Dunaföldvár Hungary

€500 million to Hungary’s GDP, supporting 2000 jobs & 1000 farmers

- Commissioned 2012 with investment by Turley family of Ireland and Fagan family of Minneapolis
- Located one hour south of Budapest in Dunaföldvár on Danube and with own rail spur
- Biggest, newest most efficient single operation in Europe
- Produces 450 million litres corn ethanol, 325,000 tons of protein feed and 10,000 tons corn oil
- Buys a million tons of corn from region’s farmers
- Capacity doubled since 2012
Tech deployment & private sector experiences

2010 – 2012: Two years from commitment to commissioning

- Record breaking short lead time
- Close collaboration between owners and EPC firm
- Concept based on straight replication of an US plant
- Build phase involved a couple of pivots in approach to bring it in on time
- Team led by mix of industry experts and ambitious first-timers
Tech deployment & private sector experiences

Since 2012: Ambitious growth and diversification

- Ever closer integration in region on all levels (farms, equipment, banks, government, research)
- Doubled throughput with introduction of diverse and state of the art technology
- Initiation of similar projects (stalled)
- Initiation of second generation technology plants using energy crops (stalled)
- Some potentially game changing new developments on site at Dunaföldvár
- Recruitment of worldwide best people
Lessons Learned

It can be done, and done quick

- Pannonia surprised everyone, going from newcomer to leader in under 5 years
- Becoming regional bioeconomy hub by size, security, diversification, innovation and value add
- Always one step back for two steps forward – hard mistakes along the way
- No legacy burdens is key success factor (debt, infrastructure, big brothers, labour)
- Focus, ambition and entrepreneurialism are key success factors
- Regulator is king...

Watch this space – it’s only the beginning
Outlook

• It’s the climate

Drivers in rough order of significance
1. Urgency of fossil substitution for climate change mitigation
2. Political support for renewables internationally (it needs to be international)
3. Political support for bioeconomy regionally
4. Diversification to high value food, materials and fuels
5. Diversification of feedstocks to residues, waste, new crop varieties etc