

Chartered Institute of Plumbing and Heating Engineering

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**2020 – 2022
Strategic Plan**

1. Introduction	3
Background	
2. CIPHE	4
Purpose	4
Vision	4
Mission	4
Definition of Plumbing and Heating	4
Objectives	5
i) Membership and Marketing	6
ii) Education and Research	8
iii) Public Safety and Health	10
Appendices	
A – CIPHE Committees	12
B – 2020 Committee & Group Structure	13
C – Career Pathways	14

1.0 INTRODUCTION

Background

The CIPHE is the Chartered body for the Plumbing and Heating industry and has membership in some 28 countries. Around 85% of membership is in the UK; the UK industry is largely unregulated and with the exception of those undertaking gas work, who must be registered with Gas Safe, anyone can carry out plumbing and heating work. Whilst compliance with Water Regulations (Byelaws) is required there is generally a risk-based approach to inspection and enforcement. 15% of membership is in Hong Kong, which is regulated. Regulation of the industry has been, and remains an objective in all countries in which the CIPHE operates. The CIPHE is a member of the Construction Industry Council and a licensed Professional Engineering Institute of the Engineering Council.

Within the UK, a number of trade associations, industry bodies and commercial organisations compete against each other to provide a service to the sector, which often dilutes the strategic effectiveness of the industry. In the UK it was reported that in 2008 some 120,000 individuals regularly carried out plumbing and heating activities. However, when gas installers and other individuals across the plumbing sector are taken into account the total number of installers could be closer to 200,000. The combined turnover for plumbing and heating is also in excess of £13bn each year¹. Of these involved in the industry, 85% operate in companies of less than 5 individuals, largely driven by government tariffs and the introduction of new technologies. The remaining 15% operate in larger contractors and design consultancies; here, skill requirements will evolve as new technologies are introduced. It is likely that as demand for environmental technologies increase (particularly if supported by regulation) that the size of companies will increase and that they will be stronger.²

UK Legislation is commonplace within the plumbing and heating industry through Building Regulations, Gas Safety Regulations and Water Regulations however enforcement is generally weak with little evidence of resulting prosecutions due to contravention. The lack of publicised enforcement is exacerbated by the fact that, with the exception of gas installers, anyone can establish a plumbing and heating business regardless of relevant and supporting qualifications. Gas Safe is appointed by the HSE to operate the statutory registration scheme for gas installers which is not to be confused with WaterSafe which is a voluntary scheme comprising seven water and plumbing industry Approved Contractor Persons Schemes.

¹ 'Industry Perception –Across the UK' report in 2014

² 'A functional analysis of the Building Services Engineering Sector (BSE)' Pye Tait, February 2012

2.0 CIPHE

The CIPHE's purpose, vision and mission together with definitions and objectives is stated below:

Purpose

The Purpose of the CIPHE is to enhance the safety and health of the public through a strong qualified membership reinforced by their competency and technical expertise.

Vision

The Vision of the CIPHE is to create an environment in which the public will benefit from a protected environment and enhanced sustainability together with improved safety and health through the provision of correctly installed, commissioned, maintained and decommissioned plumbing and heating systems.

Mission

The Mission of the CIPHE is to operate as an independent technical and professional focal point and be a leading authority to the plumbing and heating industry by providing technical and professional standards, expertise, educational and technical innovation to the operatives within its scope.

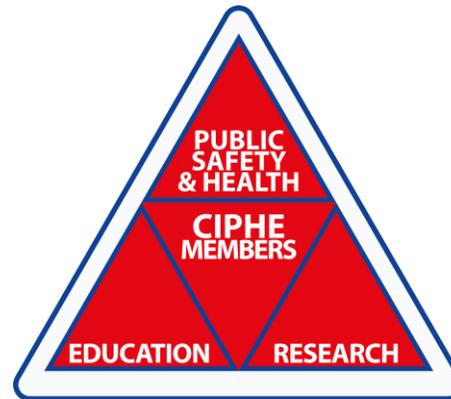
Definition of Plumbing and Heating

The CIPHE's definition of plumbing and heating is:

- The competent design, specification, installation and maintenance of all distribution and retrieval pipework systems for the transportation of fluids, both liquid and gaseous for domestic, non-domestic industrial and medical facilities.
- The provision of relevant advice, selection and installation of all methods of energy generation and conservation.
- Ensuring that all terminal fittings, sanitary appliances, controls and equipment allow safe and efficient operation of systems whilst protecting the environment and all individuals.
- The protection and preservation of buildings and structures against damage, due to ingress of rainwater by the application of suitable weathering materials.

Objectives

CIPHE activities are undertaken and maintained through the following four objectives:



Membership

To raise the standards of individual Members

By:

- ▲ Setting basic standards progressing to higher professional development
- ▲ Promoting career progression leading to Chartered status for members
- ▲ Development of Apprentices, Journeymen, Master Plumber Certificate and CPD programs

Public Safety & Health

To benefit and educate the public worldwide

By:

- ▲ Defining & monitoring professional standards via the Code of Professional Standards
- ▲ Compiling and publishing a list of competent persons
- ▲ Co-operating with professional, research and educational bodies

Research

To promote study, research and publication

By:

- ▲ Encouraging research groups in building engineering services
- ▲ Supporting technical advances within the industry
- ▲ Publishing research and development papers

Education

To further the education of the profession, worldwide

By:

- ▲ Promoting technical training programs with colleges and the industry
- ▲ Supporting new and emerging technologies
- ▲ Publishing technical guidance

The Strategic elements of the CIPHE's four objectives will now be examined in turn (Education and Research combined)

i) Membership and Marketing

The CIPHE continues to promote the strapline 'Proud to be a Professional'.

The industry-marketing programme introduced in 2016 positions members and the plumbing and heating work they undertake as high quality and of essential public benefit, particularly caring for the vulnerable. Consideration is being given to whether a Consumer Compliance Health Check should be introduced. The aim of the Health Check is to encourage consumers to have regular inspections of their plumbing and heating systems and prevent problems before they occur. The concept could be used to support the Government's endeavours in support of 'Healthy Homes'. The Health Check scheme is likely to be supported by other organisations such as WaterSafe. Consumer messaging will emphasise that members are trained to a high level; they keep up to date with regular CPD training and adhere to a Code of Professional Standards. The CIPHE investigates complaints against members should standards fall short. The CIPHE is unique in this regard. The Membership Engagement Plan that commenced in January 2018 will continue to seek two-way information exchanges with members. Membership statistics will be evaluated to ascertain which membership categories should receive priority within the recruitment programme.

The digital strategy implementation plan commenced in 2019 with the update to Windows 365 and the development of the CRM database and website. Embracing digital communications across the CIPHE and especially for membership processes, promotional activities, technical support and CPD are integral to the new system (anticipated to become operational in 2020). The system will speed up membership processing, provide greater interaction from members, allow for more frequent and

targeted mailshots to enhance member engagement, support technical services and e-learning and ensure systems are GDPR compliant.

There are twelve Branches that in 2019 were deemed active through the submission of Branch Finance Reports (BFR). In addition to providing financial information, BFR's outline their level of activity.

Branch Secretaries will be consulted to ascertain their membership engagement and expertise at their disposal in promoting CIPHE's objectives. Training on the implications and requirements of GDPR will be provided to Branches, IAs and members.

IAs will be encouraged to support virtual meetings and on-line training activities. In addition to this, IAs and Approved Training Centres will be encouraged to host meetings of members on a regional basis through dedicated 'Centres of Excellence'. This will be a partnership between Branches, members not appointed to a Branch, IAs ATCs and Head Office. Further information on CIPHE's educational activities can be found in section 2ii)

Following research within the water industry it is apparent that those working in regulation enforcement do not have the links with grass roots level that they require. A Register of Water Regulation Inspectors will be promoted to water company personnel.

Competency of engineers will be promoted through the post Grenfell fire working group, included within this will be encouragement of mandatory CPD where required.

ii) Education and Research

The Technical status of the CIPHE has been raised by investment in internal resources. This will be enhanced further through the Lead Technical Consultant with support from the Technical Manager, administration staff and volunteers.

The Technical Programme is managed by the Technical Strategy Group (TSG) and a series of Technical Working Groups (TWGs). In support of the CIPHE, the TSG works on the understanding that from a technical point of view the purpose of the CIPHE is to operate as an independent technical and professional focal point and be a leading authority to the plumbing and heating industry by providing technical standards, guidance, expertise and educational & technical innovation. The TWGs focus on the following areas: Water Safety; Heating; Controls; Hot and Cold Water; Drainage; Renewables & low carbon and Non-technical (Legal and Compliance). All working groups have representation from internal and external resources. Meetings will be conducted ‘virtually’ if required. The CIPHE has long maintained that ‘Prevention is better than cure’ and recognises the need to continually promote good plumbing, heating and sanitation. The CIPHE will maximise the Government’s paper about ‘prevention’ by raising awareness of plumbing and heating related hazards that can affect the safety, health and welfare of the public. In addition, the Government initiative promoting ‘Healthy Homes’ will be supported. Funding opportunities will be explored so as to maximise messaging for the public benefit. Information and supporting articles outlining statistics for plumbing and heating related incidents focussing on Legionella; hot water scalding, carbon monoxide and potable water will be published and promoted to industry and consumers.

The Technical Programme will focus on technical output to support technical publishing of guides, datasheets, articles, e-learning academy, design guide modules, (taking into account advances in heating, water engineering and renewable technologies and make it available under license electronically). Where appropriate, new income streams will be established. The Plumbing Engineering Services Design Guide will be revised in sections and promoted to members electronically. Technical articles, techtalk videos and Virtual Reality (VR) training programmes will be produced and promoted through the CIPHE website. Virtual Reality programs that are developed with IAs will generate income through sponsorship and licensing arrangements (direct to colleges) in line with CIPHE’s digital requirements. Technical material will be used as CPD support and will incorporate membership promotion at the end of each product.

Following on the development of a Legionnaires’ disease risk assessment guide a training course will be developed for industry to partake in.

Education

The CIPHE has developed a career pathway flow (Appendix C) chart for Plumbing and Heating Engineers, incorporating the current Master Plumber scheme, and will continue to promote it to members, colleges, training centres, Industrial Associates and Awarding Organisations.

An evaluation of the Plumbing & Domestic Heating Technician Apprenticeship (launched in March 2019) will be undertaken to ascertain the impact and take up by industry. Concern has been expressed that the imbalance of funding available to other Trailblazer apprenticeships could impact negatively on the plumbing apprenticeship. A review will be undertaken to ascertain how many colleges/training centres support the Trailblazer and how many have opted for alternative arrangements. CIPHE will support the marketing group established by the Plumbing & Heating Skills Partnership to promote the Trailblazer. Consideration will be given to supporting the development of other 'Fit for Purpose' training courses for the plumbing and heating industry. As far as the CIPHE is concerned Level 3 NVQ (or equivalent such as the SVQ 3 in Scotland) is the minimum qualification that a plumbing or heating installer should possess. Initiatives to upskill installers to achieve Level 3 or its equivalent through recognition of experienced workers will be encouraged. Digital learning support materials will be developed for relevant training courses. CIPHE will provide technical expertise to Awarding Organisations in the development of educational materials for installers. In respect of the Trailblazer Apprenticeship scheme the process of apprenticeship certification will be evaluated and opportunities explored for the CIPHE to be involved with the provision of CPD to trainers and apprentices. Additional support will be provided as required to the devolved nations during their respective reviews of qualifications.

The CIPHE will increase its number of Approved Training Centres to over 100 (associated with a minimum of 40 IAs), through engagement with colleges/training centres and through recognising manufacturers' training provision. A college engagement programme started in 2017 during which 20 Colleges/ATCs are visited each year. In addition to promoting membership and bursaries the presentations will promote technical initiatives such as the augmented reality applications for lecturers and students. Professional Standards Inspectors will be invited to monitor the quality of training provision and ensure CIPHE standards are maintained. Under the auspices of the Education & Training Group support information and electronic communications will be sent to lecturers and trainers. A review of ETM will be carried out to maximise its relationship with the Education & Training Group and to ascertain the ongoing support information required for lecturers/trainers and trainees.

In recognition of excellence within training and education the designation of '*Registered Trainer*' will be promoted to colleges and Approved Training Centres. Voting Members of the CIPHE who are registered with the Engineering Council are eligible to apply for the designation.

In addition, 'Register of Water Regulations Inspectors' will be promoted to water company representatives.

The CIPHE will enhance its e-learning and CPD activities and raise standards in education ensuring apprenticeships are fit for purpose. Industrial Associates will be encouraged to produce e-learning content stored in a digital environment. Collaboration with like-minded Awarding Organisations and stakeholders within the plumbing, heating and water industry will enable resources to be shared in order to produce quality training provision. The concept of introducing examinations will be explored to assist career development from trainee to Chartered Engineer and also for the recognition of experienced workers. The CIPHE will continue to collaborate with education supporters such as HIP (SNG Publishing) to promote CIPHE membership, CPD and career progression. CIPHE will support HIP skills competitions and will provide technical input into its publications.

Funding opportunities will be sought where possible to assist in the development of mobile apps and research and development programmes. Consideration will be given to developing apps for access by the public to promote healthy homes.

CIPHE will maintain a watching brief on consultations, especially the Government's Industrial Strategy.

Research

Industrial Associates will be encouraged to sponsor technical and research activities. Research activities enhancing plumbing engineering design will be encouraged. The development of and access to research information across the world will be promoted through the CIPHE's continued involvement with the World Plumbing Council (The CEO is an Executive Board member). CIPHE is supporting Phase 2 of the LUNA project in partnership with CIBSE and SoPHE and this project is due for completion in 2020. The Phase 1 report findings are available to members free of charge via the CIPHE website. Careful consideration will be given to strengthening the relationship with SoPHE/CIBSE with other likeminded collaboration.

iii) Public Safety and Health

'CIPHE will develop an improved public profile reflecting recognition of its reputation for public safety and health'

CIPHE develops strategies to raise its public profile to deliver its core charitable purpose of protecting the safety and health of the public. This will centre on the promotion of the CIPHE **'Find a Professional'** list of registered members via the website. Given the funding implications of communicating directly with over 26.7 million households in the UK this needs to be carefully directed and positioned for maximum effectiveness. This public facing list of members is integral to the digital and membership strategy. Enabling all eligible members to participate in the Consumer Listing as cost effectively as possible is of paramount importance. The CIPHE is keenly aware of the number of 'commercial lists' that operate in the public domain, often no more than lead generation tools. It is important that CIPHE has a value added profile and distinguishes itself as being of real public benefit. It will be essential to partner with likeminded organisations to amplify the key messages. The key elements of the programmes in the plan period are:

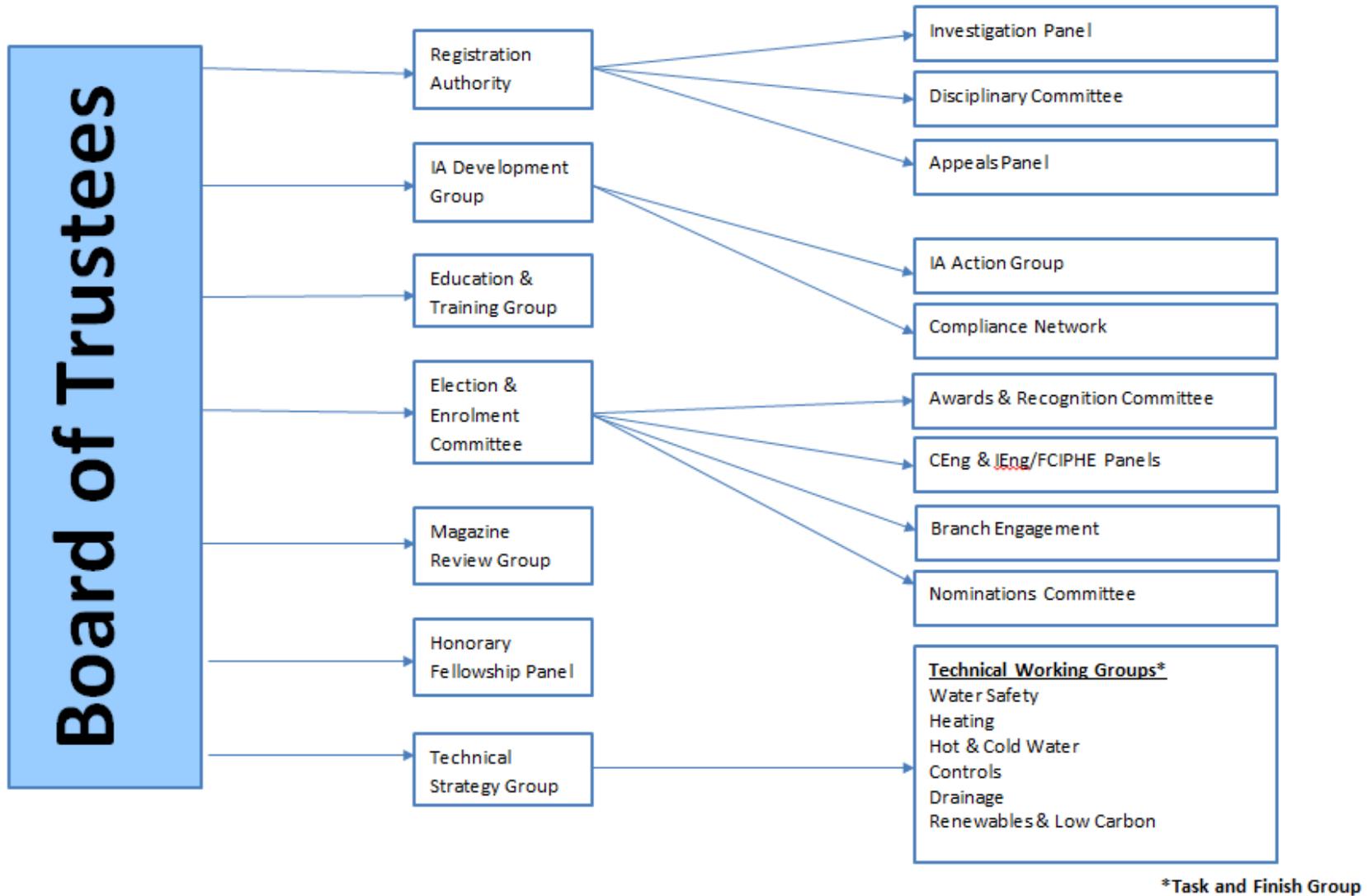
- CIPHE is a founding member of WaterSafe, this will continue and cross promotion campaigns run throughout the period. The Water Regulations/legionella training course will be promoted to water companies via WaterSafe. This will be linked to the CPD Commitment mentioned above under the Education programme. The information will be utilised for the development of Compliance Health Check related support.
- CIPHE will seek key alliances with other quality organisations to cross promote and raise the CIPHE's awareness with the public. Where possible this should benefit members of CIPHE and the public alike. Collaboration was agreed in 2016 with Which? Trusted Trader and discussions will be re-established with them. The strategic alliance enabled the charities to work together in enhancing business performance and providing competent and experienced plumbing and heating professionals in the public interest.
- Regular articles on 'Vulnerability', 'Proud to be a Professional', healthy homes and compliance health checks will be released. Over the plan the frequency of articles will be increased.
- Entry to the 'Search for a plumber' (Business Directory) section of the website and consideration will be given to making it more accessible and 'free' to all eligible members.
- Joint consumer communication programmes will be formalised with the BMA and stakeholders on issues which affect the public, such as; scalding, carbon monoxide poisoning and legionella.
- The 'Love your Lav' campaign in 2018 received considerable publicity across the world and further promotions will be maintained regularly.
- Engagement will take place with consumer organisations, including the Consumer Council for Water and Age UK, to encourage joint messaging on issues of interest to the public. Publications such as the Safe Water Guide will be promoted to members, industry and to the public through social media activities and through relationships with stakeholders.
- Maximising its links with the World Plumbing Council there will be greater engagement with European associations. CIPHE is supporting the WPC in the update of the Guidelines on Health Aspects of Plumbing on behalf of the World Health Organisation.
- The CIPHE will liaise with the NHS to obtain statistics relating to those affected by plumbing related matters and will promote the findings through industry, national media and throughout social media. In addition, engagement will take place with consumer organisations such as Which? EST and Age UK.

Appendix A – CIPHE Committees

The Board of Trustees appoints Committees, working groups and representatives and is run by volunteers. They are supported by between 10-13 full and part time staff. The Chairmen of all Committees report progress to the Board on a regular basis and if their activities have been concluded the Committee or working group can be disbanded.

- The *Registration Authority*, by delegation from the Board of Trustees, is responsible for overseeing the CIPHE Registers that it might maintain from time to time. In particular, the Registration Authority is concerned with formulating and revising the Code of Professional Standards and the Disciplinary Procedure, the conditions for admission to the Registers, and the removal of Registrants from the Registers by disciplinary process. Working groups of the RA comprise: Investigation Panel; Disciplinary Committee and Appeals Committee.
- The *Industrial Associates Development Group (IADG)* has direct contact with Industrial Associate supporters who are leading manufacturers and merchants. Working closely with the Development Group the IADG reinforces the CIPHE's role as the voice of the industry. Its sub groups include an *Industrial Associate Action Group (IAAG)* to engage with media activities and promotional engagement to stakeholders and a *Compliance Group* will liaise with IAs and industry stakeholders to promote the need for compliant products. It will complement the work of the Compliance Health Check promotion.
- The *Education & Training Group (ETG)* leads the CIPHE's educational activities and ensures industry standards are being maintained. It is enhancing its links with training bodies and Awarding Organisations and will be developing educational support information for members.
- The *Election & Enrolment Committee (EEC)* is responsible for membership enrolment and professional registration. A prime objective is to ensure its Professional Engineering Institute license with the Engineering Council is renewed and maintained. It is responsible for the Awards & Recognition Committee, the IEng/CEng Panel and the Nominations Committee which assists members wishing to aspire to becoming a Trustee through assessment and personal development.
- The *Magazine Review Group* is responsible for CIPHE publications.
- The *Honorary Fellowship Panel* is appointed when a nomination for Honorary Fellowship has been received and recognises sterling service and support at national level.
- The *Technical Strategy Group (TSG) and Technical Working Groups (TWGs)*, maintain all technical initiatives and ensure technical developments are conveyed to members through publications, CPD activities and training events. It is also responsible for the *LUNA Group*, which is reviewing loading units used for the sizing of domestic hot and cold water systems in buildings.

Appendix B – 2020 Committee & Group Structure



Appendix C – Career Pathways

