The *Petroleum History Library*A digital humanities project developed by the Energy Museum of Ripi

Keywords: Digital Resources; Open Access; Research; Petroleum Industry History; Energy History.

Scientific domain: Digital Humanities; Energy History; Science History.

<u>Beneficiaries</u>: Graduate, postgraduate students, and research scholars; scientists and practitioners in the energy sector; and the concerned citizen interested in the past science and technology of petroleum.

Executive Resume of the Project

Even after the access to the Internet became common practice in the daily activities of scholars, researchers, and students, those interested in deepening the petroleum history subject still experience difficulties in finding digital platforms instrumental to their work.

Several digital libraries and archives have been publishing since late 2000s online an increasing number of resources useful for petroleum historians. But most of these resources have been made available online by generalist platforms working independently of each other, with different aims and different scholarly conventions, as part of a vast and heterogeneous set of resources. In this *mare magnum*, very often petroleum related manuscript and printed resourced are not properly references, described, and tagged. They lack of a common organizational scheme, standard format, and have limited quality control.

In 2020, the Energy Museum explored the possibility of creating a digital resource that would fill these voids, and determined that it is not just feasible, but highly desirable to build the Petroleum History Library (PHL) - a virtual, ubiquitous, sustainable working space where scholars and readers of historical resources on petroleum can achieve their research goals.

The Museum produced a user behavior study to collect information on how potential users of the PHL use resources that are currently available on the Internet. Francesco Gerali conducted interviews of different types of users so that we would have information on what people do and do not like about the resources they use. On these premises, in 2021 started the creation of the Petroleum History Library.

Petroleum History Library is an open access and multilingual digital repository specializing in primary and secondary handwritten, printed, audio, and video resources useful in the study of petroleum history in the pre-industrial (antiquity-1859) and industrial (1860-present) phases.

The PHL is one of a kind digital initiative. It stands out from other digital repositories for its high level of specialization in Petroleum History. It collects exclusively materials relating to petroleum science, technology, and engineering applied to exploration, drilling, production, transportation, refining, and trade. The platform offers contents on the Oil&Gas sector on numerous countries. Currently, it includes a selection of sources on the Americas, Europe, and Australia. The long-term goal is to feature the PHL with a set of items such as to cover the history of the petroleum industry in the five continents.

The PHL was developed as part of the Decree May 20, 2020, n°G06026 - L.R n° 24/2019 Annual Plan 2020 issued by the Lazio Regional Administration and went first online in February 2022.

Structure, organization, and regulations of the Petroleum History Library

Registered Name of the Platform in the Authorities Records

PETROLEUM HISTORY LIBRARY (PHL)

Permanent Web Address

Url: https://www.museoenergiaripi.it/petroleum-history-library/

Managing Institution Legally Responsible for the Project

Museo dell' Energia di Ripi/Energy Museum of Ripi, a cultural institution supported by the Municipality of Ripi, Lazio Region, Italy.

Content Manager

Francesco Gerali

Platform Type

Digital library

Data Typology

Open access

Access mode

Free online access. No charge or subscription required to the user. The Energy Museum is a nonprofit educational institution funded by the Region Lazio and the Municipality of Ripi.

Aims of the Petroleum History Library

- Targeted collection, evaluation, and upload of printed materials and manuscripts dated between the 16th and the 20th century.
- Continuous research on international and multilingual digital archives to identify bibliographic records and normalize metadata by prioritizing authority records recommended by the Library of Congress.
- Use of the best procedures for the acquisition and consolidation of quality standards internationally recognized for optimizing the development of digital libraries.
- Periodic review of catalogs, databases, and digital archives available in English, French, Spanish,
 - German, Italian and Portuguese to make recurring content updates.
- Facilitated and functional visualization of materials through an easy-to-use graphic interface.

Potential Users

PHL is an international portal aimed at supporting the study and research of:

Historians of science, technology, engineering, and energy

Undergraduate, postgraduate, university, and independent researcher

The benefits of the Petroleum History Library for users

- Availability on a single platform of a heterogeneous selection of specific resources for the study
 of the history of petroleum. Most of the contents are not easy to find elsewhere, and/or never
 previously digitized.
- A constantly growing, freely accessible portal of high-quality resources.
- Facilitation of the work of professionals in the historical disciplines.
- Added value for scientists and the general public.
- PHL is a freely accessible portal in continuous development for consulting and downloading high quality resources.
- PHL offers centralized access from the search page to search all the available contents.
- Simple and immediate navigation within digital documents.
- Long-term availability of digital documents thanks to permanent links.
- Metadata is normalized using a unique style.
- Facilitated interface for resource download.

Benefits for the partner institutions

- The bibliographic section of each element identifies the partner institution that provided the resource.
- Each partner institution has its own logo and link to access the institutional site on the front page of the Petroleum History Library.
- The partner can increase the visibility to the international audience.
- Guarantee of professional IT maintenance of the platform and management of its contents.
- Long-term backup of digital documents (PDF) and secured through permanent links.

Use Petroleum History Library

- PHL does not have authority to grant or deny permissions to use images, maps, tables and charts from volumes that are in the public domain or open access.
- Centralized access from the search page, ability to carry out a search in all content available.
- Simple navigation inside digital documents using a clear structure.
- Long-term availability of digital documents through stable and monitored permanent links.
- Metadata are normalized using the IEEE Reference Style.
- Practical interface for downloading the resources.

Accessibility and utilization policies of the Petroleum History Library

- PHL resources are in the public domain and not subject to copyright. Users are free to copy, use, and redistribute the items in part or in their original length.
- The resources under copyright are made available from the PHL with explicit permission of the copyright holder.
- Anyone may access the metadata free of charge.
- The metadata may be re-used in any medium without prior permission for not-for-profit purposes.
- Anyone may access full items free of charge.

- Copies of full items can be reproduced and displayed or performed in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge.
- Full items hosted in the PHL are not sold commercially in any format or medium.
- Mention of the repository is appreciated; users are invited to utilize the citation style showed in the notes.

Contents

All published contents are selected and reviewed by the content manager of the Energy Museum and individually tagged with normalized metadata. The main languages of the items included are to date: English, Italian, French, German, Spanish, and Romanian.

The PHL includes:

- Journal Articles
- Conference proceedings
- Technical reports
- Monographs
- Book chapters
- Audio and audiovisual multimedia materials
- PHL Policy of Preservation
- Items will be retained indefinitely.
- The PHL will ensure continued readability and accessibility.
- Items may be removed at the request of the author/copyright holder.
- The PHL regularly backs up its files according to current best practice.
- The original bit stream is retained for all items, in addition to any upgraded formats.
- Reasons for content withdrawal may include proven copyright violation or plagiarism.
- Withdrawn items are deleted entirely from the database and the metadata of withdrawn items will not be searchable.
- In the event of the repository being closed, the database will be preserved and transferred to another public host.