



- A. IFRF Ltd matters
- B. Strategy and Governance
- C. Membership
- D. Research and Training
- E. Events and Communications
- F. Resources



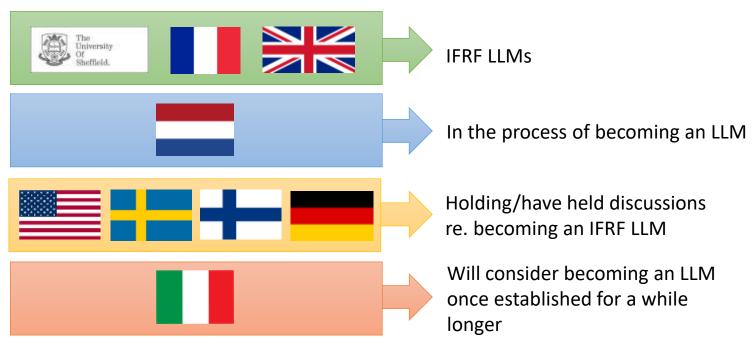


A. IFRF Ltd matters (1/2): Overview

#	Goal	Year	Who	SitRep
A1	Increase Limited Liability Members from 3 to 5 in total (by end-2021)	2021	PS	3 LLMs
A2	Co-locate and embed IFRF within 'PACT-2' initiative (by end-2021)	2021	PS (GenS)	TERC building under contstruction

#	KPI	TGT at 2019	SitRep
1	Limited Liability Members (total)	4	3

Limited Liability Members (LLMs):



NC	LLM status (more detail)
NVV	Processed paused whilst new Chair appointed
AFRC	Decision postponed for incoming Chair to progress
SFRC	Voted to pause becoming an LLM until more NCs sign up
FFRC	Resolution not reached at meeting; VB holding discussions to secure agreement
DVV	To be discussed at next member meeting in Munich (14 th November)
CI	Will consider once more established



A. IFRF Ltd matters (2/2): Overview cont.

TERC:



'Translational Energy Research Centre' (TERC) - construction now in progress and major items of plant tendered

SUEL:



Meeting held with SUEL regarding Company Secretary activity and finance administration, 9th July



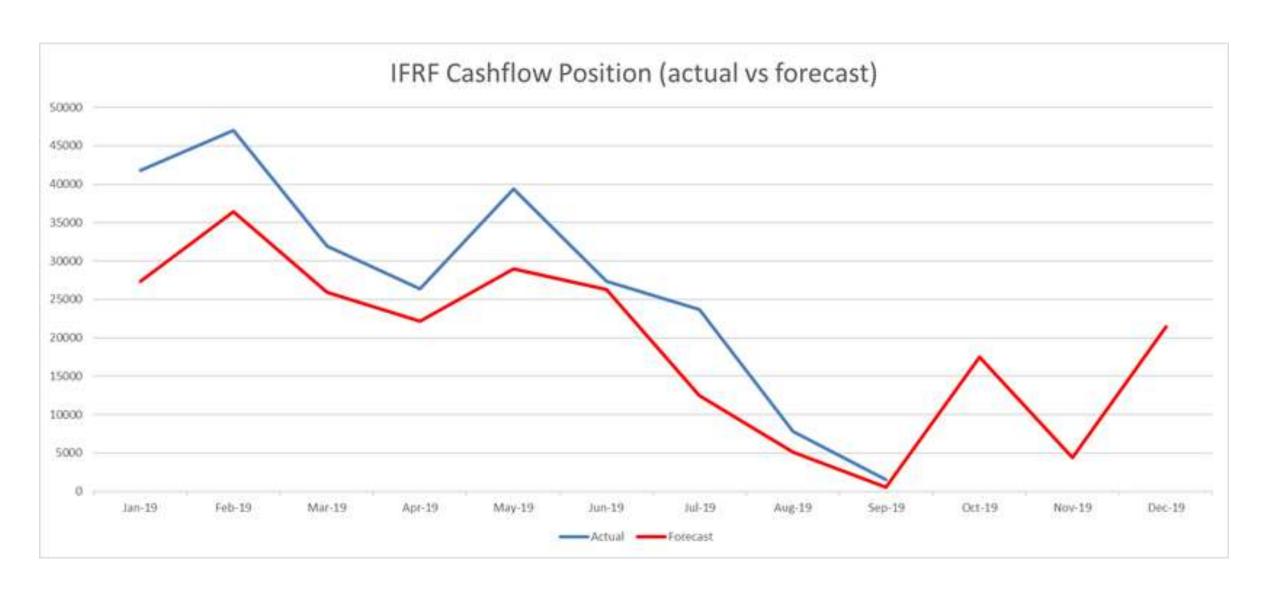
B. Strategy and Governance (1/3): Overview

#	Goal	Year	Who	SitRep
B1	Update mission, values and vision statements (early-2019)	2019	PS	Completed
B2	Address 'SoR role' on Council (2019)	2019	PS	VP-Research role defined, NCs encouraged to identify suitable candidates – AFRC seeking nominations
В3	Revise 'Co-opted Specialist' responsibilities on Council and recruit appropriately (2019)	2019	PS	NCs encouraged to identify suitable candidates – AFRC seeking nominations
B4	Confirm 'additional Council member' to serve on ExCo (early-2019)	2019	PS	Completed
B5	Build a 3-month operational reserve (by end-2021); spend surpluses on research activity	2021	PS (LS)	Budget and Financial plans approved by Council
В6	Try to establish a more consistent NC membership fees structure (2019)	2019	PS (LS)	Updated paper to be discussed at CL(2019)02

#	KPI	TGT at 2019	SitRep
2	Operational reserve (by end-2021)	-	Budget and Financial plans agreed by Council



B. Strategy and Governance (2/3): Cashflow





B. Strategy and Governance (3/3): IFRF Council



Virtual ExCo meeting held 18th July 2019 Six attendees (100%)



Cashflow monitoring

Regular monitoring and discussions regarding the cashflow position due to delayed NC payments.

Vice President - Research

 NCs encouraged to identify suitable candidates from their members; AFRC seeking nominations





Co-opted Specialists:

 NCs encouraged to identify Co-opted Specialists (current vacancies - 'Environment' and 'Sector – Waste Treatment') from their members: AFRC seeking nominations





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C. Membership (1/4): Overview

#	Goal	Year	Who	SitRep
C1	Establish China NC (2019)	2019	PS	8 Chinese members recruited; CFRC registration papers under preparation
C2	Re-establish Japan NC, if possible (by end-2021)	2021	PS	PS visited Japan; JFRC still operational; talks to realign with IFRF ongoing
C3	Develop AMG esprit de corps and use as vehicle for growth in other Asian countries	2019	LS (PS)	AMG community plan implemented; periodic comms established
C4	Maintain/grow existing NCs (inc. Italy)	2019	PS	PS attended AFRC General Meeting
C5	Investigate opportunity for core group in Poland and Belgium to form NC (2019)	2019	PS	Discussions held at EC(2019)01 – no further progress
C6	Consider MEA and C&SAM for growth; reactive to opportunities in other regions	2019	PS	No progress (PS to visit C&SAM in 2020)
#	KPI	TGT at 2019		SitRep
3	National Committees (total)	9		8
4	Organisational members (total)	1	30	129 orgs; 9 individuals

- Events and Communications regarding NCs covered in section E
- PS attended AFRC general meeting in Hawaii, USA



C. Membership (2/4): NC Breakdown

AFRC

- 2019 fees paid December 2018
- 21 organisations; 5 individuals

BFRC

- 2019 fees partially paid July 2019; 1 member outstanding
- 9 organisations

CF

- 2019 fees outstanding;
 Fees due October 2019
- 19 organisations

CI

- 2018 fees paid March 2019
- 2019 fees due December 2019
- 10 organisations

DVV

- 2019 fees paid February 2019
- 23 organisations

FFRC

- 2019 fees paid May 2019
- 13 organisations

NVV

- 2019 fees paid December 2018
- 5 organisations

SFRC

- Fees outstanding from February;
 payment expected in October
 2019
- 9 organisations

AMG

- Invoices issued January 2019
- 94% of AMG members paid
- 12 organisations; 3 individuals
- CFRC 8 organisations; registration docs under preparation

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C. Membership (3/4): Member Breakdown

129 member organisations

- 6 up from Q2 2019
- 9 up from Q3 2018

Includes:

- Large industry = 47 (no change)
- Small industry = 30 (+2 from Q2 2019)
- Academia = 52 (+4 from Q2 2019)

9 individual members

- Same as Q2 2019
- Same as Q3 2018





C. Membership (4/4): Member Enquiries

Type of enquiries:

- Information for events
- Website logons
- TOTeM presentations

0 Library requests*:

*Down 5 from Q2 2019





D. Research and Training: Overview (1/3)

#	Goal	Year	Who	SitRep
D1	Expand network of Preferred Research Partners and establish MoUs (inc. in China)	2019	PS	Discussions with Greens Combustion
D2	Establish 'mini-projects' initially with UK universities (2019)	2019	PS	2 EngD projects established. JD's API concept still to be progressed
D3	Seek opportunities for collaborative R&D projects and react to partnership requests	2019	PS	Promoted H2020 2019 Calls in MNM
D4	Co-develop and deliver two pilot training courses (with partners) in 2019-2020	2019	PS (LS)	One place confirmed on ECR training however no uptake
D5	Develop and deliver one web-based training course in 2019	2019	PS (LS)	Ideas discussed at CL(2019)01
D6	Establish support mechanism with UK Centre for Doctoral Training	2019	PS	Completed
D7	Maintain referral and commission arrangement with Green Flames Technology re. probes	2019	LS	Two probes orders received

#	KPI	TGT at 2019	SitRep
5	Preferred Research Partners (total)	3	2
6	Collaborative research projects involving members (total)	1	0
7	Training courses delivered within year (real/virtual)	1	1 (but no uptake)



D. Research and Training: Training Proposals (2/3)



- Safety of combustion
- Operating pilot-scale rigs One place confirmed on ECR training however no uptake

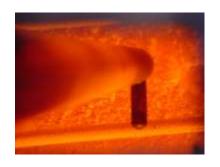


 Combustion masterclass on flexible operation





D. Research and Training: Probes and MoU (3/3)



Probes

- 1 x Probes order completed with RI:SE (SFRC member)
- 1 x Probes order received from ArcelorMittal (CF member)



E. Events and Communications: Overview (1/3)

#	Goal	Year	Who	SitRep
E1	Develop and deliver 'IFRF 2021' conference (2021) – location to be decided	2021	LS (PS)	No progress
E2	Co-develop and deliver (with NCs) one TOTeM per year (2019-2021)	2019	LS (PS)	TOTeM#46 (EfW, Pisa, 21-22/11) – programme under development; TOTeM#47 (AM of combustor parts, Paris, Feb 2020) – plan created + programme to be discussed
E3	Support all NCs to deliver Flame Days/Symposia type events annually (inc. China NC)	2019	LS (PS)	Support provided to FFRC for NFD2019, AFRC for AFRC2019 and NVV for COMBURA 2019
E4	Develop and deliver one specialised 'Roundtable Workshop' (by end-2021)	2021	LS (PS)	No progress
E5	Establish two Specialised Networking Gps. (2019-2020); each to hold two webinars/yr.	2019	PS (LS)	Ideas discussed at CL(2019)01; EfW Group to be considered at TOTeM
E6	Continue to develop IFRF website as the hub for digital delivery of IFRF's services	2019	LS (ESP)	Initial design and development complete
E7	Co-develop and deliver any 'daughter' website/pages requested by any NC	2019	LS (ESP)	Guide on how to update NC pages issued to NC chairs. Hosting of APGTF website under development



E. Events and Communications: Overview (2/3)

#	Goal	Year	Who	SitRep
E8	Find emailing solution for comms with Chinese members and NC (2019)	2019	LS	Completed (ifrf@outlook.com)
E9	Maintain bi-monthly 'MNM' e-newsletters (i.e. 26/yr.); maintain freshness and balance	2019	LS (PS)	7 MNMs in Q3; MNM refresh plans implemented
E10	Further develop social media activity: Twitter, LinkedIn, WeChat, and YouTube	2019	LS (PS)	Social media activity update
E11	Review 'Industrial Combustion' online journal; revise Editorial Board and processes (2019)	2019	PS (LS+GenS)	IC Journal change review implemented
E12	Overhaul and update the online 'Combustion Handbook' (2019-2020)	2019	LS (PS)	Web statistics reviewed; PL to analyse content
E13	Maintain publication of 'IFRF Annual Reports'	2019	LS (PS+Pres)	Completed
E14	Close-out '#IFRFAt70' PR campaign; launch roll-out of IFRF 3-Year Plan	2019	LS (PS)	Completed
E15	Cooperate/co-market with at least three combustion R&D related orgs.	2021	LS	Agreement reached with 11 other UK organisations to cooperate; Joint event under development for 7/10/19; information sharing amongst UK organisations; Integration of APGTF website into IFRF website begun
E16	Produce updated standard IFRF brochures (e-publish); restock promotional gifts (2019)	2019	LS (PS)	3 revised standard IFRF brochures published



E. Events and Communications: Overview (3/3)

#	KPI	TGT at 2019	SitRep
8	IFRF Conference delivered	0	0
9	TOTeMs delivered	1	0
10	National Flame Days/Symposia supported	2	3
11	Specialised Networking Groups (SNGs) established and holding webinar meetings (total)	1	0
12	MNMs published	26	20
13	Industrial Combustion journal papers published	6	1



E. Events and Communications: Events (1/3)

Potential future TOTeM topics for 2019/2020:

- TOTeM46 21-22 November 2019; Pisa, Italy
 'Waste-to-energy: Status and perspectives of technologies'
 - Coordinated by CI and IFRF
 - Programme being finalised
- TOTeM47 5 February 2020; Paris, France
 'Additive manufacturing for combustion application'
 - Coordinated by CF and IFRF
 - Programme under development

Other topics under discussion:

- AFRC and APIs work on standards for process heaters and flares
 - Topic generated from AFRC Symposium 2017
 - People keen on TOTeM outside of Europe
- Hydrogen and ammonia as energy vectors impact on combustion
 - Topic generated from TOTeM45







E. Events and Communications: Events (2/3)

NC breakdown

AFRC

PS attended and presented at AFRC2019 (9th – 11th September 2019)

BFRC

Promoted 'Clean Energy Science Lecture' and Workshop (7th October 2019)

CF

Discussions held regarding TOTeM47 in Q1 2020

CI

Discussions regarding TOTeM46 in Q4 2019

DVV

Annual Meeting 14th November – invited PS to speak

FFRC

NFD2019 (28th – 29th August) web page updated; NFD2019 promoted via MNM – PS unable to attend; Finland overview issued in MNM

NVV

Promotion of COMBURA 2019 (10th October)

SFRC

NFD2019 (28th – 29th August) web page updated; NFD2019 promoted via MNM – PS unable to attend

AMG

CFRC reviewing legislation regarding setting up the NC;
PS visited Japan to re-engage JFRC

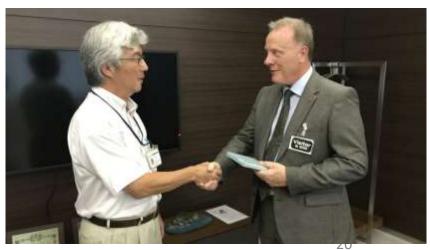


E. Events and Communications: Events (3/3)

Other meetings attended by IFRF

- Finance update meeting with SUEL; Sheffield, UK (LS)
- Visit to Japan, 15-21/9/19 (PS) visited 9 organisations; outcomes:
 - Understanding current status and membership of JFRC (seven members), arrangement with JBRA (~50 members) and prospects for enhancing
 - Connections made with potential IFRF member organisations Chiyoda Corporation, JGC Corporation, IHI Corporation, NFK and CRIEPI
 - Strategy for re-engaging with JFRC and possibly re-establishing it as an NC, aligning JBRA with JFRC and enlarging JFRC membership
 - Discussion with IFRF's partner organisation, IERE regarding coparticipation and co-organising of events/activities
 - Promotion of IFRF to other organisations with environmental issues,
 CCUS, etc., i.e. RITE and METI.
 - Identified organisations to visit in Japan, plus various government organisations/agents







E. Events and Communications: Comms (1/13)

MNM - Monday Night Mail (1/3)

7 MNMs published in Q3









E. Events and Communications: Comms (2/13)

MNM - Monday Night Mail (2/3)

Issue	1 st Most read article	2 nd Most read article	3 rd Most read article
MNM14	GWI successfully concludes the upgrade of its semi-industrial high-temperature combustion test rigs	Digital Twin Technology for Biomass Combustion	Introducing the IFRF team Patrick Lavery
MNM15	RJM International	Pathways to a low carbon future	AFRC Industrial Combustion Symposium Advert
MNM16	How much warmer is your city?	Italian hydrogen trial gives impetus to European push, but cost likely to be the chief decider	BHEL and NTPC to build "world's most efficient and environmentally friendly coal-fired power plant"
MNM17	C-Capture founder gives views on carbon capture as company looks to expand	Powering the future	Exposer of Madoff Ponzi scheme claims General Electric engaged in bigger fraud than Enron
MNM18	Energy-from-Waste technologies – Advanced Thermal Treatment: Pyrolysis and Gasification	New IPCC report suggests limits to bioenergy and afforestation	Does the rate of change of carbon emissions targets give some cause for optimism?
MNM19	Exciting times ahead in Finland	Åbo Akademi University hosts the 2019 Nordic Flame days	Valmet: Academic research boosting the energy industry
MNM20	Can hydrogen compete in costs terms?	IFRF Director in Japan (but NOT for the Rugby!)	South Korean hydrogen economy ambitions facing hurdles



E. Events and Communications: Comms (3/13)

MNM refresh implemented:

- Redesigned MNM layout
- MNM subscription opened to non-members
- Guest editors Yong Yan, Mohamed
 Pourkashanian, Sauro Pasini and Vesna Barisic
- Members profiled GWI, RJM International, CanmetENERGY, University of Sheffield, ArcelorMittal, Sumitomo and Bloom Engineering
- MNM advertising package created
- Researched vlogs and podcasts as a potential future communication channel for MNM

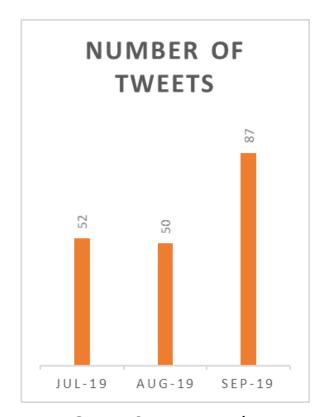




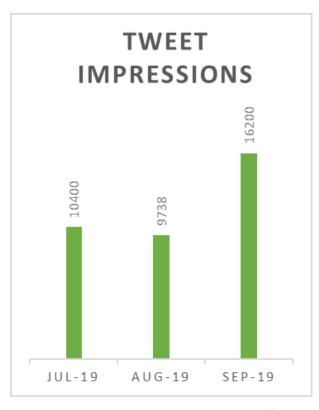
E. Events and Communications: Comms (4/13)

Social media (1/4)

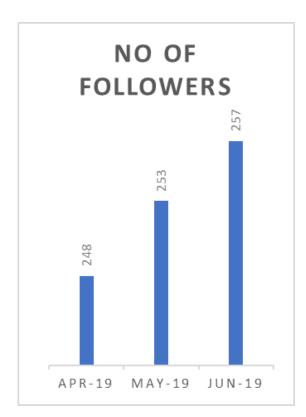




TGT = 40 per month



TGT = 10,000 per month
Impressions = reach of tweets



No TGT set



TGT = 1% per month

Rate of an engagement with a tweet (i.e. a retweet) against the number of impressions



E. Events and Communications: Comms (5/13)

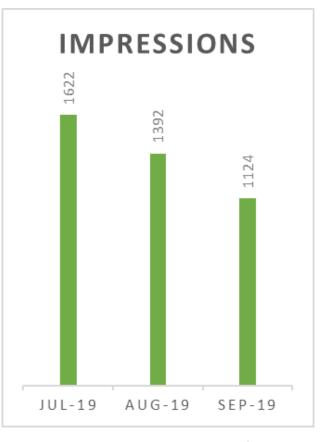
Social media (2/4)

LinkedIn Company page

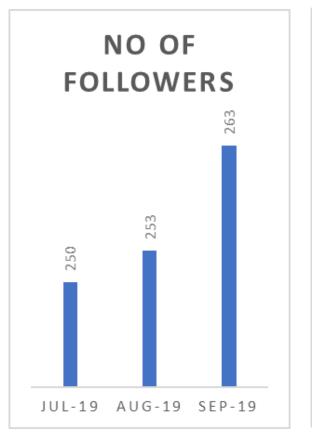




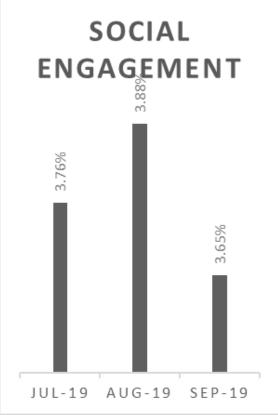
TGT = 40 per month



TGT = 1,000 per month



No TGT set



TGT = 1% per month



E. Events and Communications: Comms (6/13)

Social media (3/4) LinkedIn Group





Number of group conversations = 8

(-4 from last quarter)



Number of group comments = 0

(same as last quarter)



Number of group likes = 5

(-5 from last quarter)



Number of group members = 629

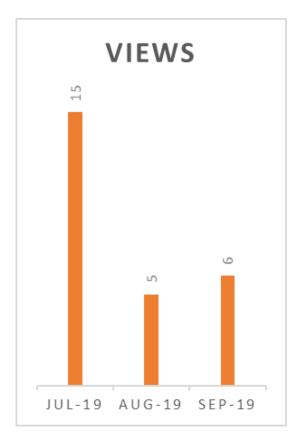
(+11 from last quarter)



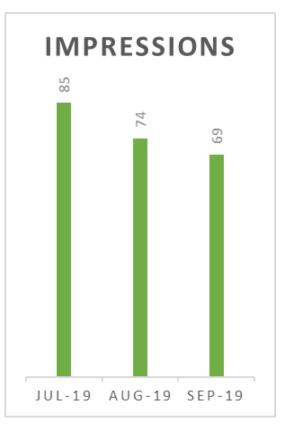
E. Events and Communications: Comms (7/13)

Social media (4/4)





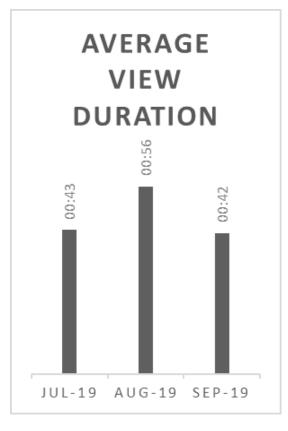
TGT = 15 per month



TGT = 100 per month



No TGT set



TGT = 1:00 per month

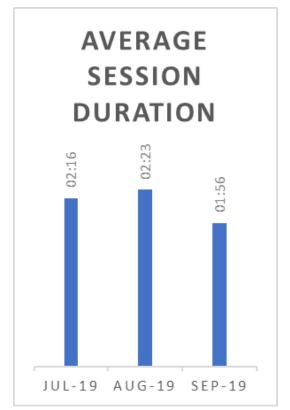


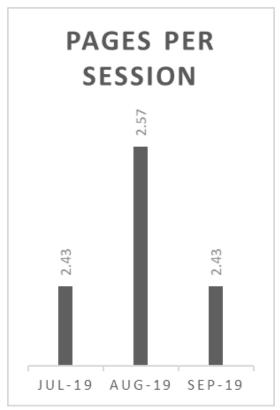
E. Events and Communications: Comms (8/13)

Website (1/3):











E. Events and Communications: Comms (9/13)

Website (2/3):

Top 10 users by country

#	Country	Views in Q3
1	USA	= 689 (-90)
2	UK	= 610 (+171)
3	Germany	= 291 (+57)
4	Finland	= 283 (+80)
5	France	= 191 (+17)
6	India	↑ 182(+70)
7	Netherlands	个 177 (+82)
8	Japan	146 (+73)
9	Italy	↓ 125 (-5)
10	South Korea	= 119 (+20)

Key: Green arrows indicate that the number of views from the country or page has moved up the table since last year; a red arrow indicates the number of views have moved down the table. A blue equals sign indicates the country or page is in the same place as last quarter.

Top 5 pages viewed

#	Page	Views in Q3
1	Home	= 1108 (+8)
2	EVENT: Nordic Flame Days 2019	= 777 (-120)
3	IFRF Blog: Green & blue hydrogen	1 429 (+72)
4	Research	↓ 425 (+34)
5	News and blogs	↓ 409 (+19)

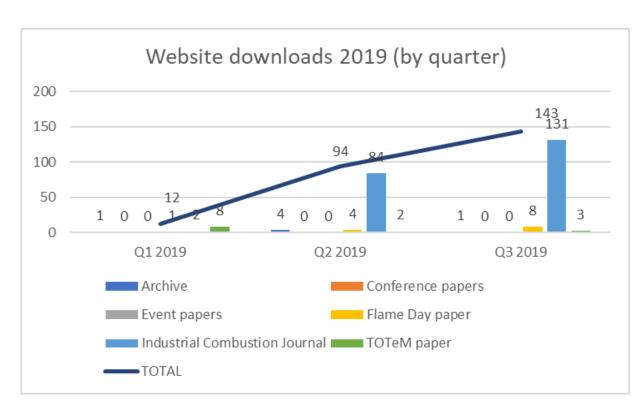
Top 5 news articles viewed

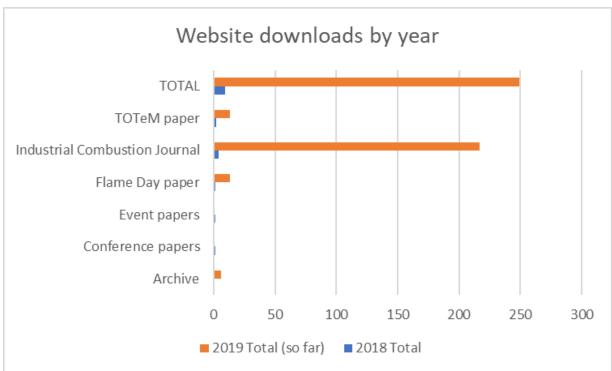
#	Page	Views in Q3
1	'Green' and 'blue' hydrogen for a low-carbon European economy?	429
2	Ammonia – an emerging marine fuel?	186
3	INFUB-12: 12th European Conference on Industrial Furnaces and Boilers	182
4	Hydrogen: securing supplies for a colourful future	130
5	An Exercise in Magical Thinking' published by the Manhattan Institute	103



E. Events and Communications: Comms (10/13)

Website (3/4): Downloads







E. Events and Communications: Comms (11/13)

Website (4/4): Functionality

Web design and development completed





E. Events and Communications: Comms (12/11)

Marketing (1/1):

Redesigned flyers and published







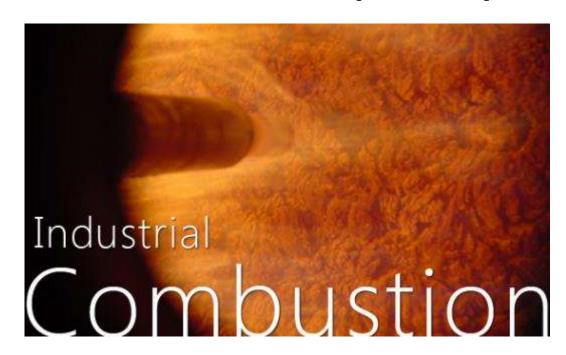


E. Events and Communications: Comms (13/13)

Industrial Combustion Journal (1/1):

1 paper published in Q3 (year to date = 1)

- One paper submitted for review in Q3
- Number in progress (inc. new papers submitted in Q3) = 7
- John Oakey (editor) approved changes
- Changes implemented in the paper review process
- Email pool used to share papers with editorial board





#	Goal	Year	Who	SitRep
F1	Contract Exec Dir for 96 days/yr. (2019) at affordable dayrate (fixed for three years) – annual	2019	GenS	Completed
F2	Increase Lucy Straker's employment from 90% FTE to full-time w.e.f. 1/1/2019	2019	PS	Completed
F3	Maintain current level of effort from Patrick Lavery; negotiate CIN rate annually	2019	PS (PL)	Completed
F4	Contract other ad hoc support on project/item basis as needed, costs borne by project/item	2019	PS	WDD used for flyer production; Frank Rhodes used for APGTF integration
F5	Increase T&S budget to £15k/yr. as affordable [to £10k/yr. as appropriate]; maintain all other overhead budget lines	2019	LS	Completed

Discussions held with MP regarding LS being contracted to work on TERC communications