

directly available	models with small/mid scale intermediary	strategic finance sources - larger scale vehicle	commercial models	Fiscal instruments	model	description	owner occupiers	private rented sector	registered providers	local authorities	other public sector	total	small scale/start up	medium scale	large scale	examples	
							14,786,000	4,847,000	2,430,000	1,612,000	57,000	23,732,000					
Loan/investment							62.3%	20.4%	10.2%	6.8%	0.2%						
					mortgage	Many private retrofits are funded by extending the existing mortgage. Rates can be low but requires sufficient surplus value over current loan							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
					equity release	funding retrofit measures against the future asset value. capital can be locked up for long periods if turnover is low, affecting cost, useful where asset rich, cash poor							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
					'green' mortgage	Variable interest rates dependent on change in energy performance usually by EPC band in the UK.							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ecology Building Society, Nordic banks	
					loans secured elsewhere	Interested RP's, local authorities and even larger companies seeking to build their retrofit business might choose to provide the finance for strategic or policy purposes							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
					loans unsecured	Less attractive in terms of risk than secured lending, more attractive when trying to deliver policy objectives for those without adequate asset value. Less likely to be relevant to commercial or 3rd sector parties but various LA's have home improvement loan products done this way							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
					community shares	usually ethical investment offer through a Community Benefit Society, rate offered but not guaranteed. 1 member 1 vote not weighted by shareholding. Unlikely to deliver scale but possible to kickstart 3rd sector intermediary							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
					loanstock	less regulated version of bonds as a result of offering very much lower amounts, used for ethical investment so sold with optional RoR. Again unsuitable for scale							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
					crowdfunding	Peer to peer lending. Not yet deployed at the kind of scale required for an at scale roll-out but could have use in initial start ups							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	https://propertymoose.co.uk/properties/crowdfunding	
					bonds	An IOU, fixed term usually fixed return finance product sitting on the asset side of the balance sheet, regulated. Only available to large organisations due to large sums of money							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
					Housing finance corporation	Mutual bond aggregator exclusively for Housing Associations							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
					pensions	Public Sector Pension funds may be able/prepared to invest in their communities as pressure to disinvest in fossil fuels rises. Take a longer view. Longer term returns can be low but stable especially if performance guaranteed or underwritten to improve covenant							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
					Public Works Loan Board	Source of funding for much of the council housing in the UK, less well used since PSBR issue, but rates and terms can be very favourable. Only available directly to councils but can be deployed more widely by them							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
					Publicly owned 'Green' Investment Bank	Used in Germany (KfW) allows better use of state funds where repayment is possible but not at commercial rates so funds can still be effectively recycled. Interest rates can be tailored to within reason to policy objectives.							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

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cost reduction/recovery																
					energy services company	Direct sale of energy, or the generation of it usually through renewables. Provides income stream. Margins on resale small As yet untested proposal to provide 'warmth' so replace utility payments with debt payments for work done							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					energy performance contracting	A contract for works to homes to provide a certain energy performance over a period rather than certain measures with individual warranties e							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Energiesprong Netherlands
					energy trading	Aggregating energy storage and/or renewable generation to enable sale to the National Grid or energy providers							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					energy savings trading	Aggregating payments from DNO's for reduction in energy use at peak periods, or specific sale of "NegaWatts"							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	tradable white certificates. Wigan NEDO
					emissions trading	While ECO has been a framework for the evaluation of carbon saved and a price to purchase. Could the carbon saved be traded directly?							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					commercial partnership	Funding of activities as a result of commercial players seeing income generating opportunities such as heat networks (and Energiesprong again)							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					lease/hire purchase	leasing of M&E equipment - LED lighting, batteries, PV, boilers							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					asset management strategy	Retrofit works carried as part of wider asset management so cost can be set against major repairs or with cost reduced by working with other interventions (cf SHAP Beyond Decent Homes 2009)							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					additional service charge	rented housing providers can fund debt repayment through a service charge. Treasury would most likely insist this was not covered by benefits although future governments might see this as way of targeting fuel poverty alleviation without legislation							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					Green Deal	while the Green Deal Home Improvement Finance no longer exists, the legislation is still in place and remains an option for all housing tenures subject to finding suitable finance							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Subsidy/grant																
					charitable trusts	all big 6 energy companies have a charitable trust, with different objectives but usually aimed at reducing fuel poverty							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					NHS savings	a pilot study by Sunderland Community Commissioning Group with Gentoo fitted insulation and boilers in six households suffering COPD, reducing non elective admissions. Worcester too							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					ECO	State driven form of emissions trading where large scale energy providers have to offset their CO2 emissions by 'buying' notional tonnages of Carbon from retrofitted homes. Negligible contributions to whole house works							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					Tax credits	Government incentive to encourage householders to improve their energy efficiency. Used in France							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					Differential Stamp Duty	As yet untested proposal to vary Stamp Duty on house sales depending on energy performance							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					Differential Council Tax	As yet untested proposal to vary Council Tax depending on energy performance							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					contract for difference	Gov't subsidy for difference between conventional & renewable energy supply							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					FiT RHI	Government incentive to increase renewable energy generation. FiT largely							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
					ERDF/ESIF/ Horizon 2020	Still viable and Brexit uncertainty suggest there is merit in leaving this on for now							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	