

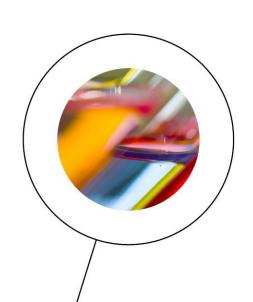
### **DEALS OF THE YEAR 2014**

#### **FIONA GRIFFITH**

**18 SEPTEMBER 2015** 







# Bringing new technologies to life

Connecting expertise, investment and inspired ideas across the globe



### Technology Approval Group

TAG is a global innovation forum for the world's leading water utilities. The TAG model was first launched in the UK in 2005, we now run 12 TAG groups across 4 continents, with more groups on the horizon.

#### **Global Locations**

- UK
- The Netherlands
- Australia
- US



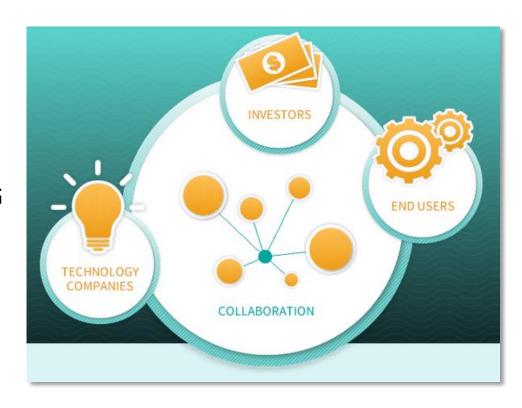
#### Consulting

With its highly skilled team of engineers and scientists Isle can provide a wider range of consulting services, from research consultancy to due diligence (both technical and market) to feasibility and evaluation studies.



#### Introduction

- Technology and innovation consultancy
- Water focus
- Global presence
- Novel Innovation Platform TAG (Technology Approval Group)
- Facilitating international collaboration
- Unparalleled track record in bringing appropriate technologies to address market needs



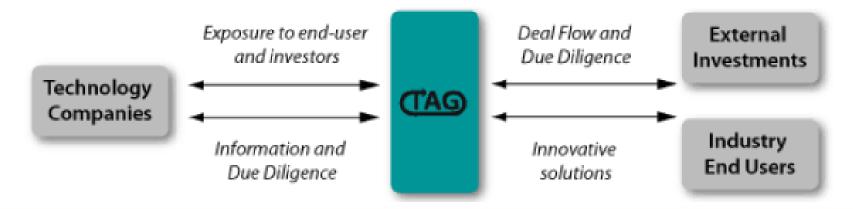


#### What is TAG?

#### TAG brings a new energy & momentum to the water sector

- Understands sector needs
- Identifies appropriate technology solutions
- Accelerates technology uptake through end user engagement

- Facilitates international industry collaboration / sharing of best practice
- Builds strong links to funding
  - Trials
  - Commercialization activities
  - The investment community





#### How does TAG work?

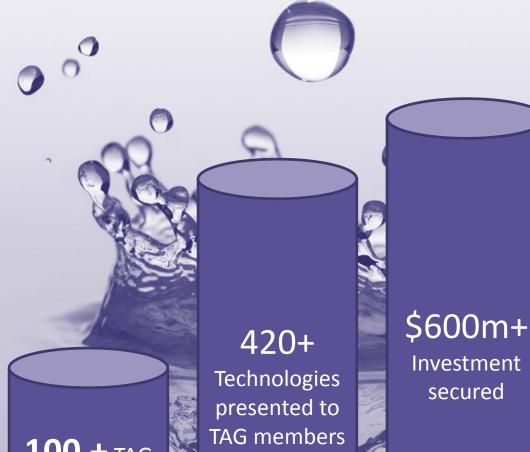
Industry uptake (trials, The Proposed Top 5 invited Technology demos) pitches at technology Due diligence Technologies to present at search List & Voting TAG TAG Investment opportunities



### TAG – the benefits



# Our°Track Record



Over 3500 technologies reviewed

> **70** TAG Meetings

**100** + TAG members globally

Investment secured

### **Global TAG Members**



100+
Global utilities



Approx. **280m**Customers served



Approx. **\$430m**R&D investment



### **Global TAG Members**







Waste-water treated







WESTERNPORT











UMGEN

WATER - AMANZI





## **Technology Companies**

































### **Investors**

### **Key Facts**

\$10m

Typical investment size

50+

Technology companies received investment

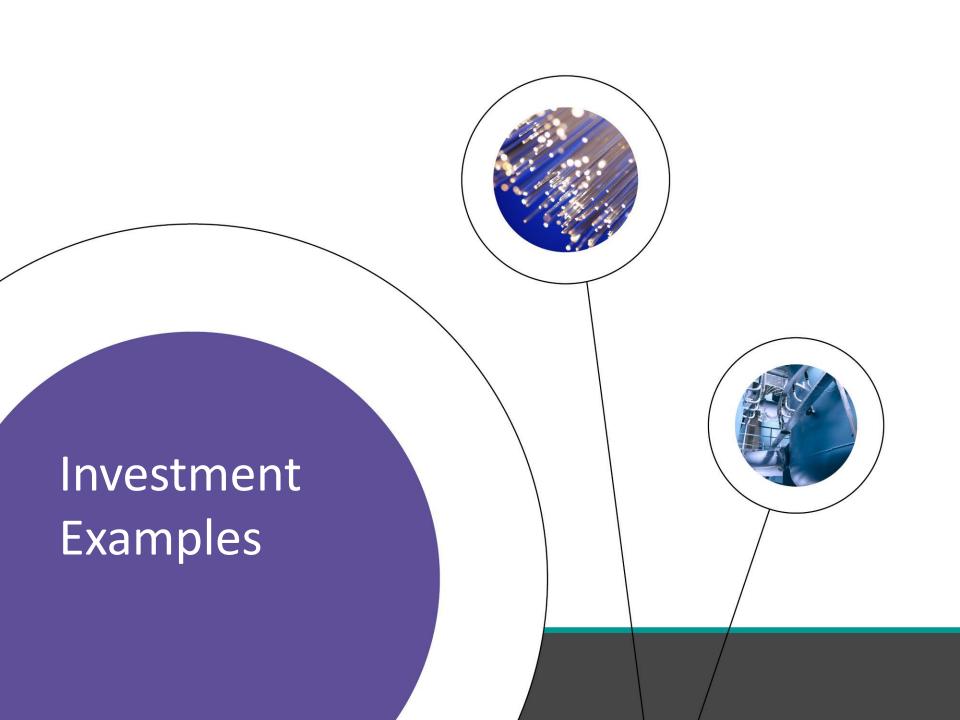
\$600m+

Investment facilitated by Isle







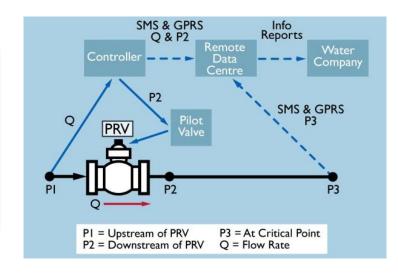


### i20 Water



**Technology Application:** Advanced pressure management system

**Technology Description:** Designed to enable water companies to reduce their leakage and burst rates while improving customer service through intelligent pressure control. A range of algorithms have been developed to vary the output pressure of the PRV so that the pressure at the critical point is kept at a stable target level independent of the water demand in the DMA.



Isle Identified Technology & Undertook DD i20 Presentation at TAG Resulted in Several UK Trials Success of Trials Enabled Early Stage Funding of \$2.5m i20 has secured \$48m of funding in total Many UK and international commercial installs

January 2008 March 2008 2009 - 2015



### **GW Fathom**

**Technology Application:** Meter reading and customer billing

**Technology Description**: FATHOM is the world's foremost Software-as-a-Service (SaaS) provider in the Water Sector. FATHOM defines the vertical between meter data management and the customer through a variety of products including meter data management, customer information system and a customer engagement platform.



Isle Identified Technology & Undertook DD Fathom
Presentation at
TAG – In EU and US

Initial uptake in US, Trials with Thames Water Significant Investment from XPV and Silver Lake Kraftwerk Now a shared platform for water software entrepreneurs

2012 April 2013 2014 2015



### **Lucid Energy**

**Technology Application:** Energy recovery from pressure in water pipes

**Technology Description**: LucidPipe utilises an in-pipe turbine that captures energy from water inside of large diameter, gravity-fed pipelines, with no impact on flow or operation. Depending on head, flow and pipe diameter, each LucidPipe turbine produces up to 100 kilowatts of electricity by extracting excess head pressure.



Isle Identified Technology & Undertook DD

Presented at TAG in EU and US

Secured \$5.7m equity investment

Commercial demonstrators in US

Now looking at market in South Africa

Dec 2013 Jan 2014 2014 2015



### Lontra

**Technology Application:** Aeration Blade Compressor for Variable Capacity Compressors

**Technology Description:** The patented design has a novel rotary geometry, designed for high volumetric and thermal efficiency. It can deliver the benefits of variable capacity, variable compression ratio and variable output through the basic mechanism. This obviates the requirement for complex variable speed control systems, delivering the efficiency improvements of VSDs (of up to 35%) without the attendant capital costs.



Isle Identified Technology & Undertook DD

Lontra Presented at TAG

Isle facilitated trial with Severn Trent Water

Isle facilitates meetings resulting in Lontra securing \$500,000 in investment

Lontra establishes licensing deal with Sulzer

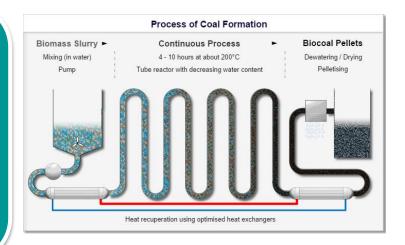
June 2007 September 2007 2008 June 2010 January 2014



### **Antaco**

**Technology Application:** Convert waste into carbon neutral solid fuel

**Technology Description**: Hydrothermal carbonisation is a highly efficient process which replicates the natural process of coal generation. The process uses a combination of heat and pressure to chemically transform biowaste into a carbon dense material with similar or better properties as fossil coal.



Isle Identified Technology & Undertook DD Antaco not selected to present at TAG – too early stage Introductions to interested water utilities

Grant funding from DECC - \$1.34m

Commercial demonstrators being established

Jan 2013 March 2013 2014 2015



### Orege

**Technology Application:** Sludge dewatering optimisation

**Technology Description**: SLG is a physio-chemical pretreatment system which can be used on a wide range of different sludge streams before traditional dewatering tools such as filters or centrifuges. Reduces chemical consumption, sludge volumes and transport costs.



Isle Identified Technology & Undertook DD Orege Presentation at TAG – In EU and US Additional VC investment, trials with Anglian Water

Sale of company to natural resource efficiency group Eren S.A.

Growth and commercial sales in municipal water

Jan 2012 March 2012 2013 2014 2015

# Thank you

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