1.	Record Nr.	UNINA9910483996103321
	Autore	Zhivov Alexander M.
	Titolo	Deep energy retrofit - a guide for decision makers / / Alexander Zhivov, Rudiger Lohse
	Pubbl/distr/stampa	Cham, Switzerland : , : EBC : , : Springer, , [2021] ©2021
	ISBN	3-030-66211-X
	Edizione	[1st ed. 2021.]
	Descrizione fisica	1 online resource (XXI, 84 p. 22 illus., 19 illus. in color.)
	Collana	SpringerBriefs in applied sciences and technology
	Disciplina	696
	Soggetti	Buildings - Energy conservation
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Deep Energy Retrofit In Public Buildings -- Chapter 3. What Is Deep Energy Retrofit? -- Chapter 4. Deep Energy Retrofit vs Shallow Renovation -- Chapter 5. Major Renovation And Deep Energy Retrofit -- Chapter 6. Product Delivery Quality Assurance Process -- Chapter 7. How To Make Der Cost Effective? -- Chapter 8. Business Models For Der -- Chapter 9. Der Financing -- Chapter 10. Lessons Learned From Pilot Projects -- Chapter 11. Conclusions -- References -- Acronyms and Abbreviations.
	Sommario/riassunto	Many governments worldwide are setting more stringent targets for reductions in energy use in government/public buildings. Buildings constructed more than 10 years ago account for a major share of energy used by the building stock. However, the funding and "know-how" (applied knowledge) available for owner-directed energy retrofit projects has not kept pace with new requirements. With typical retrofit projects, reduction of energy use varies between 10 and 20%, while actual executed renovation projects show that energy use reduction can exceed 50%, and can cost-effectively achieve the Passive House standard or even approach net zero-energy status (EBC Annex 61 2017a, Hermelink and Müller 2010; NBI 2014; RICS 2013; Shonder and Nasseri 2015; Miller and Higgins 2015; Emmerich et al. 2011). Building energy efficiency (EE) ranks first in approaches with resource efficiency potential with a total resource benefit of approximately $700 billion

until 2030. EE is by far the cheapest way to cut CO_2 emissions (McKinsey 2011, IPCC 2007). However, according to an IEA study (IEA 2014a), more than 80% of savings potential in building sector remains untapped. Thus, the share of deployed EE in the building sector is lower than in the Industry, Transport, and Energy generation sectors. Estimates for the deep renovation potentials show: €600-900bn investment potential, €1000-1300bn savings potential, 70% energy-saving potential, and 90% CO_2 reduction potential.