

High Value Manufacturing – Flow & Fluids

Drivers / Challenges

Shift from high volume to high value manufacturing / Faster, more efficient reduced waste processes

Targets / Impact / KT

Industry guidance on innovative techniques for use of non-invasive ultrasonic flowmeters

Industry guidance on innovative flowmetering techniques

Industry guidance on measurement techniques / support for standards

Improved accuracy, reduced health & safety issues for flow measurement in food processing, pharmaceuticals and nuclear industry

Improved accuracy and reduced costs for flow metering in challenging environments

Accurate measurement enabling compliance with environmental regulations and improved efficiency for renewable energy systems

Deliverables

JIP evaluation of the performance of clamp-on ultrasonic meters

Provision of additional flow and fluid property information – phase 2

Traceable facilities for wind, wave, tidal, solar and other renewable energy technologies

Demonstrator network with clamp-on meters – **04/11**

Provision of additional flow and fluid property information – phase 1 – **09/10**

Techniques for measurement of efficiency of renewable energy systems

Technologies

Clamp-on ultrasonic flow meters

Advanced meter diagnostic techniques

Advanced techniques & technologies for measurements in fluids & flows

Advanced data processing and modelling techniques

Remote sensing technologies such as SODAR and LIDAR

Project 08/5.3 →
Project 09/06 →

Enabling Science

Underpinning metrology, traceability and standards plus increasing knowledge of physics and chemistry of fluids, fluid dynamics and advanced manufacturing techniques

2009

2010

2011

2013

2015

