Institute of Materials, Minerals & Mining

Corporate Strategy 2023-2030

The global network for the materials cycle, promoting sustainability and greater circularity in the extraction, processing and use of natural resources

Introduction

The Institute of Materials, Minerals and Mining (IOM3) is the global network for the materials cycle, promoting sustainability and greater circularity in the extraction, processing and use of natural resources. IOM3 supports professionals in materials, minerals, mining and associated technical disciplines to be champions of the transition to a low-carbon, resilient & resource efficient society. It seeks to be the best professional membership body it can be by providing modern, flexible services; quality technical content; and value for money.

IOM3 is a major UK science and engineering institution, incorporated by Royal Charter and registered as a charity in England & Wales and in Scotland. It was formed from the merger of the Institute of Materials and the Institution of Mining and Metallurgy in June 2002. Its roots go back to the Iron and Steel Institute which was established in 1869. It received Royal Charters in 1899 and 1975. IOM3 was joined by the Institute of Packaging in 2005, the Institute of Clay Technology in 2006 and embraced the activities and membership of the Institute of Wood Science in 2009 and the Institute of Vitreous Enamellers in 2010.

Under its Royal Charter, its charitable objects are:

To advance and develop all aspects of science, engineering and technology as applied to the discovery, exploration, development, characterisation, exploitation, processing, application and re-cycling of materials, minerals and fuels, to further and co-ordinate education, training and practice in these disciplines and to facilitate the acquisition, preservation and dissemination of knowledge pertaining to these disciplines, provided that in pursuing these objects, in so far as they may be similar to those of existing organisations, the Institute shall use its best endeavours to cooperate with them and to ensure that its activities are complimentary to those of such organisations.

IOM3 has also established its vision and mission:

Vision – to be recognised as the global leader for professionals involved with the materials cycle.

Mission – to promote the science, design, engineering and technology of materials, minerals and mining and their practical applications and facilitate qualifications, professional recognition and development, and to deliver knowledge, information and networking services to a global membership and wider community.

Strategy

1. Context

The previous strategy was launched at the start of 2020, at a time of challenge due to humanity's impact on the planet and changes to society. Over the past few years, the salience and importance of those challenges have grown.

Humanity is shaping the globe to an unprecedented extent. Climate change, plastic pollution and biodiversity loss are just some of the major environmental degradation challenges. The pressures of population growth on land use and resource consumption continue. Addressing these challenges will require society to transition to a low-carbon, resource-efficient future.

In demographic terms, richer countries are seeing an ageing population, which coupled with changes in employment can mean longer active lives as well as increasing burdens placed on health and social care and potentially greater dependence on technology to maintain quality of life.

At the same time, the expectations of newer generations coming into the workplace are changing. "Millennials" and "Generation Z", who together will soon make up the majority of the workforce, grew up with digital technology and expect immediate access to personalised digital services. Career expectations are often less linear nowadays – fewer jobs for life and more moving across and between sectors – and people generally see more benefit in continued learning, tending to value experiences over possessions.

2. Implications for IOM3

To respond to these pressures, IOM3 set out its two overarching aims to deliver on its charitable purpose, vision and mission.

The materials, minerals and mining communities have a fundamental role to play in the transition of society, alongside the wider engineering and scientific world. From the materials to build renewable energy infrastructure to the mines producing the minerals necessary for the move to electric transport, the work of the members of IOM3 is fundamental. IOM3 has a unique place in this, supporting professional standards and recognition, sharing the necessary knowledge and information and providing networking and learning opportunities. One strategic aim is therefore:

To support professionals in materials, minerals and mining to be champions of the transition to a low-carbon, & resilient resource efficient society

In order to do this effectively, IOM3 needs to continue to meet the changing expectations of its current and future members. This means building on its existing strengths and recent innovations to provide modern, flexible services, quality technical content and value for money. The second strategic aim is therefore:

To be the best professional membership body it can be

The IOM3 Executive Board has reflected on these objectives and considers that they remain the right ones to guide IOM3 through to the end of the decade at least.

3. Financial Context

When the previous strategy was set, the expectation was that it would be several years before IOM3 returned surpluses. However, despite the radical challenges of COVID-19, IOM3 has delivered a positive operational surplus in 2019, 2020 and 2021 (it is expecting a deficit in 2022). This has been in large part because of the efforts of IOM3 to reduce costs at the same time as securing a growth in membership (numbers and income) and training. This work continues, and, subject to global circumstances, IOM3 expects to generate an operational surplus from 2023 onwards.

IOM3 has also invested some of its capital reserves in new digital capabilities and improvements to its physical infrastructure, which underpinned the positive results in the first few years of the decade.

4. Strategy Strands

There are four strands of work that IOM3 will continue to work towards delivering on the two strategic aims set out above.

Membership

As a professional membership body that delivers its charitable purpose via its members, nurturing those members is a core part of what IOM3 needs to do. In this area, the Institute will:

- Grow a sustainable membership across all grades;
- Develop its understanding of its members and ensure its services meet their needs;
- Protect and promote professional standards, including professional registration with the Engineering Council, Science Council and Society for the Environment;
- Deliver online and digital services to cater for the needs of members, learners and others at different stages of their careers around the world; and
- Implement a strategic approach to the Institute's international work and deliver on its existing international commitments.

Content

Surveys and other evidence show that quality technical content is of vital importance to the members of IOM3. Sharing this content is also one of the principal ways in which IOM3 fulfils its charitable purpose. The Institute already produces a great deal of content, but in order to continue to build its capacity it will:

 Deliver a strong conference and events programme that meets members' desire for good technical content and provides strong income;

¹ That is, before the payments to its historical closed defined benefit pension scheme and before depreciation

- Ensure the Technical Communities operate effectively to support members and generate technical content such as conference and event ideas, publications, etc;
- Work with its publishing partner to continue to develop the IOM3 suite of engineering and scientific journals, especially in light of the changes around Open Access;
- Ensure the member magazines continue to deliver value to members and IOM3;
- Provide forums for debating topics of general or technical interest and embracing our member activities, for example through podcasts and blogs; and
- Continue to promote our existing library holdings to capitalise, where possible, on the knowledge within and increase its utility to members and wider society.

Professional Development

Supporting its members as they progress through their careers is important to IOM3. The training offering has been extended and work will continue to develop this further. IOM3 will also:

- Deliver a comprehensive portfolio of professional development opportunities and support to individuals and organisations working within IOM3 topics;
- Deploy and expand online and blended learning capabilities to accommodate different learner needs; and
- Develop the existing outreach offering that seeks to engage, educate, and enthuse the next generation of materials professionals and extend it to increase the focus on potential future minerals and mining professionals as well.

Influence

Materials, minerals and mining are essential to almost all modern human endeavours. IOM3, through the expertise of its members, has a great deal to offer to a larger number of public, policy and media debates. It has already started to increase its visibility and its activities in support of the positive role of professionals in materials, minerals and mining in the transition to a low-carbon, resource-efficient society. In order to do more, it will:

- Bring together groups of members with relevant expertise to advise policy makers on key materials, minerals and mining issues, building on the successful models used in 2021 and 2022;
- Work with the Technical Community leadership teams and Strategic Advisors to channel member expertise into policy debates;
- Work in partnership with other like-minded organisations to amplify and project the expertise of IOM3 members in relevant engineering, environmental and scientific matters and professional affairs; and
- Use its profile and expertise to promote materials, minerals and mining as a positive and exciting career choice.

Underpinning these four strands will be the work to ensure IOM3 continues to develop and deploy the correct human, digital and physical infrastructure to support its ambitions.