

## Special Issue

# Sustainable Safety Assessment and Failure Analysis of Urban Underground Pipeline Networks

### Message from the Guest Editors

Urban underground pipeline systems, including water supply, drainage, and energy transportation networks, form the backbone of modern cities. However, aging infrastructure, increasing environmental stress, and operational demands pose significant challenges to their safety, sustainability, and reliability. Corrosion defects, coupled with complex loading conditions and surface irregularities, frequently contribute to failures, leading to economic losses, environmental issues, and social disruptions. This Collection aims to address the safety assessment, failure analysis, and sustainable management of underground pipeline systems using advanced computational and analytical approaches. It aligns with the scope of Sustainability by integrating innovative assessment methods, predictive models, and cutting-edge technologies to promote sustainable urban infrastructure solutions. We invite submissions that contribute to understanding underground pipeline safety and management, focusing on topics such as numerical modeling, failure prediction methods, defect characterization, digital twins, and sustainable maintenance strategies.

---

### Guest Editors

Prof. Dr. Bin Li  
Dr. Kejie Zhai  
Dr. Xueming Du

---

### Deadline for manuscript submissions

31 May 2026



Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/228413](https://mdpi.com/si/228413)

*Sustainability*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)

[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)



## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

---

### Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,  
Columbus, OH 43210, USA

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)