# 2024

# LIBRARIANS GOING GREEN

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"Sustainable Neighbors"

Authors of the guide and "Sustainable Neighbors" team:

Sofia Papageorgiou, Environmental Scientist, M.Sc.

<u>Hilal Sultan Taşcı</u>, Librarian

Maria Aplada, Librarian

Meliha Arı, Librarian







# Prologue

This guideline provides a comprehensive framework to help libraries integrate sustainability into their operations, facilities, services, and communities. By integrating the Sustainable Development Goals into their operations and services, libraries can play a vital role in fostering sustainable, inclusive, and resilient communities.

According to the Sustainable Libraries Initiative (SLI), libraries are sustainable when they are:

#### Strong and authentic institutions

A library needs to be sustainable "from the inside out." Libraries should consider first their own policy, operational, budgetary, personnel, program, service, and partnership design choices using **the triple bottom line framework** that seeks balance at the nexus of **environmental** stewardship, **social** equity, and **economic** feasibility.

#### Catalysts for civic participation and social cohesion in communities

The SLI urges libraries to embrace the opportunity to actively educate their constituents about how to be involved in decision - making matters on a local, national, and global scale, while applying the principles of equity, diversity, and inclusion to ensure that justice is being considered in the decision making about the future of the communities.

#### Working on climate mitigation

Libraries should take responsibility for reducing their carbon footprint: *"the total GHG emissions caused directly and indirectly by an individual, organization, event or product."* 

The top two areas where libraries can reduce their carbon footprint is by making different choices related to transportation (the largest source of  $CO_2$  emissions) and electricity (the  $2^{nd}$  largest source of  $CO_2$  emissions).

Libraries offer significant resources as means of building strong community resilience against the disruptive events aggravated by climate change. Community resilience work can take many forms, including strengthening the food supply chain, creating redundancies in communication systems, allowing for library infrastructure to become part of emergency management solutions in the form of heating/cooling stations, and serving as resource drop-off/pick-up points etc.



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# 1. Introduction

Libraries have long been roots of knowledge, education, and community development. Nowadays, they play an increasingly vital role in addressing global challenges, aligning closely with the United Nations' Sustainable Development Goals (SDGs). These 17 goals, adopted in 2015, aim to promote peace, prosperity, and environmental sustainability by 2030. From quality education and reducing inequalities to fostering innovation and climate action, the SDGs present a framework through which libraries can enhance their impact.

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership.



Figure 1: United Nations Sustainable Development Goals (SDGs) (https://www.un.org/sustainabledevelopment/)

Libraries play a crucial role in advancing the United Nations Sustainable Development Goals (SDGs) by providing access to information, fostering education, and supporting community development. By implementing SDG principles, they can evolve as hubs for inclusive information, lifelong learning, and social change, transforming into active agents for sustainable development.

This guide provides practical steps and strategies for libraries to integrate SDGs into their operations, programs, and services. Through this framework, libraries can empower their communities, advocate for equity and sustainability, and actively contribute to global progress.



# 2. Implementing SDGs in libraries

# SDG 1: No Poverty

SDG 1 aims to end poverty in all its forms by 2030. Libraries can play a crucial role in achieving this goal by providing resources, services, and programs that support education, employment, and community development. Here are several ways libraries could contribute to SDG 1:

#### 1. Access to Information and Education

Libraries offer free access to books, online resources, and educational programs. By providing access to information, libraries empower individuals to improve their knowledge and skills. All of these can enhance their employability and help lift them out of poverty.

#### 2. Digital Inclusion

Libraries provide access to computers, the internet, and digital literacy training. This helps bridge the digital divide, ensuring that even those without personal technology can access important online services, job opportunities, and educational resources.

#### 3. Job Search Assistance

Many libraries offer job search services, including resume writing workshops, interview preparation, and job listings. They may also host job fairs and provide space for career counseling.

#### 4. Community Support Services

Libraries could partner with local organizations to offer services such as financial literacy workshops, tax preparation assistance, and social services referrals. These programs can help individuals manage their finances better and access the support they need to overcome poverty.

#### 5. Lifelong Learning and Skills Development

Libraries provide lifelong learning opportunities through various programs, such as adult education classes, vocational training, and skills development workshops. These programs can help community members acquire new skills and improve their employability.

#### 6. Early Childhood Education

Libraries support early childhood education through story times, literacy programs, and access to educational toys and materials. Early literacy skills are crucial for long-term educational success and can help break the cycle of poverty.

#### 7. Community Building

Libraries serve as community hubs where people can connect, share resources, and support one another. Strong community networks are essential for providing social support and reducing poverty.





#### 8. Support for Entrepreneurs

Libraries often provide resources and support for small business owners and entrepreneurs, such as access to business databases, market research materials, and workshops on starting and managing a business. All these can foster local economic development and job creation.

### SDG 2: Zero Hunger

SDG 2 aims to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture by 2030. Libraries can play a crucial role in supporting SDG 2 through various initiatives and programs. Here are several ways libraries can contribute:

#### 1. Information and Education

Libraries can host workshops and seminars on nutrition, sustainable agriculture, and food security. These can be conducted by experts in the field and can cover topics such as organic farming, composting, and healthy eating habits. They can also provide access to books, journals, and online resources related to agriculture, nutrition, and food security. This can help educate the community on best practices and innovative techniques.

#### 2. Community Engagement and Support

- **Community Gardens**: Libraries can establish community gardens where locals can grow their own food. This can promote local food production and provide a practical learning experience about sustainable agriculture.
- **Seed Libraries**: Libraries can create seed libraries where community members can borrow seeds to plant in their own gardens. This can encourage gardening and local food production.
- Food Drives and Distribution: Partnering with local food banks, libraries can organize food drives and serve as distribution points for food to those in need.

#### 3. Programs and Services

- **Nutrition Programs**: Libraries can offer programs that focus on nutrition education, such as cooking classes that teach how to prepare healthy, affordable meals.
- **Support local Farmers**: Libraries in rural areas can provide resources and support for local farmers, including information on sustainable farming practices, grants, and market opportunities.
- **Digital Literacy**: They could also teach farmers digital literacy skills that will help them have access to important online resources, such as weather forecasts, market prices, and agricultural innovations.

#### 4. Partnerships and Collaborations

- **Collaboration with NGOs and Government Agencies**: Libraries can work with nongovernmental organizations and government agencies to promote food security initiatives and distribute educational materials.
- **School Partnerships**: Partnering with local schools, libraries can support educational programs on nutrition and agriculture, ensuring that children learn the importance of healthy eating and sustainable practices from a young age.



#### 5. Advocacy and Awareness

- **Campaigns and Exhibitions**: Libraries can organize campaigns and exhibitions to raise awareness about hunger and food security issues and promote community involvement in solving these problems.
- **Storytelling and Cultural Events**: Hosting storytelling sessions and cultural events that focus on food traditions and sustainable practices can enhance community understanding and appreciation of local food systems.

## SDG 3: Good Health and Well-being

SDG 3 focuses on ensuring healthy lives and promoting well-being for all, at all ages. Libraries can achieve this goal by providing access to health information, promote health literacy, and support community's well-being.

- 1. Health Information and Resources
- Health Collections: Libraries can curate a comprehensive collection of books, journals, and digital resources on health topics such as nutrition, mental health, disease prevention, and wellness.
- Access to Databases: Providing access to medical and health databases, enabling people to find reliable and up-to-date health information.

#### 2. Health Literacy

- Workshops and Seminars: Hosting events on topics like nutrition, mental health, first aid, and disease prevention. These can be conducted by healthcare professionals or trained librarians.
- Information Literacy Programs: Teaching people how to find and evaluate health information, distinguishing between reliable and unreliable sources.

#### 3. Community Health Initiatives

- Health Screenings and Clinics: Partnering with local health organizations to offer services such as blood pressure screenings, vaccination clinics, and health fairs within the library.
- **Fitness and Wellness Programs**: Offering yoga classes, meditation sessions, or other wellness activities to promote physical and mental well-being.

#### 4. Digital Health Literacy

- **Technology Training**: Providing training on using health apps, telehealth services, and online patient portals to manage personal health.
- **Online Health Resources**: Creating guides and directories for reliable online health information and services.

#### 5. Partnerships and Collaborations

- **Collaborations with Health Organizations**: Partnering with hospitals, clinics, public health departments, and non-profits to bring health services and education to the community.
- **Community Health Workers**: Hosting community health workers or nurses who can provide one-on-one consultations and advice.





#### 6. Support for Mental Health

- **Mental Health Resources**: Offering books, articles, and digital resources on mental health topics, including coping strategies and where to seek help.
- **Support Groups**: Facilitating support groups for mental health, chronic illnesses, or other health-related issues.

#### 7. Inclusive Health Services

- Accessible Health Information: Ensuring health information is available in multiple languages and formats, including braille and audiobooks, to cater to diverse populations.
- **Programs for Vulnerable Groups**: Tailoring programs and services to meet the health needs of vulnerable populations such as the elderly, low-income families, and people with disabilities.

#### 8. Advocacy and Awareness

- **Health Campaigns**: Running campaigns to raise awareness about important health issues, such as vaccination, mental health awareness, and healthy lifestyle choices.
- **Health Policy Information**: Providing information about local and national health policies and how they impact the community.

## SDG 4: Quality Education

SDG 4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Libraries play a crucial role in providing access to information, fostering literacy, supporting lifelong learning, and serving as community hubs for educational activities. Here's how libraries can contribute to this goal:

#### 1. Access to Information

Libraries can offer free access to a wide range of information resources, including books, digital media, databases, and educational materials. This access helps bridge the knowledge gap and provides opportunities for individuals of all ages to learn and grow.

#### 2. Literacy and Reading Programs

Libraries conduct literacy programs, reading clubs, and story time sessions to promote reading habits among children and adults. These programs are essential for developing literacy skills, which are foundational for all forms of learning.

#### 3. Educational Support

Libraries can provide resources and services that support formal and informal education. This includes homework help, tutoring services, study spaces, and access to online learning platforms. They can also collaborate with schools and educational institutions to enhance the learning experience.

#### 4. Lifelong Learning Opportunities

Libraries are centers for lifelong learning, offering workshops, courses, and training sessions on a variety of topics. These programs cater to different age groups and



#### 5. Digital Inclusion

By providing access to computers, the internet, and digital literacy training, libraries help individuals develop the skills needed to thrive in the digital world. This is particularly important for marginalized communities that may lack access to technology.

#### 6. Community Engagement and Empowerment

Libraries can serve as community hubs where people can come together to share knowledge, engage in cultural activities, and participate in community-driven projects. This fosters a sense of belonging and empowers individuals to contribute to their communities.

#### 7. Inclusive and Equitable Services

Libraries are committed to inclusivity and equity, ensuring that their services are accessible to everyone, regardless of their socio-economic background, gender, ethnicity, or disability. This aligns with the goal of providing quality education for all.

#### 8. Information Literacy

Libraries can teach information literacy skills, helping individuals critically evaluate information sources and navigate the vast amount of information available. This is crucial in an era of misinformation and fake news.

### SDG 5: Gender Equality

Libraries should ensure safety and welcoming places for all genders. Also, promote programs that support gender equality and the empowerment of women and girls. Here are some ways libraries can support and advance SDG 5:

- 1. Promote Access to Information
- **Gender-Specific Resources**: Curate collections that focus on women's studies, gender equality, and women's rights.
- **Digital Inclusion**: Provide access to digital resources and the internet to women and girls who may not have access at home, bridging the digital divide.

#### 2. Educational Programs and Workshops

- **Literacy Programs**: Offer literacy and education programs specifically for women and girls to enhance their skills and knowledge.
- **STEM Workshops**: Conduct workshops and classes in science, technology, engineering, and mathematics (STEM) to encourage more girls to pursue careers in these fields.

#### 3. Safe Spaces and Support Services

- **Safe Spaces**: Create safe and inclusive environments where women and girls can meet, study, and collaborate without fear of discrimination or harassment.
- **Support Services**: Partner with local organizations to provide counseling, legal advice, and support for issues such as domestic violence, sexual harassment, and gender discrimination.





#### 4. Advocacy and Awareness Campaigns

- **Gender Equality Campaigns**: Organize events, exhibitions, and talks to raise awareness about gender equality, women's rights, and the importance of SDG 5.
- **Highlight Female Role Models**: Showcase the achievements of women in various fields through exhibits, speaker series, and reading lists.

#### 5. Community Engagement and Collaboration

- **Partnerships**: Collaborate with schools, universities, NGOs, and community organizations to promote gender equality initiatives and programs.
- **Community Outreach**: Conduct outreach programs to engage women and girls in the community, especially those in marginalized and underserved areas.

#### 6. Library Policies and Practices

- **Inclusive Hiring**: Ensure gender equality in library staff and create policies that support a diverse and inclusive workplace.
- **Leadership Opportunities**: Encourage and support women in leadership roles within the library and its community programs.

#### 7. Monitoring and Evaluation

- **Impact Assessment**: Regularly assess the impact of gender equality initiatives and programs to ensure they are effective and make necessary adjustments based on feedback.
- **Data Collection**: Collect and analyze data on library usage by gender to identify gaps and opportunities for improvement.

## SDG 6: Clean Water and Sanitation

Libraries can inform the public about the importance of clean water and proper sanitation practices. They can partner with local health organizations to distribute information on water conservation techniques, safe hygiene practices, and the impacts of water pollution. Furthermore, libraries can also advocate for water accessibility by offering their spaces for community discussions and policy-making initiatives, ensuring that even the most vulnerable populations are included in the dialogue. Through these efforts, libraries not only foster informed and empowered communities but also contribute significantly to the global pursuit of sustainable water and sanitation solutions. Here are some ways libraries can contribute to SDG 6:

#### 1. Education and Awareness

- Workshops and Seminars: Libraries can organize workshops, seminars, and lectures on water conservation, sanitation practices, and the importance of clean water. Experts can be invited to speak about the challenges and solutions related to water and sanitation.
- **Exhibits and Displays**: Creating exhibits and displays that highlight issues related to water scarcity, pollution, and sanitation can help raise awareness among library visitors.
- **Educational Materials**: Libraries can provide books, brochures, and multimedia resources that cover topics related to water management, conservation techniques, and the global water crisis.



#### 2. Community Engagement

- **Partnerships**: Collaborate with local environmental organizations, schools, and government agencies to promote water and sanitation initiatives. These partnerships can help amplify the impact of programs and reach a broader audience.
- **Events**: Host community events like clean-up drives, water testing activities, and campaigns to promote the importance of clean water and proper sanitation.

#### 3. Access to Information

- **Digital Resources**: Offer access to online databases, journals, and e-books that cover scientific research and policy documents related to water and sanitation.
- **Research Support**: Assist students, researchers, and community members in accessing and utilizing information related to water conservation and management.

#### 4. Sustainable Practices

- **Green Infrastructure**: Implement water-saving measures within the library itself, such as installing low-flow faucets, using water-efficient landscaping, and promoting the use of reusable water bottles.
- **Waste Reduction**: Encourage proper waste disposal and recycling within the library premises to prevent water pollution.

#### 5. Programs for Children and Youth

- **Storytimes and Activities**: Incorporate themes of water conservation and sanitation into story time sessions, craft activities, and science projects for children.
- **Educational Games**: Provide educational games and interactive activities that teach children about the importance of clean water and hygiene.

#### 6. Advocacy

- **Campaigns**: Run advocacy campaigns to promote water conservation practices and policies at the local, national, and international levels.
- **Policy Support**: Support initiatives and policies that aim to improve water and sanitation services, particularly in underserved communities.

#### 7. Resource Centers

- Information Hubs: Establish sections in the library dedicated to water and sanitation, where community members can find resources and support for related projects and initiatives.
- **Data and Research**: Collect and provide access to local data on water quality, availability, and usage to support community planning and decision-making.

## SDG 7: Affordable and Clean Energy

Libraries can significantly contribute to Affordable and Clean Energy by becoming centers for education, innovation, and community involvement. They can offer a wealth of information on renewable energy sources, energy efficiency, and sustainable practices



through books, digital resources, and interactive exhibits. By hosting workshops and seminars, libraries can educate the public on how to reduce energy consumption and transition to clean energy alternatives. Collaborations with local energy experts and environmental organizations can further enhance these initiatives.

Libraries can also lead by example, implementing energy-efficient practices and renewable energy solutions within their facilities. By fostering a culture of sustainability and providing the tools and knowledge needed to adopt clean energy, libraries help to empower communities to participate actively in the shift towards a more sustainable and energy-efficient future. Libraries can contribute to this goal in several meaningful ways such as:

#### 1. Energy Efficiency in Library Buildings

- **Green Building Practices**: Libraries can implement energy-efficient designs and technologies, such as LED lighting, energy-efficient HVAC systems, and solar panels.
- **Renovation and Retrofitting:** Existing library buildings can be upgraded to improve insulation, install energy-efficient windows, and incorporate smart energy management systems.

#### 2. Promoting Awareness and Education

- Educational Programs: Libraries can offer workshops, seminars, and exhibitions on energy conservation, renewable energy technologies, and sustainable practices.
- **Resources and Materials**: Providing access to books, articles, and multimedia resources about sustainable energy, climate change, and environmental science.

#### 3. Community Engagement and Advocacy

- **Outreach Programs**: Collaborating with local schools, community centers, and environmental organizations to spread awareness about energy efficiency and renewable energy.
- **Public Campaigns**: Hosting events like Earth Day celebrations, energy fairs, and sustainability challenges to engage the community.

#### 4. Digital Access and Information Dissemination

- **Online Resources**: Creating digital repositories of information on sustainable energy, accessible to the public through the library's website.
- **Social media**: Using social media platforms to share tips on energy conservation, updates on renewable energy technologies, and news related to SDG 7.

#### 5. Modeling Sustainable Practices

- **Sustainable Operations**: Adopting sustainable practices in daily operations, such as reducing paper usage, recycling, and using eco-friendly products.
- **Energy Audits**: Regularly conducting energy audits to monitor and reduce energy consumption.



#### 6. Supporting Local Renewable Energy Projects:

- **Collaboration with Local Governments**: Partnering with local governments and organizations to support renewable energy projects and initiatives.
- **Hosting Demonstrations**: Facilitating demonstrations of renewable energy technologies, such as solar panels and wind turbines, to educate and inspire the community.

#### 7. Research and Innovation:

- **Supporting Research**: Providing resources and support for research on sustainable energy technologies and practices.
- Innovation Hubs: Establishing innovation hubs or maker spaces where community members can work on projects related to renewable energy and sustainability.

## SDG 8: Decent Work and Economic Growth

Sustainable Development Goal 8, which focuses on promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all, can be actively supported and advanced by libraries in several ways such as:

#### 1. Educational Programs and Training

- Job Skills Workshops: Libraries can offer workshops on resume writing, interview skills, job searching, and career development to help community members improve their employment prospects.
- **Digital Literacy Training**: Providing training in digital skills can help individuals acquire the necessary competencies for modern job markets, particularly in areas where digital access and literacy may be lacking.

#### 2. Access to Resources

- **Employment Resources**: Libraries can maintain collections of books, online databases, and resources related to career development, job hunting, and entrepreneurship.
- **Business Resources**: Offering resources for small business owners and entrepreneurs, such as guides on starting a business, business planning software, and market research databases.

#### 3. Support for Entrepreneurs and Small Businesses

- **Business Incubators**: Some libraries provide spaces and support services for start-ups and small businesses, including access to mentors, business plan assistance, and networking opportunities.
- Workshops and Networking Events: Hosting events that connect local businesses and entrepreneurs, offering opportunities for networking, collaboration, and learning.

#### 4. Inclusive Programs

• **Programs for Marginalized Groups**: Libraries can offer targeted programs to support the employment and economic development of marginalized and vulnerable groups, including women, minorities, and people with disabilities.





• Language and Literacy Programs: Providing language learning resources and literacy programs can help non-native speakers and those with low literacy levels improve their skills, thus enhancing their employment opportunities.

#### 5. Community Engagement

- **Partnerships with Local Organizations**: Collaborating with local businesses, government agencies, and non-profits to provide comprehensive support and resources to job seekers and entrepreneurs.
- **Community Feedback**: Engaging with the community to understand their needs and tailoring programs and services to meet those specific economic and employment-related needs.

#### 6. Information Access and Technology

- Free Internet Access: Offering free access to the internet and computers, which is crucial for job searching, online applications, and accessing employment resources.
- **Technology Lending Programs**: Providing access to technology such as laptops, tablets, and Wi-Fi hotspots for individuals who may not have these resources at home.

### SDG 9: Industry, Innovation, and Infrastructure

Sustainable Development Goal 9 focuses on building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. Community could evolve through library's support with access to cutting-edge technology services and programs that meet its needs:

#### 1. Providing Access to Information and Resources

Libraries offer access to a wealth of information, including scientific research, technological advancements, and industrial data. By providing free and open access to these resources, libraries support education and innovation, which are key components of sustainable industrialization.

#### 2. Supporting Education and Lifelong Learning

Libraries should host workshops, courses, and programs that promote STEM (Science, Technology, Engineering, and Mathematics) education. These initiatives help build a skilled workforce capable of contributing to sustainable industrial practices and technological innovation.

#### 3. Facilitating Research and Development

Academic and research libraries play a pivotal role in supporting research and development activities. They provide access to specialized databases, journals, and other resources necessary for cutting-edge research in infrastructure and industrialization.



#### 4. Promoting Digital Inclusion

Libraries help bridge the digital divide by offering internet access, digital literacy programs, and technology training. By ensuring that all community members have access to digital tools and skills, libraries promote inclusive growth and innovation.

#### 5. Supporting Local Entrepreneurs and Startups

Many libraries offer maker spaces, business incubators, and co-working spaces that support local entrepreneurs and startups. These facilities provide the tools and resources needed to innovate and develop new products and services.

#### 6. Hosting Innovation Hubs and Maker Spaces

Libraries can serve as innovation hubs, providing spaces where community members can collaborate, create, and experiment with new ideas. Maker spaces equipped with tools like 3D printers, laser cutters, and other technologies can foster creativity and innovation.

#### 7. Promoting Sustainable Practices

Libraries themselves can adopt sustainable practices, such as using energy-efficient technologies, reducing waste, and promoting recycling. By modeling sustainable behavior, libraries can inspire their communities to follow suit.

#### 8. Collaborating with Other Organizations

Libraries can collaborate with educational institutions, government agencies, nonprofits, and private sector partners to promote infrastructure development and industrial innovation. These partnerships can lead to shared resources, joint programs, and increased impact.

### SDG 10: Reduced Inequalities

Sustainable Development Goal 10 aims to reduce inequality within and among countries. Libraries can provide free public access and programs of cultural diversion and promote social inclusion.

- 1. Access to Information and Education
- Inclusive Programs and Services: Libraries can offer programs specifically designed for marginalized groups, such as immigrants, refugees, and people with disabilities, ensuring they have access to educational and informational resources.
- Literacy Programs: Implementing literacy and digital literacy programs helps reduce educational inequalities, giving everyone the skills needed to succeed in the information age.

#### 2. Promoting Social Inclusion

- **Safe Spaces**: Libraries often serve as safe and welcoming spaces for all community members, fostering social inclusion and community cohesion.
- **Community Engagement**: Hosting events and discussion forums on topics related to inequality and social justice can raise awareness and encourage community participation in addressing these issues.





#### 3. Economic Empowerment

- Job Search Assistance: Libraries can provide resources and training for job seekers, including resume writing workshops, job search strategies, and access to job listings.
- Entrepreneurship Support: Offering resources and workshops for aspiring entrepreneurs, including business planning, financial literacy, and access to market research tools.

#### 4. Cultural Representation

- **Diverse Collections**: Ensuring that library collections reflect the diversity of the community, including books and materials in multiple languages and by diverse authors.
- **Cultural Programs**: Hosting cultural events and exhibits that celebrate the diversity of the community can help promote understanding and reduce cultural inequalities.
- 5. Partnerships and Advocacy
- **Collaborations with NGOs**: Partnering with non-governmental organizations and community groups that work on reducing inequalities can amplify the library's impact.
- **Advocacy:** Libraries can advocate for policies that promote social and economic inclusion, leveraging their position as community hubs to influence change.

#### 6. Digital Inclusion

- Access to Technology: Providing free access to computers, internet, and digital resources helps bridge the digital divide, ensuring that all community members can participate in the digital economy.
- **Digital Skills Training**: Offering workshops and one-on-one assistance in digital skills helps those who might otherwise be left behind due to lack of technology access or skills.

## SDG 11: Sustainable Cities and Communities

Sustainable Development Goal 11 aims to make cities inclusive, safe, resilient, and sustainable. Libraries should partner with local organizations, schools, and government agencies to promote community development and resilience.

#### 1. Access to Information and Knowledge

Libraries provide access to a wide range of information resources that help educate communities about sustainability, urban planning, and resilience. They offer books, databases, and digital resources on topics like sustainable architecture, urban agriculture, and disaster preparedness.

#### 2. Community Engagement and Education

Libraries serve as community hubs where people can gather, learn, and discuss local issues. They host workshops, lectures, and discussions on urban development, sustainability practices, and community resilience. These events can empower citizens to participate in local governance and decision-making processes.



#### 3. Digital Inclusion

Libraries provide free internet access and digital literacy programs, ensuring that all community members, including those in underserved areas, can access digital services and information. This supports the creation of inclusive digital communities and helps bridge the digital divide.

#### 4. Support for Local Economies

Libraries often support local businesses and entrepreneurs by providing access to business information, co-working spaces, and networking opportunities. They can also offer training on sustainable business practices and green technologies, promoting local economic development.

#### 5. Environmental Stewardship

Many libraries implement sustainable practices within their operations, such as energyefficient buildings, waste reduction programs, and green procurement policies. These practices not only reduce the environmental footprint of the library but also serve as models for the community.

#### 6. Cultural Heritage Preservation

Libraries play a crucial role in preserving and promoting local cultural heritage, which is an essential aspect of sustainable communities. They collect, digitize, and make accessible local history materials, fostering a sense of place and community identity.

#### 7. Safe and Inclusive Spaces

Libraries provide safe and inclusive spaces for all community members, including marginalized groups. They offer programs and services tailored to the needs of diverse populations, promoting social cohesion and inclusivity.

# SDG 12: Responsible Consumption and Production

Libraries by organizing workshops, lectures, and informational sessions, can raise awareness about the environmental and social impacts of consumption patterns and production processes. Partnerships with local businesses, environmental organizations, and government agencies can further amplify these efforts, providing patrons with practical tools and strategies for making more sustainable choices. Additionally, libraries can lead by example by adopting eco-friendly practices within their operations, such as minimizing waste, using sustainable materials, and promoting the use of digital resources. Through these multifaceted efforts, libraries inspire and equip communities to embrace responsible consumption and production, fostering a more sustainable and equitable world.

#### 1. Education and Awareness

Libraries provide access to a wealth of information on sustainable consumption and production. They offer books, articles, and digital resources on topics such as waste reduction, recycling, sustainable living, and eco-friendly products. Educational programs and workshops can further raise awareness and promote responsible behaviors.





#### 2. Resource Sharing and Reuse

Libraries exemplify the concept of resource sharing by allowing multiple people to use the same materials, reducing the need for individual ownership and production of new items. They can extend this model by offering tool lending libraries, seed libraries, and makerspaces where community members can borrow tools, seeds, and other resources.

#### 3. Sustainable Practices within Libraries

Libraries can lead by adopting sustainable practices within their operations. This includes energy-efficient building designs, waste reduction programs, recycling initiatives, and green procurement policies. By implementing these practices, libraries can reduce their environmental footprint and inspire others to follow.

#### 4. Programs on Sustainable Living

Libraries can host programs and workshops on topics such as minimalism, zero-waste living, composting, and sustainable food practices. These programs can provide practical advice and hands-on experience, helping individuals and families adopt more sustainable lifestyles.

#### 5. Community Recycling and Upcycling Initiatives

Libraries can serve as collection points for recycling and upcycling projects. They can organize events where community members can bring in items for recycling or participate in upcycling workshops to create new items from old materials. These initiatives promote the reuse of materials and reduce waste.

#### 6. Partnerships with Local Organizations

Libraries can collaborate with local environmental organizations, businesses, and government agencies to promote sustainable consumption and production. These partnerships can lead to joint programs, resource sharing, and community-wide initiatives that amplify the impact of sustainability efforts.

#### 7. Access to Digital Resources

By providing access to digital resources such as e-books, online courses, and digital magazines, libraries reduce the need for physical materials, thereby decreasing the demand for paper and other resources. Digital resources also make it easier to access information on sustainable practices.

### SDG 13: Climate Action - Environmental Sustainability

SDG 13:"Climate Action," focuses on taking urgent action to combat climate change and its impacts. Libraries can support SDG 13 through various initiatives aimed at raising awareness, educating the community, and promoting climate action. Implementation of daily operations, such as energy conservation, waste reduction, and sustainable procurement and environmental educational programs, could engage people in sustainability.



#### 1. Educational Programs and Workshops

Libraries can organize educational programs and workshops focused on climate change, its impacts, and mitigation strategies. These events can cover topics such as renewable energy, energy efficiency, sustainable living, and climate science.

#### 2. Access to Information and Resources

Libraries provide access to a vast array of resources on climate change, including books, scientific journals, reports, documentaries, and online databases. This information helps community members understand the science behind climate change and the importance of acting.

#### 3. Community Engagement and Advocacy

Libraries can serve as platforms for community engagement and advocacy on climate issues. They can host public forums, panel discussions, and debates where community members, experts, and policymakers discuss climate action strategies and policies.

#### 4. Sustainable Practices and Green Infrastructure

Libraries can adopt and showcase sustainable practices within their own operations. This includes implementing energy-efficient lighting and heating systems, using renewable energy sources, reducing waste, and promoting recycling. Libraries can also serve as models of green infrastructure, incorporating sustainable building materials and designs.

#### 5. Climate Literacy for all ages

Libraries can provide climate literacy programs tailored to different age groups, from children to adults. Storytimes, interactive exhibits, and hands-on activities can engage younger audiences, while lectures and book clubs can cater to adults.

#### 6. Partnerships with Environmental Organizations

Libraries can collaborate with local environmental organizations, schools, and universities to promote climate action. These partnerships can result in joint programs, shared resources, and community-wide initiatives that amplify the impact of climate education and advocacy.

#### 7. Emergency Preparedness and Resilience

Libraries can play a critical role in educating the community about emergency preparedness and resilience in the face of climate-related disasters. They can provide information on local emergency plans, offer training on disaster response, and serve as information hubs during emergencies.

#### 8. Digital Resources and Virtual Programs

By offering digital resources and virtual programs, libraries can reach a wider audience and provide continuous access to climate information. Online workshops, webinars, and virtual discussion groups can engage the community in climate action regardless of physical location.





# SDG 14: Life Below Water

SDG 14: "Life Below Water," aims to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. Libraries can support SDG 14 by raising awareness, providing educational resources, and promoting community engagement in marine conservation.

#### 1. Educational Programs and Workshops

Libraries can organize educational programs and workshops that focus on marine conservation, the importance of oceans, and the impact of human activities on marine ecosystems. These events can include lectures by marine biologists, documentary screenings, and interactive activities for all age groups.

#### 2. Access to Information and Resources

Libraries can provide access to a wealth of information on marine science, conservation efforts, and sustainable practices. They can offer books, scientific journals, magazines, online databases, and multimedia resources on topics such as marine biodiversity, oceanography, and sustainable fishing practices.

#### 3. Community Engagement and Advocacy

Libraries can serve as platforms for community engagement and advocacy on marine conservation issues. They can host public forums, panel discussions, and community meetings where experts, activists, and community members discuss and advocate for the protection of marine environments.

#### 4. Promotion of Sustainable Practices

Libraries can promote sustainable practices that help protect marine environments. This can include programs on reducing plastic use, proper waste disposal, and sustainable seafood consumption. Libraries can also implement their own sustainability practices, such as reducing plastic use in their operations.

#### 5. Partnerships with Environmental Organizations

Libraries can collaborate with local environmental organizations, schools, universities, and marine conservation groups to promote SDG 14. These partnerships can result in joint programs, shared resources, and community initiatives that raise awareness and drive action on marine conservation.

#### 6. Citizen Science and Volunteer Opportunities

Libraries can support citizen science projects and volunteer opportunities related to marine conservation. They can provide information on how community members can participate in beach clean-ups, marine wildlife monitoring, and other conservation activities.

#### 7. Exhibits and Displays

Libraries can create exhibits and displays that highlight the beauty and importance of marine life and ecosystems. These visual presentations can include photographs, art,



and informational panels that educate and inspire visitors to care about marine conservation.

#### 8. Digital Resources and Virtual Programs

Libraries can offer digital resources and virtual programs that focus on marine conservation. Online workshops, webinars, and virtual discussion groups can reach a wider audience and provide continuous access to information on marine issues.

### SDG 15: Life on Land

Sustainable Development Goal 15 "Life on Land," aims to protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.

Libraries through their extensive collections can provide access to a wealth of information on biodiversity, conservation strategies, and sustainable land management practices. They can host educational programs, workshops, and lectures that raise awareness about the importance of preserving forests, combating desertification, and halting biodiversity loss. Collaborations with environmental organizations and experts can enhance these efforts, offering the community hands-on learning opportunities and participation in local conservation projects. Additionally, libraries can create green spaces or community gardens that serve as living examples of sustainable land use. By fostering knowledge and community action, libraries contribute significantly to the protection and restoration of terrestrial ecosystems, ensuring that the benefits of healthy land are enjoyed by current and future generations.

Libraries can support SDG 15 through various initiatives that raise awareness, provide educational resources, and engage the community in conservation efforts.

#### 1. Educational Programs and Workshops

Libraries can organize educational programs and workshops focused on terrestrial ecosystems, biodiversity, and conservation. These events can cover topics such as wildlife preservation, forest management, sustainable agriculture, and the impact of human activities on land.

#### 2. Access to Information and Resources

Libraries offer access to a wide range of resources on terrestrial ecosystems and conservation. This includes books, scientific journals, reports, documentaries, and online databases on topics such as botany, zoology, environmental science, and sustainable land use practices.

#### 3. Community Engagement and Advocacy

Libraries can serve as platforms for community engagement and advocacy on land conservation issues. They can host public forums, panel discussions, and community meetings where experts, activists, and community members discuss and advocate for the protection and sustainable use of terrestrial ecosystems.





#### 4. Promotion of Sustainable Practices

Libraries can promote sustainable practices that help protect terrestrial ecosystems. This can include programs on reducing waste, composting, organic gardening, and sustainable farming practices. Libraries can also implement their own sustainability practices, such as using green building materials and reducing their environmental footprint.

#### 5. Partnerships with Environmental Organizations

Libraries can collaborate with local environmental organizations, schools, universities, and conservation groups to promote SDG 15. These partnerships can result in joint programs, shared resources, and community initiatives that raise awareness and drive action on land conservation.

#### 6. Citizen Science and Volunteer Opportunities

Libraries can support citizen science projects and volunteer opportunities related to land conservation. They can provide information on how community members can participate in wildlife monitoring, tree planting, habitat restoration, and other conservation activities.

#### 7. Exhibits and Displays

Libraries can create exhibits and displays that highlight the importance of terrestrial ecosystems and biodiversity. These visual presentations can include photographs, art, and informational panels that educate and inspire visitors to care about land conservation.

#### 8. Digital Resources and Virtual Programs

Libraries can offer digital resources and virtual programs focused on land conservation. Online workshops, webinars, and virtual discussion groups can reach a wider audience and provide continuous access to information on terrestrial ecosystem issues.

## SDG 16: Peace, Justice, and Strong Institutions

Sustainable Development Goal 16 "Peace, Justice, and Strong Institutions," aims to promote peaceful and inclusive societies, provide access to justice for all, and build effective, accountable, and inclusive institutions. Libraries can promote access to information and provide educational resources. Here are several ways libraries contribute to SDG 16:

#### 1. Access to Information and Knowledge

Libraries provide free and equitable access to a wide range of information and knowledge. This access is fundamental to empowering individuals, promoting transparency, and supporting informed decision-making, which are essential for justice and strong institutions.

#### 2. Educational Programs and Workshops

Libraries can organize educational programs and workshops on topics related to peace, justice, human rights, and governance. These events can help raise awareness and



educate the community about the importance of these issues and how they can contribute to a more just society.

#### 3. Community Engagement and Dialogue

Libraries serve as neutral spaces where community members can come together to engage in dialogue and discuss important social issues. Hosting forums, discussion groups, and panels on topics such as conflict resolution, civic participation, and social justice can foster a culture of peace and understanding.

#### 4. Promoting Legal Literacy

Libraries can help improve legal literacy by providing resources and programs that educate the public about their rights and the legal system. This can include workshops on understanding legal documents, navigating the justice system, and knowing one's rights.

#### 5. Support for Marginalized Communities

Libraries often serve as safe spaces for marginalized and vulnerable communities. By providing targeted programs and services, libraries can help ensure that everyone has access to information and resources that promote inclusion and equality.

#### 6. Partnerships with Legal and Civic Organizations

Libraries can collaborate with local legal aid societies, human rights organizations, and civic groups to provide resources and support for community members. These partnerships can result in joint programs, shared resources, and initiatives that strengthen community resilience and justice.

#### 7. Digital Inclusion and Information Literacy

By offering digital literacy programs and free access to the internet, libraries help bridge the digital divide and ensure that all community members can access information and participate in the digital society. Information literacy programs can teach patrons how to evaluate and use information effectively, promoting informed and active citizenship.

#### 8. Cultural and Historical Preservation

Libraries play a vital role in preserving cultural and historical records, which are essential for understanding and promoting justice and peace. By maintaining archives and special collections, libraries help ensure that important historical documents and cultural artifacts are accessible to future generations.

## SDG 17: Partnerships for the Goals

Sustainable Development Goal 17 "Partnerships for the Goals," aims to strengthen the means of implementation and revitalize the global partnership for sustainable development. Libraries can support the goal by fostering collaboration, sharing resources, and promoting sustainable development. Local, national, and global networks to share best practices and resources for sustainable development are necessary to keep society informed and involved.





#### 1. Creating Collaborative Networks

Libraries can serve as hubs for creating and nurturing collaborative networks among local organizations, educational institutions, businesses, and government agencies. By facilitating partnerships, libraries help build stronger, more cohesive communities that can work together towards achieving sustainable development goals.

#### 2. Resource Sharing and Access

Libraries promote the sharing of resources and access to information, which is fundamental for building partnerships. They can act as repositories for data and research on sustainable development, making this information freely accessible to the public, policymakers, and researchers.

#### 3. Educational Programs and Workshops

Libraries can organize educational programs and workshops on the importance of partnerships for sustainable development.

#### 4. Hosting Community Forums and Meetings

Libraries can host community forums, meetings, and conferences that bring together diverse stakeholders to discuss local and global sustainable development challenges. These events can facilitate dialogue, idea exchange, and the formation of new partnerships.

#### 5. Promoting Digital Inclusion

By providing free internet access and digital literacy programs, libraries help bridge the digital divide. This ensures that all community members can participate in the digital economy and access global information networks, which is essential for building inclusive partnerships.

#### 6. Supporting Local and Global Initiatives

Libraries can support local and global sustainable development initiatives by providing space, resources, and promotional support. They can partner with local NGOs, government agencies, and international organizations to host events, run awareness campaigns, and implement community projects.

#### 7. Encouraging Civic Engagement

Libraries can promote civic engagement by providing information on how to participate in local governance and community decision-making processes. By educating people about their rights and responsibilities, libraries help build informed and active citizenry, which is crucial for effective partnerships.

#### 8. Facilitating Access to Funding and Resources

Libraries can provide information on grants, funding opportunities, and resources available for sustainable development projects. They can also offer workshops on grant writing, project management, and fundraising, helping local organizations and community groups secure the resources they need to implement their initiatives.



# 3. Purpose of the guide

The purpose of this guide is to equip libraries with useful tips that will help them introduce sustainable behaviors in line with environmental management principles. Libraries as centers for education and public participation have a chance to show how sustainability should be encompassed in everyday activities and services.

To gain more information and knowledge of the practices that are being implemented in

Greece and Turkey,"Sustainable Neighbors" team prepared a questionnaire that was to be sent to the countries' libraries (ANNEX A). The libraries' regions that took part in the survey were: Attica region (Greece), Istanbul and Tokat (Turkey).

Based on the research results, the team would organize an environmental educational program consisted of events and sustainable workshops. There would be 3 target groups for the environmental educational programs:

- 1. Librarians,
- 2. General public
- 3. Kids

(ANNEX B: environmental educational games for kids)



Figure 2: Environmental education target groups

# 4. Methodology

A questionnaire was developed and sent to libraries in Greece (Attica region) and Turkey (Istanbul and Tokat regions) to understand current sustainable practices and gather insights into their efforts. The questions explored various areas, such as waste management, energy efficiency, and community involvement in sustainability efforts.

The "Sustainable Neighbors" team received a total of 33 responses of the questionnaire. These responses represented 24 / 50 Greek libraries from the Attica region and included participation of 33 individual librarians.

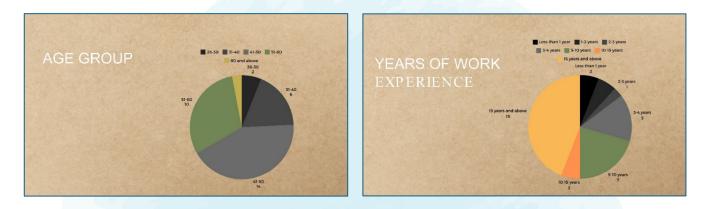


# 5. Data analysis - Results

# 5.1 Data analysis

### 5.1.1 Demographic Data

Notable demographic data include the age distribution of participants. The 26-30 age group was underrepresented, with only 2 respondents. In contrast, the 41-50 age group had the highest participation, with 14 respondents. Additionally, the oldest participant, aged over 60, was the sole respondent from that age category.



Additionally, 26 of the participants held at least one degree in library science, regardless of the degree level.



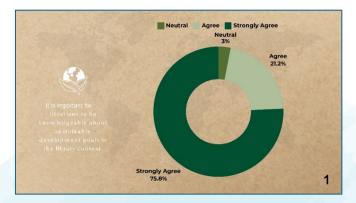
### 5.1.2 Main part of the research

The main part of the research consisted of 20 questions to assess participants' awareness of sustainability. The total estimated time of filling in the questionnaire was 6 minutes. Right below are listed both the questions and their results.



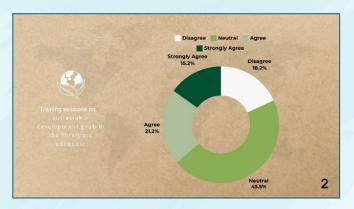
# Q1: It is important for librarians to be knowledgeable about sustainable development goals in the library context.

Most of the participants, 75.8%, strongly agreed that librarians should understand, apply, and promote sustainability in their workplace.



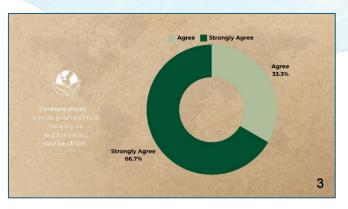
#### Q2: Training sessions on sustainable development goals in the library are adequate.

Only 15.2% of participants strongly agreed that the training sessions on sustainability currently organized for librarians are sufficient to inform them.





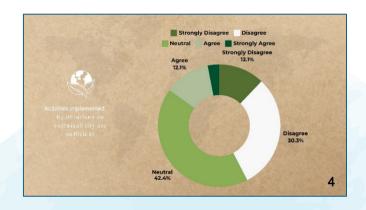
Even though the previous question indicates that there are not enough workshops or information, in this question, 66.7% believe it is essential to receive practical training on implementing sustainability.





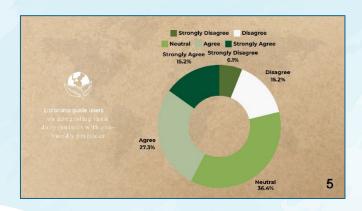
#### Q4: Activities implemented by librarians on sustainability are sufficient.

From the fourth question comes that libraries who participated in this research do not organise enough activities with sustainable character since 30.3% of them disagrees on the sufficiency of these activities. Also 42.4% of them answered neutral.



# Q5: Librarians guide users on integrating their daily routines with eco-friendly practices.

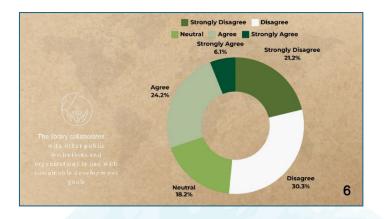
In this question, very few participants, 15.2%, strongly agreed that part of a librarian's job is to encourage library users to adopt eco-friendly living. The highest percentage, 36.4%, was recorded under the 'Neutral' response.



# Q6: The library collaborates with other public institutions and organizations in line with sustainable development goals.

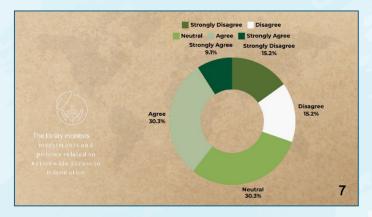
Regarding collaborations between the libraries participating in this research and other institutions, such as museums and environmental organizations, these do not occur. 30.3% of the respondents disagreed with the statement about existing collaborations with other organizations.





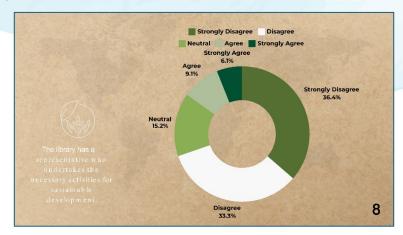
# **Q7:** The library monitors investments and policies related to nationwide access to information.

In this question, the answers did not reveal a clear majority, as the percentage of 'Neutral' and 'Agree' responses was the same at 30.3%. Also the strongly agree answers were only 9.1%.



# Q8: The library has a representative who undertakes the necessary activities for sustainable development.

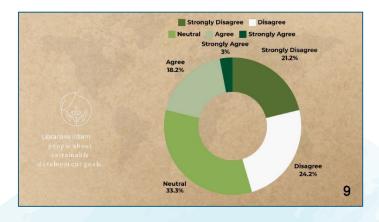
In the 8th question, most of the responses were 'Strongly Disagree' at 36.4%, indicating that the majority of libraries do not have a representative to promote sustainability within the organization.





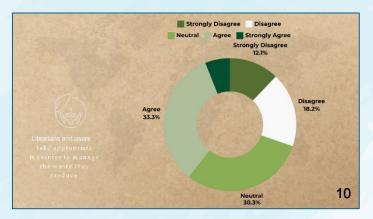
#### **Q9:** Librarians inform people about sustainable development goals.

The information about the 17 sustainable development goals is not common among librarians who participated as 33.3% chose the neutral answer.



# Q10: Librarians and users take appropriate measures to manage the waste they produce.

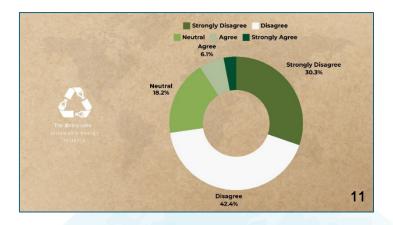
In the 10th question, despite the fact that 'Neutral' responses at 30.3% and 'Agree' responses at 33.3% were quite close, the 'Agree' responses prevailed, indicating that both librarians and the users of their libraries manage the waste they produce appropriately.



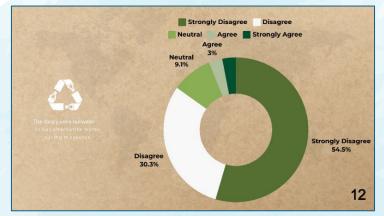
#### Q11: The library uses renewable energy systems.

Regarding renewable energy systems, very few of the libraries appear to use them, according to the statistics provided by our research. More specifically, 30.3% strongly disagreed, and 42.4% disagreed with the existence of renewable energy systems in their working environment-library.

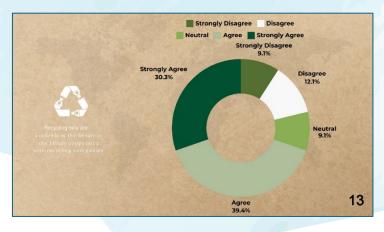




Q12: The library uses rainwater or has alternative water-saving measures.



Participants also strongly disagree or simply disagree, with 54.5% and 30.3%, respectively, regarding the existence of water-saving measures adopted by the organization, such as saving and reusing rainwater.



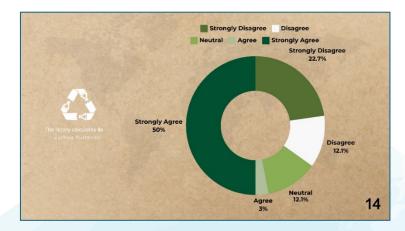
# Q13: Recycling bins are available in the library or the library cooperates with recycling companies.

Percentages of strongly agree or just agree indicate that participating libraries use recycling bins within 30-40%.

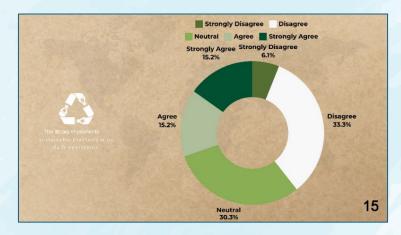


#### Q14: The library calculates its carbon footprint.

Very few Greek libraries measure their environmental footprint, as between 50-70% of participants indicate that such a process is not common or does not occur at all.

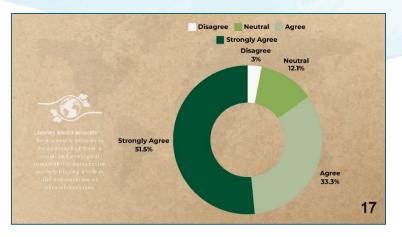


**Q15:** The library implements sustainable practices in its daily operations. In their daily operations, Greek libraries appear not to use sustainable practices, with a rate of 33.3%



# Q16: The libraries should integrate economic and social sustainability principles into combating unemployment.

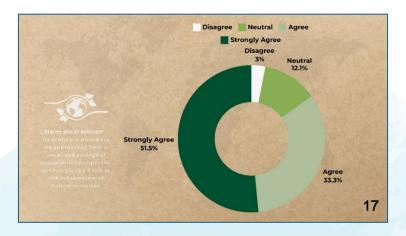
84.8% of the participants either agreed or strongly agreed on the use of sustainability as a means to combat unemployment. None disagreed. An interesting comment came from one participant who stated that did not understand the question.





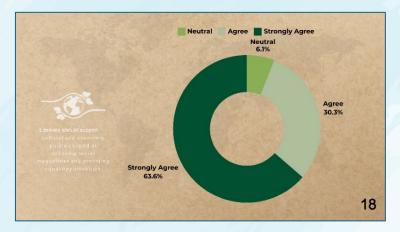
# Q17: Libraries should advocate for economic policies to be approached from a social and ecological sustainability perspective, actively playing a role in the conservation of natural resources.

In the question about the role of libraries in the conservation of natural resources, the majority of responses were in the 'Strongly Agree' category, with a percentage of 51.5%, while only 3% of participants selected 'Disagree'.



## Q18: Libraries should support cultural and economic policies aimed at reducing social inequalities and providing equal opportunities.

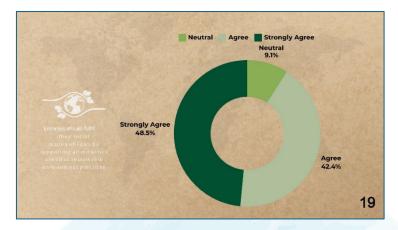
"Libraries have an active role and significant power in reducing inequalities and instead providing equal opportunities". This statement was supported by 63.6% of participants.



## Q19: Libraries should fulfill their social responsibilities by supporting all initiatives aimed at sustainable environment practices.

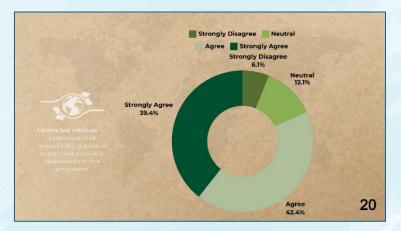
In the question that combines the social responsibilities of libraries toward the community with sustainability, there were no negative responses. Participants answered with 48.5% "Strongly Agree", 42.4% "Agree", and 9.1% "Neutral Response".





Q20: Libraries help individuals understand their responsibility to preserve cultural and economic resources for future generations.

In the last question regarding the role of libraries in relation to the conservation of resources for future generations, there was an agreement of 42.4%, while absolute agreement among participants was only 39.4%.



## 5.2 Results

The questions explored various areas, such as waste management, energy efficiency, and community involvement in sustainability efforts.

- The findings revealed areas for improvement in participation and suggested the need for more comprehensive awareness programs to better engage a wider demographic.
- Low participation rate limited the scope of the findings, the accuracy and reliability of the results leading to potential gaps in data and insights. The limited scope may have restricted the diversity of practices reported, with additional regions potentially offering different insights.

Based on the gathered data, a series of environmental educational programs are needed to be developed. For better results, organizing an awareness campaign to inform librarians, would be the best way in order to promote sustainability in libraries and engage them to participate actively.



## 6. Practical tips for greening libraries

## 6.1 Governance and leadership

#### Sustainability Policy

Develop and adopt a formal sustainability policy that aligns with the library's mission and values.

#### Green Team

Establish a sustainability committee or green team to oversee and implement sustainability initiatives.

#### <u>Stakeholder Engagement</u>

Engage staff, patrons, and the community in sustainability efforts through regular communication and involvement.

### 6.2 Facility management

### 6.2.1 Energy Efficiency

- Conduct energy audits to identify and implement energy-saving measures.
- Utilize energy-efficient lighting, heating, cooling, and ventilation systems.
- Use energy-efficient computers, printers, and other electronic devices.
- Incorporate renewable energy sources, such as solar panels.

#### 6.2.2 Water Conservation

- Install low-flow fixtures and water-efficient appliances.
- Implement water-saving landscaping practices, such as xeriscaping.
- Use rainwater harvesting systems for irrigation of library gardens.
- Implement a greywater recycling system for non-potable water uses.
- Educate staff and patrons on water conservation practices.

#### 6.2.3 Waste Reduction

- Establish comprehensive recycling programs for paper, plastics, metals, and electronics.
- Promote reuse and reduce single-use items.
- Implement composting programs for organic waste particularly in libraries with cafes or green spaces

### 6.2.4 Natural Resource Consumption Monitoring Form

The Natural Resource Consumption Monitoring Form is an indispensable tool for libraries committed to effectively managing their resources and promoting sustainability. This form meticulously records the consumption of key resources such as electricity, natural gas, water, and diesel across different months, providing a foundational dataset for making informed, data-driven decisions.



**Purpose of the Form**: The primary purpose of this form is to facilitate a detailed tracking of resource usage, enabling libraries to identify consumption patterns and potential areas for improvement. By comparing resource consumption across different months and correlating it with varying levels of library patronage, it becomes possible to spot inefficiencies or wasteful practices.

YEAR	2024											
NATURAL RESOURCES												
	January			February			March			April		
	Consumption	Users	Per person	Consumption	Users	Consumption	Users	Users	Per person	Consumption	Users	Per persor
ELECTRICITY (kw/h)										1		
NATURALGAS (m3)												
WATERd (m3)												
MOTORIN (lt)												

More information: ANNEX C.

## 6.3 Sustainable Design and Construction

#### Green Building Standards

Adhere to green building standards (e.g., LEED, BREEAM) for new construction and renovations.

#### Material Selection

Choose sustainable, non-toxic, and locally sourced materials for building projects.

#### Indoor Environmental Quality

Enhance indoor air quality with proper ventilation, non-toxic materials, and adequate natural lighting.

• Incorporate green roofs and walls to improve insulation and reduce urban heat islands.

## 6.4 Sustainable Operations

#### 6.4.1 Procurement

- Purchase eco-friendly, energy-efficient, and ethically sourced products.
- Implement green purchasing policies to guide procurement decisions.
- Choose vendors with sustainable practices.

#### 6.4.2 Technology

- Use energy-efficient IT equipment.
- Implement digital services to reduce paper use.
- Ensure proper disposal and recycling of electronic waste.
- Offer virtual programs and services to reduce the need for physical travel.



#### 6.4.3 Transportation

- Encourage the use of public transportation, biking, and walking to the library.
- Provide facilities for cyclists, such as bike racks and repair stations.
- Consider electric or hybrid vehicles for library operations.
- Facilitate carpooling options for staff and patrons.

## 6.5 Community Engagement and Education

#### Sustainability Programming

Offer programs and workshops on sustainability topics, such as energy conservation, recycling, and sustainable living.

#### Partnerships

Partner with local environmental organizations, schools, and businesses to promote sustainability

#### <u>Awareness Campaigns</u>

Conduct campaigns to raise awareness about environmental issues and the library's sustainability efforts.

• Provide resources and materials related to the SDGs and sustainability for all age groups.

### 6. 6 Collections and Resources

#### - Sustainable Collection Development

- Focus on acquiring materials that support sustainability education and awareness.
- Promote digital collections to reduce physical resource use.

#### -Resource Sharing

- Encourage the sharing of resources through interlibrary loans.
- Promote the use of digital resources to minimize environmental impact.

## 6.7 Monitoring and Reporting

<u>Tracking Progress</u>

Develop metrics and benchmarks to track the progress of sustainability initiatives.

#### <u>Regular Reporting</u>

Provide regular reports on sustainability efforts and achievements to stakeholders.

#### <u>Continuous Improvement</u>

Regularly review and update sustainability practices to ensure ongoing improvement and adaptation to new technologies and methodologies.



## 6.7.1 Importance and Implementation of Forms, Instructions, Procedures, and Policies in a Sustainable Library

#### A. Forms

#### 1. Natural Resource Consumption Tracking Form

- **Importance:** Helps monitor and manage the consumption of resources like water, electricity, and paper, ensuring efficient use and reducing waste.
- Implementation: Regularly record data on resource usage, analyze trends, and identify areas for improvement.

#### 2. Supplier Evaluation Formyytgtby

- **Importance**: Ensures that suppliers meet sustainability criteria, promoting responsible sourcing.
- **Implementation**: Assess suppliers based on environmental impact, social responsibility, and compliance with sustainable practices.

#### 3. Approved Supplier List

- **Importance**: Streamlines procurement processes by having a list of preevaluated, sustainable suppliers.
- **Implementation**: Maintain an updated list of suppliers who meet the library's sustainability standards.

#### 4. Annual Training Plan

- Importance: Enhances staff knowledge and skills in sustainability practices.
- **Implementation**: Develop and execute a yearly schedule for training sessions on topics like energy efficiency, waste reduction, and sustainable procurement.

#### 5. Occupational Safety Annual Work Plan

- **Importance**: Ensures a safe working environment, reducing the risk of accidents and promoting well-being.
- Implementation: Outline safety goals and actions for the year, regularly review and update the plan.

#### 6. Emergency Action Plan

- **Importance**: Prepares the library for emergencies, minimizing potential harm and ensuring quick response.
- Implementation: Develop procedures for different emergency scenarios, conduct drills, and regularly update the plan.

#### 7. Environmental Emergency Plan

- **Importance**: Protects the environment from potential hazards, ensuring compliance with regulations.
- **Implementation**: Identify potential environmental risks, establish response procedures, and train staff.

#### 8. Plant Inventory List



- **Importance**: Manages and maintains the library's green spaces, contributing to a healthy environment.
- **Implementation**: Keep a detailed inventory of plants, schedule regular maintenance, and replace as needed.

#### 9. Machinery and Equipment List

- **Importance**: Ensures efficient operation and maintenance of library equipment, reducing downtime and energy consumption.
- **Implementation**: Regularly update the list, schedule maintenance, and monitor equipment performance.

#### 10. Machinery Maintenance Plan

- **Importance**: Extends the lifespan of equipment, ensuring optimal performance and safety.
- Implementation: Develop a maintenance schedule, perform regular checks, and document all activities.

#### B. Instructions, Procedures, and Policies

#### 1. Sustainability Policy:

- **Importance**: Provides a framework for all sustainability efforts, guiding decisionmaking and actions.
- **Implementation**: Clearly outline the library's commitment to sustainability, set measurable goals, and communicate to all stakeholders.

#### 2. Donation Policy:

- **Importance**: Manages donations effectively, ensuring they align with sustainability goals.
- **Implementation**: Establish criteria for acceptable donations, provide guidelines for donors, and regularly review policy.

#### 3. Corporate Equality Policy:

- **Importance:** Promotes a diverse and inclusive workplace, enhancing social sustainability.
- **Implementation**: Ensure equal opportunities for all employees, provide diversity training, and monitor compliance.

#### 4. Sustainable Procurement Policy:

- Importance: Ensures all purchases support the library's sustainability goals.
- **Implementation**: Set criteria for sustainable products and services, train staff on procurement processes, and monitor adherence.

#### 5. Energy Management Policy:

- **Importance**: Reduces energy consumption, lowering the library's carbon footprint.
- Implementation: Implement energy-saving measures, regularly monitor usage, and adjust strategies as needed.



#### 6. Employee and Human Rights Policy:

- **Importance**: Ensures fair treatment of employees, promoting ethical labor practices.
- **Implementation**: Clearly define employee rights, provide training, and establish a grievance mechanism.

#### 7. Environmental Policy:

- Importance: Guides the library's efforts to minimize its environmental impact.
- **Implementation**: Set environmental goals, implement eco-friendly practices, and regularly review progress.

#### 8. Anti-Bribery and Corruption Policy:

- Importance: Maintains ethical standards, ensuring integrity in all operations.
- Implementation: Define unacceptable practices, provide training, and establish reporting mechanisms.

#### 9. Water Management Policy:

- **Importance**: Ensures efficient use of water resources, reducing waste and promoting conservation.
- **Implementation**: Monitor water usage, implement water-saving measures, and educate staff.

#### **10.** Non-conformance and Corrective Action Procedures:

- **Importance**: Addresses any deviations from sustainability goals, ensuring continuous improvement.
- **Implementation**: Identify non-conformances, develop corrective actions, and monitor effectiveness.

#### **11.** Environmental Management Instructions:

- Importance: Provides specific guidelines for managing environmental aspects.
- **Implementation**: Detail procedures for waste management, pollution control, and resource conservation.

#### 12. First Aid, Fire, and Earthquake Instructions:

- **Importance**: Ensures preparedness for emergencies, safeguarding staff and visitors.
- Implementation: Provide clear instructions, conduct regular drills, and maintain emergency supplies.

## 13. Management Activities, Event and Project Management, Risk and Opportunity Management Procedures:

- **Importance**: Ensures all activities align with sustainability goals, promoting effective management.
- **Implementation**: Develop comprehensive procedures, provide training, and regularly review processes.



## 14. Chemical Spillage, Fire Extinguisher Use, Accident Response, and Personal Protective Equipment Instructions:

- **Importance**: Ensures safe handling of chemicals and equipment, minimizing risks.
- **Implementation**: Provide detailed instructions, conduct regular training, and ensure availability of protective equipment.

## 15. Legal Requirements, Procurement, Human Resources & Training Procedures:

- **Importance**: Ensures compliance with legal standards and promotes sustainability in all operations.
- **Implementation**: Regularly review legal requirements, provide staff training, and implement best practices.

## 16. Change Management, Suggestion System, Occupational Health and Safety Instructions:

- **Importance**: Facilitates continuous improvement and adaptation while ensuring workplace safety.
- **Implementation**: Develop clear protocols for managing changes, encourage employee suggestions for sustainability improvements, and maintain rigorous health and safety standards.

#### **17.** Use of Personal Protective Equipment (PPE) Instructions:

- **Importance**: Ensures the safety of employees when handling hazardous materials or working in risky environments.
- **Implementation**: Provide comprehensive training on the correct use of PPE, ensure adequate supply, and enforce compliance.

#### 18. Management Activities, Event, and Project Management Procedures:

- **Importance**: Aligns all management activities and projects with sustainability goals.
- **Implementation**: Establish clear guidelines for planning, executing, and evaluating projects, ensuring they contribute to the library's sustainability objectives.

#### 19. Risk and Opportunity Management Procedures:

- **Importance**: Identifies potential risks and opportunities related to sustainability, enabling proactive management.
- Implementation: Conduct regular risk assessments, develop mitigation strategies, and capitalize on opportunities to enhance sustainability.

## 20. Communication, Emergency, Landscaping, and Garden Design Procedures:

• **Importance**: Ensures effective communication, preparedness for emergencies, and sustainable landscaping practices.



• **Implementation**: Develop communication plans for sustainability initiatives, prepare detailed emergency procedures, and implement eco-friendly garden designs.

## 21. Energy, Maintenance, Calibration, and Equipment Management Procedures:

- **Importance**: Ensures efficient energy use and maintenance of equipment, reducing environmental impact and operational costs.
- **Implementation**: Regularly monitor and manage energy usage, schedule routine maintenance and calibration of equipment, and maintain detailed records.

#### 22. Legal Requirements and Compliance Procedures:

- **Importance**: Ensures the library complies with all relevant laws and regulations, avoiding legal penalties and enhancing reputation.
- **Implementation**: Stay updated with legal requirements, conduct regular compliance audits, and implement necessary changes promptly.

#### 23. Procurement Procedures:

- **Importance**: Ensures that all purchases are made in alignment with the library's sustainability goals.
- Implementation: Develop and follow strict procurement guidelines that prioritize sustainable products and services, train staff, and regularly review and update procedures.

#### 24. Human Resources and Training Procedures:

- **Importance**: Promotes the development and well-being of employees, ensuring they are equipped to support the library's sustainability goals.
- **Implementation**: Provide continuous training on sustainability topics, establish clear HR policies that support ethical practices, and monitor employee satisfaction and performance.





## 7. Green libraries around the world

## 7.1 Green libraries

### 7.1.1 Seattle Central Library, USA

This library incorporates energy-efficient systems, extensive use of natural light, and sustainable building materials. It also has an efficient waste management system.

• Certification: LEED Silver

### 7.1.2. Stuttgart City Library, Germany

The Stuttgart City Library is designed with energy efficiency in mind, using advanced climate control systems and natural ventilation. It also utilizes a geothermal heating and cooling system.

• Design: The building's minimalist design maximizes the use of natural light.

### 7.1.3 Vancouver Public Library, Canada

The Vancouver Public Library's central branch has a green roof, energy-efficient systems, and water-saving fixtures. It also incorporates recycled materials in its construction.

• Programs: Offers a range of sustainability-focused programs and workshops for the community.

### 7.1.4 Taipei Public Library, Beitou Branch, Taiwan

This library is renowned for its green design, which includes solar panels, rainwater harvesting systems, and extensive use of natural light and ventilation.

- Beitou Public Library is one of Asia's first green libraries, known for its wooden structure and eco-friendly architecture.
- Solar panels provide energy for the library, and rainwater is collected and used for toilets.
- The building's large windows allow for natural ventilation, reducing the need for air conditioning.
- Certification: Taiwan's EEWH Green Building Label

#### 7.1.5 National Library of Singapore

This library integrates sustainable design with technology, including energy-efficient lighting and air conditioning systems, and extensive use of greenery.

• Initiatives: Runs numerous environmental programs and workshops.

#### 7.1.6 Biblioteca Vasconcelos, Mexico

This library boasts a garden that helps regulate the building's temperature, energyefficient lighting, and water-saving plumbing fixtures.

• Design: The building is designed to blend harmoniously with the surrounding environment.



## 7.1.7 Hjørring Library, Denmark

Known for its sustainable architecture, including solar panels, natural lighting, and energy-efficient systems.

• Community Engagement: Actively involves the community in green initiatives and educational programs.

### 7.1.8 Copenhagen Main Library, Denmark

Implements green energy solutions, including the use of solar panels and energy-efficient lighting. It also has a green roof to enhance insulation and biodiversity.

#### 7.1.9 Amsterdam Public Library (OBA), Netherlands

Incorporates sustainable building materials, energy-efficient systems, and a green roof.

 Programs: Offers educational programs on sustainability and environmental awareness.

### 7.1.10 State Library of Queensland, Australia

Designed with sustainability in mind, featuring energy-efficient lighting and cooling systems, water-saving fixtures, and extensive use of natural light and ventilation.

• Initiatives: Hosts various sustainability workshops and educational programs.

#### 7.1.11 Malmö City Library – Malmö, Sweden

- This library's design emphasizes sustainability, with its new addition, known as "The Calendar of Light," built using eco-friendly practices.
- The building features energy-saving technologies, including intelligent lighting systems and the use of geothermal heating and cooling.
- Malmö's library is part of the city's goal to become carbon neutral by 2030.

## 7.2 Best practices from these libraries

- 1. **Energy Efficiency**: Implementing energy-efficient systems, such as LED lighting, energy-efficient HVAC systems, and automated controls.
- 2. **Sustainable Materials**: Using recycled, renewable, and low-impact materials in construction and renovations.
- 3. **Natural Light and Ventilation**: Maximizing the use of natural light and incorporating natural ventilation to reduce energy consumption.
- 4. **Water Conservation**: Installing water-saving fixtures and systems, such as rainwater harvesting and greywater recycling.
- 5. **Green Roofs and Walls**: Utilizing green roofs and living walls to improve insulation, reduce heat islands, and promote biodiversity.
- 6. **Community Engagement**: Running programs and workshops focused on sustainability, environmental education, and green living.
- 7. **Certification and Standards**: Striving for certifications like LEED, BREEAM, or local green building standards to ensure best practices are followed.



By adopting these best practices, libraries around the world can significantly reduce their environmental impact while serving as educational and community hubs for sustainability.

## 8. Conclusions

Making a library sustainable involves a holistic approach that integrates environmental, economic, and social sustainability practices into all aspects of library operations. By following these steps, libraries can reduce their environmental impact, foster community engagement, and set an example for sustainability in their communities.

The results showed that it is necessary an awareness campaign to inform librarians for the new era called sustainability. By aligning with the SDGs, libraries can become leaders in sustainability, demonstrating commitment to environmental stewardship, social equity, and economic responsibility. These efforts not only enhance the library's operational efficiency but also position it as a vital community resource for education and action on sustainability issues. Implementing these strategies helps libraries contribute to a more sustainable and equitable world.





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## 10.Annex

## A. Questionnaire

		Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
reness and Education	1	It is important for librarians to be knowledgeable about sustainable development goals in the library context.					
	2	Training sessions on sustainable development goals in the library are adequate.					
	3	Librarians should receive practical/field training on implementing sustainability.					
	4	Activities implemented by librarians on sustainability are sufficient.					
	5	Librarians guide users on integrating their daily routines with eco- friendly practices					
tion	6	The library collaborates with other public institutions and organizations in line with sustainable development goals.					
Policy and Collaboration	7	The library monitors investments and policies related to nationwide access to information.					
	8	The library has a representative who undertakes the necessary activities for sustainable development.					
	9	Librarians inform people about sustainable development goals.					
	10	Librarians and users take appropriate measures to manage the waste they produce.					
	11	The library uses renewable energy systems.					
12 13 13 14	12	The library uses rainwater or has alternative water-saving measures.					
	13	Recycling bins are available in the library or the library cooperates with recycling companies.					
	14	The library calculates its carbon footprint.					
	15	The library implements sustainable practices in its daily operations.					
1 ility	16	The libraries should integrate economic and social sustainability principles into combating unemployment.					
	17	Libraries should advocate for economic policies to be approached from a social and ecological sustainability perspective, actively playing a role in the conservation of natural resources.					
	18	Libraries should support cultural and economic policies aimed at reducing social inequalities and providing equal opportunities.					
	19	Libraries should fulfill their social responsibilities by supporting all initiatives aimed at sustainable environment practices.					
Socia Resp(	20	Libraries help individuals understand their responsibility to preserve cultural and economic resources for future generations.					

## B. Environmental educational games for kids

#### 1. SDGs Board game <u>"Go Goals"</u>

The game aims to help teach children around the world about the Sustainable Development Goals in a simple and child-friendly way.

#### 2. Library Garden Club

**Objective:** Teach kids about plants and the importance of gardening.



#### How to Play:

- Create a small indoor or outdoor garden space within the library.
- Provide seeds, soil, and pots or a garden bed.
- Show kids how to plant seeds, water them, and care for their plants.
- Track the growth of the plants over time plants and discuss the importance of plants in the environment.

**Educational Aspect:** Instills a sense of responsibility and knowledge about plant life and ecosystems.

#### 3. Eco-Storytime and Activity

**Objective:** Combine storytelling with environmental education.

#### How to Play:

- Select a story with an environmental theme (e.g., "The Lorax" by Dr. Seuss).
- After reading the story, engage kids in an activity related to the book, such as drawing their favorite part or discussing how they can help protect the environment.

**Educational Aspect:** Encourages love for reading and understanding of environmental themes.

#### 4. Eco-Detectives

**Objective:** Solve environmental mysteries and learn about conservation.

#### How to Play:

- Create a scenario where something in the environment needs to be investigated (e.g., why plants are wilting in the library garden).
- Provide clues and tasks that lead kids to discover the cause (e.g., lack of water, pollution).
- Encourage kids to come up with solutions to solve the problem.

**Educational Aspect:** Promotes critical thinking and problem-solving skills related to environmental issues.

#### 5. Recycling Race

**Objective:** Teach kids the importance of recycling and how to sort waste correctly.

#### How to Play:

- Set up bins labeled "Plastic," "Paper," "Metal," and "Trash."
- Divide kids into teams and give each team a pile of mixed recyclables and trash.
- Kids race to sort items into the correct bins.

**Educational Aspect**: Helps kids understand the different categories of recyclables and the importance of recycling.



## C. Monitoring form

#### Instructions for Use:

- 1. **Monthly Data Entry**: Each month, enter the total consumption figures for electricity, natural gas, water, and diesel.
- 2. **Analyze Patterns**: Regularly review the data to identify any unusual patterns or trends. Look for months with disproportionate resource use compared to the number of visitors.
- 3. **Implement Changes**: Based on the findings, adjust operational practices or invest in new technologies that enhance sustainability.
- 4. **Community Engagement**: Share insights and best practices derived from the data with the library community to foster a culture of sustainability.

#### **Benefits of Using the Form:**

- Enhanced Operational Efficiency: Helps in pinpointing times and areas where resources may be overused, such as high electricity usage during periods of low visitor numbers, indicating potential inefficiencies.
- **Tailored Sustainability Strategies**: With accurate data on resource consumption, libraries can implement specific interventions like adjusting heating and lighting schedules or upgrading to more energy-efficient appliances to reduce environmental impact.
- Educational Tool: The form serves as a basis for educating the community about the importance of resource conservation. Libraries can use the collected data to host workshops or exhibitions highlighting how small behavioral adjustments can lead to significant reductions in resource usage.

By maintaining this form, libraries not only ensure that they are using their resources efficiently but also act as responsible stewards of environmental sustainability, inspiring both staff and patrons to adopt more eco-friendly practices.

https://docs.google.com/spreadsheets/d/11aOYZ8Qs2wVa55stIFPEEGmFMORmzm MxcyaPSHtkDtl/edit?usp=sharing





