opportunity

The European Commission is committed to "tackling climate and environmental-related challenges that is this generation's defining task".

The EU has defined a set of strong measures aiming at achieving zero net greenhouse gases emissions by 2050 and decoupling economic growth from resource use. This decoupling creates sector-coupling activities in energy, transport and industry with Hydrogen as the energy yector.

• Using Renewables to Sustain Resilient Communities.

Utilising hydrogen to increase coastal sustainability





# Green H2 why now?

- The term 'hydrogen economy' was first used way back in the 1970's.
- Despite several attempts it has never reached the energy starting gate.
- There have been a number of 'false starts' in the energy race.
- We are in the middle of a perfect storm that creates the correct conditions for a future role for green hydrogen.
- The level of EU governmental commitment, the greater availability of cheap, renewable power, the climate crisis and energy security need are key differentiators.





#### **COMMUNITY ENGAGEMENT**

- The use of hydrogen as an energy fuel presents a plethora of technical, safety and regulatory challenges.
- The attraction, particularly given current EU environmental tensions and commercial opportunity, is that it offers zero-emission operations making it a mighty contender in the quest for shipping industry decarbonisation.
- In the most optimistic outlooks hydrogen could soon power trucks, planes and ships. It could heat homes, balance electricity grids and help heavy industry to make everything from steel to cement.

- As Europe embraces the Green Hydrogen revolution many are confused and wonder how they can participate in the drive to a zero-carbon destination.
- The core rationale for green hydrogen is that it is as a clean energy alternative and is capable of tackling our huge CO2 emission targets transportable energy storage system.
- In order to make a just transition to a new green energy solution we must endeavour to leave no stranded assets. This includes communities, people and regions.
- As we map out the hydrogen highway, we must ensure there is an on-ramp for all to join.
- The CH2F is this on-ramp, it is a forum for all to engage, be informed and inform and importantly allow people to appraise the opportunities for themselves.

## THE ON RAMP FOR THE GREEN H2 HIGHWAY



# Green H2 where?

'The challenge for us all is not a simple yes or no to hydrogen. It is where is the best place for us to use it and that will differ between communities, regions, and countries'.

Hydrogen has it's place it is part of a hybrid energy solution and that place is different for us all.



- 1. Support a smooth reallocation of workers from declining to growing firms, while reducing the adjustment costs borne by displaced workers
- 2. Support eco-innovation and the diffusion of green technologies by strengthening initial education and vocational training, and ensuring that overly-strict product market regulations are not blunting the incentive to innovate
- 3. Reform tax and benefit systems for workers to make sure that cost pressures generated by environmental policies do not become a barrier to employment.
- 4. Development of the green-specific labour market and skill policies, including top-up training for mid-career workers who need to adapt to greener ways of working.

Source OECD work on greening of jobs and skills: <u>www.oecd.org/greengrowth/skills</u>

## A JUST TRANSITION TOWARDS A GREEN ECONOMY





- Hydrogen is a shared pathway and one where we need to build cohesion in order to accelerate the journey to net zero.
- Importantly a shared journey is key in creating a just transition to net zero

## CONCLUSION