



WSSO 标准项目建议书

名称	WSSO 建筑固体废弃物循环利用技术要求		
文档类型	标准		
制定/修订	☒ 制定 ☐ 修订	修订的标准号	
采用标准	新标准	采用的标准号	
分类	☐ 公司可持续发展 ☐ 碳市场与减排 ☐ 保证与认证 ☐ 工业应用 ☒ 技术与数据管理 ☐ 政策与法规遵从性 ☐ 其他		
标准号	WSSO SP-2025-15		
工作小组			
提出实体	建筑材料工业技术情报研究所 生态环境部环境标准研究所		
工作组主席信息			
联系信息	名称:吴端静	职位:副总工程师	
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	其他:		
技术委员会	WSSO 标准委员会		
预期参与实体			
项目时间表	☐ 12 个月 ☒ 18 个月 ☐ 24 个月		
目的 (300 字以上)	《WSSO 建筑固体废弃物循环利用技术要求》的出台，旨在建立建筑固废资源化利用技术体系与管理规范，推动建材行业从线性经济向循环经济转型。 (1) 资源效率提升 通过推广再生骨料混凝土、建筑废弃物分类预处理等技术，建筑固废的资源化率可提升至 60%-80%。例如，德国通过实施严格的建筑固废分类和再生技术，其建筑固废资源化率已达到 80%以上，显著减少了对天然砂石资源的依赖。 (2) 碳减排贡献 每利用 1 亿吨建筑固废，可减少天然砂石开采 4 亿吨，降低碳排放约 3000 万吨。以日本为例，通过推广建筑固废再生利用技术，其每年减少碳排放约 1000 万吨，相当于种植了 5000 万棵树的环境效益。 (3) 城市可持续发展		

	建筑固废的有效管理，还能缓解填埋场用地矛盾，促进“无废城市”建设。例如，新加坡通过实施建筑固废资源化利用政策，其填埋场的使用寿命延长了 20 年，为城市的可持续发展提供了重要保障。		
范围	- 技术层面：覆盖建筑固废从分类、分拣、预处理到再生加工的全流程技术规范，包括破碎筛分、金属分离、再生骨料生产等核心技术参数。 - 管理层面：规定建筑固废产生、运输、处置、再利用各环节的管理要求（如污染控制、数据追溯），以及再生材料质量认证标准。 - 对象范围：适用于住宅、商业建筑、基础设施等各类新建、拆除和翻修工程产生的混凝土、砖瓦、木材、金属等固体废弃物。 - 区域适配：既包含发达国家精细化分拣技术方案，也涵盖发展中国家低成本资源化路径（如简易分选设备应用）。		
相关文件/标准/指引/最佳实践	ISO14021:2016《环境标志和声明》 欧盟《废弃物框架指令》		
与该准则相关的国际地位声明	该标准作为全球首个系统性整合建筑废弃物循环利用技术国际要求，填补了发展中国家在循环经济路径标准化领域的空白，通过对接欧盟《废弃物框架指令》（2008/98/EC）、ISO 14021 环境声明体系及日本《建设循环法》等国际标准，确立了其在全球建筑固废资源化领域的权威地位，为联合国 2030 可持续发展目标（SDG 12：负责任消费与生产）提供了可落地的行业解决方案，成为推动全球建筑行业向循环经济转型的核心技术规则与协同治理基准。		
专利涉及	☐ 是 ☒ 否	专利名称/编号	
备注	无		
标准委员会意见	由 WSSO 标准委员会审核		
WSSO 结论	经 WSSO 董事会批准		
注意：标准结构必须与提案一起提交			



WSSO Standard Project Proposal

Proposed Name	WSSO Technical Requirements for Recycling of Construction Solid Wastes		
Document Type	Standard		
Formulation/Revision	☒ Formulation ☐ Revision	No. of Revised Standard	
Standard Adoption	New Standard	No. of adopted Standard	
Classification	☐ Corporate Sustainability ☐ Carbon Market & Emission Reduction ☐ Assurance & Certification ☐ Industry Applications ☒ Technology & Data Management ☐ Policy & Regulatory Compliance ☐ Others _____		
Standard No.	WSSO SP-2025-15		
Working Group	Proposed by WSSO Standard Committee		
Proposed Entity	Institute of Technical Information for Building Materials Industry Environmental Standard Institute		
Working Group Chair Information	Appointed by the proposing entity after review		
Contact Information	Name: Duanjing Wu	Position: Deputy Chief Engineer	
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	Others:		
Technical Committee	WSSO Standards Committee		
Expected Participate Entities			
Project timeline	☐ 12 months ☒ 18 months ☐ 24 months		
Purpose (More than 300 words)	The release of the " WSSO Technical Requirements for Recycling of Construction Solid Wastes " aims to establish a technical system and management specifications for the resource utilization of solid waste from construction, and to promote the transformation of the building materials industry from a linear economy to a circular economy. (1) Improved resource efficiency		

	By promoting technologies such as recycled aggregate concrete and classified pretreatment of construction waste, the resource utilization rate of construction solid waste can be increased to 60%-80%. For example, Germany has achieved a resource utilization rate of more than 80% of its construction solid waste by implementing strict classification and recycling technologies for construction solid waste, significantly reducing its dependence on natural sand and gravel resources. (2) Contribution to carbon reduction Every 100 million tons of construction waste recycled can reduce natural sand and gravel mining by 400 million tons and reduce carbon emissions by about 30 million tons. Taking Japan as an example, by promoting construction waste recycling technology, it reduces carbon emissions by about 10 million tons each year, which is equivalent to the environmental benefits of planting 50 million trees. (3) Urban sustainable development Effective management of construction solid waste can also ease conflicts in landfill use and promote the construction of a "zero-waste city". For example, Singapore has extended the life of its landfill by 20 years by implementing a policy to recycle construction solid waste, providing an important guarantee for the sustainable development of the city.
Scope	• Technical level: it covers the technical specifications of the entire process of construction solid waste from classification, sorting, pretreatment to recycling, including core technical parameters such as crushing and screening, metal separation, and recycled aggregate production. • Management level: it stipulates the management requirements for each link of construction solid waste generation, transportation, disposal and reuse (such as pollution control and data traceability), as well as the quality certification standards for recycled materials. • Scope of application: it is applicable to solid waste such as concrete, bricks, wood, metal, etc. generated by various new construction, demolition and renovation projects such as residential, commercial buildings, and infrastructure. • Regional adaptation: it includes both the refined sorting technology solutions of developed countries and the low-cost resource utilization paths of developing countries (such as the application of simple sorting equipment).

Relevant Document/ Standard/Guideline/B est Practice	• ISO14021:2016 Environmental Labels and Declarations • EU Waste Framework Directive		
Statement of International Status Related with the Standard	As the world's first systematically integrated international requirements for the recycling of construction waste, this standard fills the gap in the standardization of circular economy paths in developing countries. By connecting with international standards such as the EU Waste Framework Directive (2008/98/EC), the ISO 14021 Environmental Declaration System and Japan's Construction Recycling Law, it has established its authoritative position in the field of global construction solid waste resource utilization, provided a feasible industry solution for the United Nations 2030 Sustainable Development Goals (SDG 12: Responsible Consumption and Production), and become the core technical rules and collaborative governance benchmark for promoting the transformation of the global construction industry to a circular economy.		
Patent Involved	☐ Yes ☒ No	Patent Name/No.	
Notes	No		
Standard Committee Comments	<i>Review by WSSO Standard Committee</i>		
WSSO Conclusion	<i>Approve by WSSO Board</i>		
<i>Note: Standard structure must be submitted together with the Proposal</i>			