

ENERGY IN STORE

Realising the potential of
museum collections in storage

Project Report



SCIENCE
MUSEUM
GROUP

KING'S
College
LONDON

- Can museums offer access to object collections that is better adapted to the needs of independent expert researchers?
- Where might researchers benefit from a greater understanding about what happens behind the scenes in museums?
- How can the knowledge of external researchers be integrated more systematically into museum records?
- How can volunteer organisations, interest groups and museums avoid intergenerational loss of expert knowledge?
- What benefits does the digital present to object-based research?

The project *Energy in Store* brought together a working group of curators and ‘enthusiast experts’ for a series of discussions and site visits to the stored collections of the Science Museum Group (SMG).ⁱ ⁱⁱ The central aim was the exchange of perspectives between museum staff and enthusiast experts on some of these questions. We wanted to consider how sharing experiences might lead to better, more productive relationships between museums and researchers, to explore new ways of working together.

The SMG collections are huge, encompassing more than 425,000 objects. Up to 10% of these are currently on display with some objects on loan to different organisations. Nonetheless most of the collection remains in the stores for the foreseeable future. Out of sight doesn’t, of course, mean out of mind. The objects are an unparalleled resource for understanding and communicating the history of science and technology. An earlier small-scale collaborative research project *Who Cares, Interventions in ‘unloved’ museum collections* had shown that there was a need to better understand how museums can meet the needs of diverse audience groups but particularly ‘enthusiast experts’, an audience which arguably has received less attention in recent years.ⁱⁱⁱ The objects held in SMG stored collections are vital for the work of enthusiast experts, who through research, networks and wider activities, are champions for the understanding and preservation of industrial and technical heritage right across the UK.

Understanding the value of these stored collections is an issue of particular importance now, as SMG embarks on a major strategic initiative to re-imagine how its collection is cared for and shared with the world, a project known internally as ‘One Collection’. One Collection involves relocating approximately 320,000 objects from West London to new purpose-built facilities at SMG’s site in Wroughton, Wiltshire.^{iv} *Energy in Store* offered the opportunity to think through how research access will be provided in these new facilities.

Discussion in *Energy in Store* focused on objects related to the history of energy production and distribution. This was an interesting case study because energy technology can be a challenge to collect, store and make accessible. Many energy objects are difficult to manage due to their large scale (e.g. mill engines). Historical energy technologies are also often part of networked infrastructures, including items that are harder to make sense of on their own (e.g. gas pipes). We relished the opportunity to consider these challenges with the enthusiast experts who research them.

The enthusiast experts participating in *Energy in Store* all had previous experience using SMG energy collections, but diverse research interests and goals. They included former and current engineers, industrial archaeologists, a metallurgist and a model builder. The small group also represented, unofficially, a large range of interest groups including the Newcomen Society, the Association for Industrial Archaeology, the International Stationary Steam Engine Society, the Heritage group of the Chartered Institute of Building Services Engineers, and many more.^v

EVENTS AND DISCUSSIONS: The project was primarily structured around visits to different SMG stored collections in London, Manchester and Wiltshire. These visits were punctuated by table-based discussion and reflection, and discussion over email and on a private online forum. The project events were facilitated by information designer and community arts expert, John Walleth from *Livingmaps*, and recorded in a short documentary film by Aura Films. At the end of the project we convened a larger workshop with around 40 representatives from other museums, interest groups, and heritage organisations. We presented the themes that had emerged and received further excellent ideas and comments. What appears below are reflections from both the *Energy in Store* working group and the participants at our final workshop. Some of the comments and proposals take the form of recommendations that might be specific to SMG, others addressed more general challenges around collecting and researching heritage.

“I had no idea of the process that was set in motion with my initial email. Behind the scenes it’s a lot more involved than I ever expected”
[working group member]

FINDINGS. Our discussions regularly returned to the question of resources. Museums have seen substantial cuts in public funding over recent decades. Those cuts affect their institutional capacity to answer queries and to offer researcher access. Even given these conditions, however, the working group felt that there was room for improvement and invention, particularly around the potential of digital technologies for sharing information and expertise.

PHYSICAL ACCESS TO THE STORED COLLECTIONS. It was revelation to most of the enthusiast experts, to see just how much happens behind the scenes when

a research visit is requested and how much time dealing with requests can take. Multiple parties are likely to be involved in coordinating a visit and various requirements have to be met: the object has to be sound enough to be moved to a viewing area and it mustn’t pose a health risk to the researcher (SMG collections include objects with asbestos, mercury, and even radioactive substances). In sites with high racking, objects may need to be retrieved with forklift trucks. Nonetheless, the group recommended that current research enquiry processes at SMG could be streamlined, and that enquirers could be offered better information at the outset. This is being addressed.

The working group noted that it isn’t always very helpful for a researcher to be shown a single object on a research visit. Comparing a number of similar objects can be a key way of understanding a collection for researchers. This isn’t currently a form of access that is available, but SMG will be considering whether and how it will be possible for serious researchers to ‘browse’ collections and sets of objects in the new facilities that are being constructed in Wiltshire.

ACCESS TO MUSEUM DOCUMENTATION. The *Energy in Store* team made a strong case for better access to the documentation about the collections that is held by SMG. The ‘documentation’ files effectively hold the biographies of the objects and are part of SMG’s own institutional memory. The files are used by the curators, conservators and other staff in the ongoing business of the museum. While the files are nominally available for consultation by the public, they are not currently publicly listed and awareness about them in the research community is low. SMG will be exploring ways to make them a more accessible research resource in the long term.

DIGITAL FUTURES. Much of the discussion in the project focused on the possibilities of the digital. How can museums make their collections digitally available in ways that suit the needs of researchers? SMG recently launched a publicly open digital catalogue: [Collections Online](#).^{vi} Together with the SMG digital team the *Energy in Store* group discussed the specialist requirements of researchers and how those needs could be accommodated in that system. Another theme we considered was the potential use of a crowd-sourcing or wiki approach to integrate expert knowledge into the digital catalogue. Crowd-sourcing might rapidly contribute to better understanding of the collections but this idea was controversial in the project discussions. How might that process be supervised to ensure historical accuracy? Could volunteers peer review? This topic will certainly require more thought and consultation.

SOCIAL NETWORKS AROUND STORED COLLECTIONS. A final point explored by the working group was the importance of personal networks and specialist interest groups in generating and sharing knowledge about the collections. Both museums and specialist interest groups struggle to sustain networks and connections when key individuals inevitably move on. The *Energy in Store* group recommended that SMG manage these relationships more actively as an important and sustainable asset, by recording them better, and by encouraging and strengthening connections in the heritage sector through networking events.

FIND OUT MORE: If you’d like to know more then please take a look at the documentary film and further video clips from the discussions, available here (<http://bit.ly/energyinstore>). Please also look out for a longer overview of *Energy in Store* in a future issue of the open access Science Museum Group Journal (<http://journal.sciencemuseum.ac.uk>). Thanks are due to the AHRC for funding the project and to the working group participants for their generosity with their time, expertise and ideas.

ⁱ *Energy in Store* was a collaborative partnership between King’s College London and the Science Museum Group. The project was funded by the Arts and Humanities Research Council (AHRC) and took place between July 2017-2018.

ⁱⁱ The Science Museum Group is the family of five museums: **Science Museum** London; **Science and Industry Museum**, Manchester; **Railway Museum**, York; **Science and Media Museum**, Bradford; **Locomotion**, Shildon, County Durham.

ⁱⁱⁱ The term ‘enthusiast expert’ was hotly contested during the project. We believe, however, that there is a distinction between the research interests and practices of this group and those of academic researchers. The research enquiries of the *Energy in Store* working group have a basis in *practical* questions about historic objects and systems. Almost all of the group are also simultaneously campaigning for the preservation of technical heritage. This in contrast to academic historians who are more likely to be using objects as an adjunct source for written publications that address concerns primarily driven by other academic scholars.

^{iv} For more information on these changes please visit: <https://group.sciencemuseum.org.uk/project/collection/>

^v The working group members: **Oliver Carpenter**, Curator of Infrastructure and the Built Environment, Science Museum; **David Clark**, Senior Mechanical Design Engineer, Thorlabs; **Elizabeth Haines**, Project Coordinator, Science Museum; **Chris Hodrien**, Private Energy Consultant; **Jack Kirby** Head of Collections Services, Science Museum Group; **Jane Insley**, Former Senior Curator of Engineering Technologies; **Geraldine O’Farrell**, Senior Building Services Engineer, Historic England; **Ben Russell**, Curator of Mechanical Engineering, Science Museum; **Ian West**, Industrial Archaeologist; **Anna Woodham**, Project Principal Investigator and Researcher in Museum Studies, King’s College, London; **Bert Wraith**, Metallurgical Engineer. We also worked closely with curators at the Museum of Science and Industry, and other SMG staff from Research and Public History, Digital, Libraries and Archives, Documentation, and Conservation and Collections Care.

^{vi} *Collections Online* is a work in progress and SMG are adding more collections and more information. See <https://collection.sciencemuseum.org.uk>.