



Frank Wouters, Director EU GCC Clean Energy Technology Network

Mr Frank Wouters is the Director of the “EU GCC Clean Energy Technology Network” project, since December 2015.

Mr. Frank Wouters has been leading renewable energy projects, transactions, and technology development for over 25 years. He has played a lead role in development of renewable generation projects valued at over \$4.5 billion. These range from small scale PV solar electrification in Uganda to the 100MW Shams I Concentrated Solar Plant (CSP) in the UAE, and strategic equity investment in the London Array, the world’s largest offshore wind project. His transactions have received multiple project finance “Deal of the Year” awards.

Mr. Wouters’ management and leadership experience is unparalleled. As Deputy Director-General of the International Renewable Energy Agency (IRENA), the first global intergovernmental organisation dedicated to all renewables, he managed a US\$350 million IRENA/Abu Dhabi Fund for Development project facility for RE. He appraised over 80 projects a year and recommended projects for funding, including solar PV projects in Africa.

Mr. Wouters has served on the board of several energy companies, including Torresol Energy SA, where he developed three solar plants with an overall budget of US\$1.4 billion. Mr. Wouters has a proven track record of advice to public power sector agencies. As Director of the Masdar Power Unit, a clean energy company owned by the Abu Dhabi Government, he managed more than US\$3 billion of power projects, including solar and wind power projects. He coordinated with government ministers and other stakeholders to promote private sector investment for RE projects as part of the Africa Clean Energy Corridor Initiative.

Qualified with a Master of Science in Mechanical Engineering from Delft University, he is fluent in English and German, as well as Dutch.

Dr. Mustapha Taoumi, EU GCC Clean Energy Technology Network



Dr. Mustapha Taoumi is the Energy Technology Expert of the “EU GCC Clean Energy Technology Network” project, since January 2016.

Dr. Taoumi has been leading Renewable Energy and Energy Efficiency projects and technology deployment for over 30 years. He has worked with US AID, GIZ (Germany), JICA (Japan) and EU (DGXII) as Project and Programme Manager. He has conducted numerous feasibility and planning studies, building programs and has implemented projects on the ground. He assisted local institutions to develop strategic plans in sustainable energy. He managed numerous seminars and training workshops concerning the use of renewable energy and energy efficiency. Dr. Taoumi was also involved in several initiatives and projects with a regional scope particularly in MENA and Mediterranean regions including the Mediterranean Solar Plan (MSP).

As a Regional Programme Officer for North Africa and the Middle East region (MENA) within the International Renewable Energy Agency (IRENA), the first global intergovernmental organisation dedicated to all renewables, Dr. Taoumi managed several projects and initiatives across MENA region including Renewables Readiness Assessment (RRA), assessment of local manufacturing potential in the Arab region and recently the Pan Arab Clean Energy initiative (PACE).

Dr. Taoumi held several key positions including Secretary General and Interim Executive Director within the National Renewable Energy Centre (CDER) in Morocco - now transformed on a National dedicated Agency (ADEREE) as well as Executive Secretary of the Mediterranean Association of the National Agencies for Energy Conservation (MEDENER- Network). Before joining IRENA in 2010, he was nominated by the Ministry of Energy in Morocco as IRENA’s focal point and member of the IRENA’s Headquarters Selection Committee.

Among other positions, Dr. Taoumi is an active member on several organisations, conferences and networks around the world including the MENAREC Conference International Steering Committee. Dr. Taoumi holds a PhD in Electrochemistry from the Institut National Polytechnique de Grenoble (INPG) in France and master's degrees in Electrochemical Engineering and Management Science, he is fluent in English, French, Spanish as well as Arabic.



Andrew Parker, EU GCC Clean Energy Technology Network

Mr Parker has worked in the field of energy efficiency and renewable energy for over 30 years, specialising latterly in audits, energy planning, building energy efficiency, project appraisal and evaluation. He has undertaken energy projects in Russia, Moldova, Ukraine, India, Pakistan, Poland, and USA, generally serving as project manager or senior adviser. In addition Mr Parker has been responsible for project management duties on behalf of the European Commission in most member states of the European Union over the last 15 years. Wide experience in buildings energy efficiency, particularly in schools, hospitals and commercial buildings.

He was senior technical advisor for energy efficiency studies of commercial buildings in India on behalf of UNDP; has monitored energy efficiency projects in UK and elsewhere in Europe; responsible for auditing and training in building energy efficiency in Russia and Moldova. In the UK he assessed over 80 grant applications for energy saving projects under the UK Government Carbon Trust funding scheme. Most projects have included some aspects of direct training, capacity development or building staff awareness of energy and related matters.



Toby Peters, Professor in Cold Economy, University of Birmingham

Toby Peters is the Professor in Cold Economy at the University of Birmingham and a Senior Research Fellow in Transformational Innovation for Sustainability at Heriot-Watt University. He is the Senior Advisor in Cooling to Sustainable Energy for All, led by Rachel Kyte the UN Secretary General's Special Representative on Sustainable Energy for All, and chairs the Academic Panel for CoolingEU.

Toby is an award-winning technology developer and industrial academic with more than 14 years of experience in energy storage /energy systems incl. policy and regulatory environments; clean cooling/the "cold economy" and the environmental, societal and economic impacts of cooling; novel technologies for refrigeration and cooling and their development and system integration. Toby was the joint-academic lead for the Doing Cold Smarter Policy Commission.

He has created and leads much of the new system-level approaches and research around delivering environmentally and economically sustainable cooling and power in both transport and the built environment, and the role "clean cold" has to play in emerging market transformation and sustainably addressing post-harvest food loss in developing economies. He is one of the named inventors of Liquid Air Energy Storage and the architect of the "Cold Economy".



Aisha Mohamed Abdullah Al Abdooli, Director, Green Development & Environment Affairs Department

Aisha Mohamed Abdullah Al Abdooli is the Director of Green Development & Environment Affairs Department at the Ministry of Climate Change and Environment. Al Abdooli has extensive experience over 15 years in different fields including: Green Development, Sustainable Development & Green Economy, in addition to her expertise in developing policies, strategies and regulatory framework in Air Quality, Climate Change Adaptation, and Waste & Chemicals Management.

Aisha had worked in managing BOOT and PPP projects in Sewerage Infrastructure, Sewage Treatment Plants and Waste Management Projects in addition to managing EPCM firms to ensure that the Construction Environmental and Social Management Plan (CESMP) is implemented in Aluminum Industry and the project construction is executed in compliance with all applicable environmental standards.

In 2013, Aisha was appointed as the Director of Green Development at the Ministry of Environment and Water, where she was responsible for developing national green development policies and strategies and regulatory framework for transformation to green economy. She also developed necessary policies for the private-sector contribution in green development and monitoring the transformation of country toward a green economy. Subsequently she handled the role of both Director of Environmental Awareness and Education and Director of Air Quality at the Ministry. She was reappointed to lead the Green Development portfolio in January 2017. She is also serving as Chief Innovation Officer of the Ministry since March 2016.

Aisha holds Master Degree in Project Management from the British University in Dubai and Bachelor Degree in Chemical Engineering from the UAE University in Al Ain.



Dr Tadhg O'Donovan, Heriot-Watt University

Dr Tadhg O'Donovan graduated from Trinity College Dublin with a Bachelor's degree in Mechanical and Manufacturing Engineering in 2001 and a PhD in 2005. He continued in Trinity College as a Postdoctoral Research Fellow and lecturer before joining Heriot-Watt University, Edinburgh in 2007 as a lecturer in Mechanical Engineering and became an Associate Professor in 2015. In January 2018 he was appointed as the School of Engineering & Physical Sciences Associate Head of the School for the Dubai Campus of HWU.

Dr O'Donovan has a research background in thermal science, mostly applied to solar energy conversion, systems and storage. His research is mainly funded by the EPSRC and Innovate UK and relates to the development of low cost solar collector technology for domestic hot water systems, phase change thermal storage devices, characterisation of high concentration multi-junction solar cells and direct charging of molten salt high temperature thermal stores. His research takes a techno-economic approach to support renewable energy companies such as Soltrapy, Sunamp, Dukosi and AES Solar. His research also includes the thermal management of electronics, bio-thermal diagnostics, solar powered water purification using membrane distillation and thermal management of Fischer-Tropsch processes for Gas to Liquid conversion. Six PhD students have graduated under Dr O'Donovan's guidance and his current

research team includes 5 Research Associates and 3 PhD Students. Dr O'Donovan has published in excess of 60 research papers in peer reviewed conferences and high impact factor journals. Dr O'Donovan leads the nESSI (novel Energy Systems and Storage Integration) research theme within EPS and represents HWU for the Energy theme of the Scottish Universities Physics Alliance (SUPA); he is a member of the "Get Energised" Steering Group for the National Museum of Scotland and currently serves as the Director of the Scottish Institute for Solar Energy Research (SISER).

Dr O'Donovan has an established record of teaching innovation. With support from the QAA/HWU Enhancement Theme Fund and in collaboration with colleagues, he has developed a "Multi-Campus Undergraduate Research Group" where students based in Edinburgh and Dubai collaborate synergistically in a research-led learning environment. His innovative teaching practices, which also include the use of personal response devices, social media, lecture capture and podcasting have been presented at the Enhancement Led Institutional Review (ELIR) and contributed his Graduates' Teaching Award in 2013 and 2017.



Dr Raya Al-Dadah University of Birmingham

Dr Al-Dadah is a senior lecturer in Thermofluids within the Department of Mechanical Engineering having previously undertaken a BEng in Palestine and a PhD from London South Bank. She has researched and supervised research projects in the fields of heat transfer, heat powered refrigeration systems and harnessing solar energy and published over 150 papers in reputable journals and international conferences.

Specific Research interests:

- Heat powered adsorption technology for energy storage, cooling, heating, power generation and water desalination. Leading research work regarding heat powered adsorption technology in collaboration with Weatherite Air Conditioning Ltd, Johnson Matthey Plc and MOF Technology Ltd with funding from the Department of Energy and Climate Change (DECC), Engineering and Physical Research Council (EPSRC), British Council and Innovate UK.
- Harnessing solar energy: Developing efficient methods of harnessing solar energy based on concentrated Photovoltaic cells (silicon cells as well as multi-junction cells) for both electricity and heat energy production (PVT and CPVT).
- Liquid Air Energy Storage: Developing efficient cold energy recovery systems for cooling, power generation and freeze water desalination

Mohammed Youbi Idrissi– Air Liquide

He is graduate from the "Institut National Polytechnique de Grenoble" and holding a Ph.D. degree from "Conservatoire National des Arts et Métiers" from Paris,

He worked at the "Institut Français du Froid Industriel" before his research position at IRSTEA wherein he managed there many projects focused on eco-design of vapour mechanical compressors units and the energy efficiency of the heat exchangers.

In 2008, he joined Air Liquide-CRCD as Project Manager, supervising the Refrigerated Transportation project. He also participated in the R&D projects of Life Science group evaluating, improving, and innovating in the area of the cryogenic equipments dedicated to food applications and Cold Chain. In 2013, Mohammed was nominated as TCL-International Expert.



Since September 2013, Mohammed is head the R&D Life Science group managing a team researchers working on Cold Chain, Energy Storage, Food&Pharma and Bio-Chemical applications using gases provided by Air Liquide.

Mohammed is inventor of more than 30 patents and author of more than 40 scientific and technical publications in the refrigeration field, he also teach in many engineering schools and universities in France on a regular basis. He is a Junior Member of the International Institute of Refrigeration (IIR), EU-Cooling Experts network, Vice-President of the French Refrigeration Association (AFF) and member the editorial board of the Revue Générale du Froid et du Conditionnement d'Air



Scott MacMeekin – Dearman

CEO at DEARMAN ENGINE COMPANY LIMITED, May 2017 - Present

Dearman is a market leader in the 'clean cold tech' space providing cost effective, innovative, customer driven solutions to the most challenging applications across the clean-tech sector.

Non-Executive Director at TR Fastenings (LON: TRI), April 2013 - Present

TriFast Plc; Main board on the London Stock Exchange, active in more than 50 countries supplying dedicated assembly solutions to market leaders in the automotive, whitegoods, and electronic design and manufacturing sectors.

COO at Tes Envirocorp Group (Tes-Amm), May 2014 - May 2017

Tes-Amm is a leading regional e-waste management organization and world class global electronics life cycle services organization

Portfolio Director at Navis Capital Partners, May 2014 - May 2017

Navis Capital Partners founded in 1998, the firm manages several private and public equity funds, Navis has one of the largest private equity professional team in Asia, in eight offices across the region. The firm acquires control of its portfolio companies (over 60 controlling investments to date). The firm contributes both capital and management expertise to its portfolio companies.

Founding Partner at TruFormance, January 2009 - Present

Private Investment Firm, focused on carve-outs and turnarounds in the SME B2B sector

Chairman at CORPORATE PERFORMANCE MANAGEMENT SOFTWARE, January 2009 - November 2010

Providing a suit of core business tools to improve strategic alignment and execution

Industry Advisor at Norwest Equity Partners (Wells Fargo) June 2009 - October 2010

Private equity fund with 5 Billion USD under management

Executive Management Board (concurrent with CEO roles) at Bossard Group, January 1998 - June 2009

Bossard is listed on the SMI stock exchange in Switzerland and active in 78 countries worldwide, providing best in class Assembly Technology solutions to industrial companies.

Chairman at Heads Up Software, January 2005 - February 2008

Open source software and services for application lifecycle management (ALM)

Vice President Operations at Porteous Fastener Company, January 1988 - January 1995

World's largest fastener distributor with actives across the Americas

Education

Harvard Business School, Strategic Negotiations: Deal Making For The Long Term, 2004 - 2004

National University of Singapore, Master of Business Administration (Asian Business), 2000 - 2001

Harvard Business School, The General Management Program, General Management, 1997 - 1998

University of California, Los Angeles, Professional Designation, International Marketing, 1984 - 1989



Dr Phil Greening, CO-Director, Centre for Sustainable Road Freight

Dr Phil Greening is an Associate Professor at Heriot Watt University and a Director of the Centre of Sustainable Road Freight a collaborative venture between Industry, Heriot Watt University and Cambridge University. His research interests include complexity, risk in supply chains, road freight, green logistics, cold chain and computer modelling of complex systems. Prior to becoming an Academic Dr Greening was a senior Supply Chain Consultant.



Alejandro Subiza, Araner

Alejandro Subiza. Master on Electro-Mechanical Engineer by the University of the Basque Country Spain. Master Thesis carried out in the Tampere University of Technology Finland. He has also completed several Post Grade course in the field of thermal energy and refrigeration. He has developed his entire carrier in the field of refrigeration and cooling and has extensive experience in refrigeration design, and project management for various central cooling plants in the Middle East.



Professor Martin Freer, Birmingham Energy Institute

Martin Freer is Director of the Birmingham Energy Institute and Head of Physics and Astronomy at the University of Birmingham. He also established Birmingham Centre for Nuclear Education and Research. He helped establish the Energy Capital organisation which is now the body with oversight for the energy strategy for the West Midlands and is leading a range of projects associated with energy innovation and manufacturing for low carbon technologies.