K P I 1		K P I 2		K F	213	K P I 4		
Cumulative		Cumulative		Cumulative		Cumulative		
Number of		tCO2e savings		Number of		tCO2e savings		
 Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score	
		3299 3300						
		3301	79%					
		3302						
		3303				_		
		3304 3305						
		3306						
		3307	79%					
		3308						
		3309				_		
		3310 3311	80% 80%					
		3312						
		3313	80%					
		3314						
		3315 3316						
		3317						
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 		3319						
 		3320						
 		3321 3322						
		3323						
		3324	80%					
		3325						
 		3326	80% 80%		<u> </u>			
		3327						
		3329						
		3330						
 		3331				_		
		3332				_		
		3334						
		3335	80%					
		3336						
		3337 3338						
		3339						
		3340						
		3341	80%					
 		3342						
 _		3343 3344				_		
		3345						
		3346	80%					
		3347						
		3348 3349						
		3349						
		3351						
		3352						
 		3353						
		3354 3355						
 		3356	81%					
		3357	81%					
 		3358						
		3359 3360						
		3361	81%					
		3362	81%					
		3363				-		
 		3364 3365						
 1		3365						
 		3367						
		3368	81%					
		3369						
		3370 3371						
 		3372						
		3373	81%					
 		3374						
 +		3375 3376					<u> </u>	
+		3376						
		3378	81%					
		3379	81%					
		3380				+		
+		3381 3382			┞────┤		<u> </u>	
1		3382						
		3384	81%					
		3385	81%					

		KPI 1		2	K I	213	V I	214
	Cumulative		Cumulative		Cumulative	13	Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
L		_	3386					
			3387 3388					
			3389					
			3390					
			3391	81%				
			3392					
			3393 3394					
			3395					
			3396					
			3397	82%				
			3398					
			3399 3400					
			3400	82% 82%				
			3402					
			3403					
			3404					
L		_	3405		_			
├ ────			3406 3407					
			3407					
			3409					
			3410	82%				
			3411					
			3412 3413					
			3413					
			3415					
			3416					
			3417	82%				
			3418					
			3419 3420					
			3421					
			3422					
			3423					
			3424					
			3425 3426					
			3427					
			3428					
			3429	82%				
			3430					
			3431 3432					
			3432					
			3434					
			3435					
			3436					
			3437					
			3438					
			3440					
			3441	83%				
			3442					
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			3444 3445					
			3446					
			3447	83%				
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			3450 3451					
			3451					
			3453	83%				
			3454					
			3455					
├ ────			3456 3457		+			
			3457					
			3459	83%				
			3460	83%				
<u> </u>			3461]		
 			3462 3463					
			3463					
 	1		3465		1			
			3466	83%				
			3467					
L		_	3468					
├ ────			3469 3470		+			
L			3470					
			3471	0.2./0				

		KPI1	K	212	KF	213	K	214
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3473					
			3474 3475					
			3476					
			3477	84%				
			3478					
	_	_	3479				_	
			3480 3481	84% 84%			_	
			3482	84%				
			3483	84%				
			3484	84%				
			3485	84%				
	-		3486 3487	84% 84%				
			3488	84%				
			3489					
			3490					
	_	_	3491	84%			_	
			3492 3493	84% 84%			_	
			3493					
			3495	84%				
			3496	84%				
			3497	84%]		
			3498 3499					
			3499	84%				
			3501	84%				
			3502	84%				
			3503	84%				
			3504 3505	84% 84%				
			3506					
			3507	84%				
			3508					
			3509					
			3510					
		_	3511 3512	84% 84%			_	
			3512					
			3514					
			3515					
			3516					
			3517 3518					
			3518					
			3520					
			3521	85%				
			3522					
			3523 3524				_	
			3524					
			3526					
			3527	85%				
	_	-	3528					
			3529 3530					
			3530	85%				
			3532					
			3533					
			3534				_	
			3535 3536					
			3536	85%				
			3538	85%				
			3539	85%				
			3540					
			3541 3542	85% 85%				
			3542					
			3544					
			3545	85%				
			3546					
			3547					
			3548 3549					
<u> </u>			3550					
			3551	85%				
			3552	85%				
			3553			T		
			3554 3555					
			3555					
			3550					
			3558	86%				
			3559	86%				

		KPI1	K	212	K F	213	K	PI 4
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3560					
			3561 3562	86% 86%				
			3563	86%				
			3564	86%				
			3565	86%				
	_		3566	86%	_		_	
			3567 3568	86% 86%				
			3569	86%				
			3570	86%				
			3571	86%				
			3572	86%				
			3573 3574	86% 86%				
			3574	86%				
			3576					
			3577	86%				
			3578					
			3579					
			3580 3581	86% 86%				
	1		3581	86%				
			3583	86%				
			3584	86%				
	+		3585	86%				
	+		3586	86% 86%				
	1	1	3588	86%	1			
			3589	86%				
			3590	86%				
	_		3591	86%				
			3592 3593					
			3594	86%				
			3595	86%				
			3596					
			3597	86%				
			3598 3599	86% 86%				
			3600					
			3601	87%				
			3602	87%				
			3603					
			3604	87%				
			3605 3606					
			3607	87%				
			3608	87%				
			3609					
			3610 3611	87% 87%				
			3612	87%				
			3613					
			3614	87%				
			3615	87%				
	+		3616					
			3617 3618	87% 87%				
 	1	1	3619	87%	1			
			3620	87%				
			3621	87%				
	+		3622	87%				
	1		3623 3624	87% 87%				
 	1	1	3625	87%	1			
			3626	87%				
			3627	87%				
			3628	87%				
	+		3629 3630	87% 87%				
	1		3631	87%				
			3632	87%				
			3633	87%				
			3634				_	
	+		3635 3636					
	1		3636	87%				
			3638					
			3639	87%				
			3640			T		
	+		3641 3642	88% 88%				
	1		3642					
			3644					
			3645	88%				
			3646	88%				

		KPI1	K	2	K F	213	KF	P 4
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score	GLA 3647	Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3648					
			3649					
			3650					
			3651	88%				
			3652	88% 88%				
			3653					
			3655					
			3656					
			3657	88%				
			3658					
			3659 3660					
			3661	88%				
			3662	88%				
			3663					
			3664					
			3665					
			3667					
			3668	88%				
			3669					
			3670					
			3671 3672	88% 88%				
	1		3673					
			3674	88%				
			3675					
			3676					
			3677 3678	88% 88%				
			3679					
			3680					
			3681	88%				
			3682					
			3683 3684					
			3685					
			3686					
			3687	89%				
			3688					
			3689 3690					
			3691					
			3692					
			3693					
			3694					
			3695 3696					
			3697					
			3698					
			3699					
			3700					
			3701 3702	89% 89%				
			3702					
			3704	89%				
			3705	89%				
			3706				_	
			3707 3708				+	
	1		3709					
			3710	89%				
			3711	89%				
			3712					
			3713 3714				+	
	1		3714					
			3716	89%				
			3717	89%				
		_	3718					-
			3719 3720					
			3720					
			3722					
			3723	89%				
			3724]		
			3725					
			3726					
			3727					
			3729	90%				
			3730					
			3731					
			3732	90%				I

		K P I 1	KF	2	KF	213	KF	214
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3734					
			3735 3736					
			3730					
			3738					
			3739					
			3740					
			3741 3742					
			3742					
			3744					
			3745					
			3746					
			3747 3748					
			3748					
			3750					
			3751					
			3752					
			3753					
		1	3754 3755					
			3756					
			3757	90%				
			3758					
			3759 3760					
			3760	90% 90%			+	
		1	3762				1	
			3763	90%				
			3764					
			3765					
			3766 3767					
			3768					
			3769					
			3770					
			3771					
			3772 3773					
			3774					
			3775					
			3776	91%				
			3777					
			3778					
			3779 3780					
			3781					
			3782	91%				
			3783					
			3784 3785					
			3786					
			3787					
			3788	91%				
			3789]		
			3790 3791					
			3791					
			3793					
			3794					
			3795					
			3796 3797				+	
		1	3797				1	
			3799	91%				
			3800	91%				
			3801	91%				
			3802 3803					
			3803					
			3804					
			3806	91%				
			3807					
			3808					
			3809 3810					
		1	3810				1	
			3812					
			3813	92%				
			3814			T		
			3815 3816					
		1	3816					
			3817					
			3819	92%				
			3820	92%				

		KPI1	K	2	KF	213	K	214
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3821					
			3822 3823					
			3823					
			3825					
			3826					
			3827	92%				
			3828 3829					
			3830					
			3831	92%				
			3832					
			3833					
			3834 3835					
			3835					
			3837					
			3838					
			3839					
			3840					
	1	1	3841 3842					
			3843					
			3844	92%				
			3845					
			3846					
	1		3847 3848	92% 92%				
	1	1	3848				1	
			3850	93%				
			3851	93%				
			3852					
			3853 3854					
			3855					
			3856					
			3857					
			3858					
			3859 3860					
			3860	93%				
			3862					
			3863	93%				
			3864					
			3865					
			3866 3867					
			3868					
			3869	93%				
			3870					
			3871 3872					
			3873					
			3874					
			3875	93%				
			3876]		
			3877 3878					
			3878					
			3880					
			3881	93%				
			3882					
			3883 3884					
	1	1	3884				1	
			3886	93%				
			3887	93%				
			3888					
			3889 3890					
	1		3890					
			3891					
			3893	94%				
			3894					
	+		3895					
	1		3896 3897				+	
	1	1	3898				1	
			3899					
			3900	94%				
			3901	94%		T		
	+		3902 3903					
			3903					
			3904					
			3906	94%				
			3907	94%				

		(PI 1	KF	212	KF	213	KF	214
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score		Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3908					
			3909 3910					
			3911	94%				
			3912	94%				
			3913	94%				
			3914	94%			_	
			3915 3916	94% 94%			_	
			3917	94%				
			3918					
			3919					
			3920					
			3921 3922	94% 94%				
			3923					
			3924	94%				
			3925					
			3926					
			3927 3928	94% 94%			_	
			3928					
			3930	94%				
			3931	94%				
		-	3932	94%				
			3933 3934	95% 95%				
			3934	95%				
			3936					
			3937	95%				
			3938	95%]		
			3939 3940					
			3940					
			3942					
			3943					
			3944					
			3945 3946					
			3946	95%				
			3948					
			3949	95%				
			3950					
			3951 3952	95%				
			3952					
			3954					
			3955					
			3956					
			3957 3958					
			3959					
			3960					
			3961	95%				
			3962	95%				
			3963 3964					
			3965					
			3966	95%				
			3967	95%				
			3968 3969				_	
			3969					
			3971	95%				
			3972	95%				
			3973					
			3974 3975				_	
			3975					
			3977	96%				
			3978	96%				
			3979			_		
			3980	96% 96%				
			3981 3982					
	1		3983					
			3984	96%				
			3985					
			3986				-	
			3987 3988	96% 96%				
			3988					
			3990					
			3991	96%				
			3992	96%			-	
			3993 3994					
1		l	3994	96%		I I	1	l

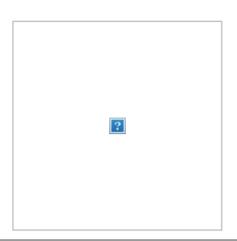
		KPI1	KI	PI 2	KF	213	KF	P 4
	Cumulative		Cumulative		Cumulative		Cumulative	
	Number of		tCO2e savings		Number of		tCO2e savings	
	Homes - GLA	Supplier Score	GLA	Supplier Score	Homes - ERDF	Supplier Score	ERDF	Supplier Score
			3995					
			3996 3997	96% 96%				
			3998					
			3999					
			4000	96%				
			4001	96%				
			4002	96% 96%				
			4003					
			4005					
			4006					
			4007	96%				
			4008					
			4009					
			4011	96%				
			4012	96%				
			4013					
			4014					
			4015				_	
			4018					
			4018	97%				
			4019	97%				
ļ			4020]		
			4021	97% 97%				
			4022					
			4023					
			4025					
			4026					
			4027					
			4028					
			4030					
			4031	97%				
			4032					
			4033					
			4034 4035				_	
			4035					
			4037					
			4038					
			4039					
			4040 4041					
			4041					
			4043					
			4044					
			4045					
			4046 4047					
			4047					
			4049					
			4050	97%				
			4051	97%				
			4052					
			4053 4054					
			4055					
			4056	97%				
			4057	98%				
			4058				_	
			4059 4060					
			4060	98%				
			4062	98%				
			4063	98%				
		_	4064					-
			4065 4066					
			4066					
			4068					
			4069	98%				
			4070					
			4071					
			4072					
			4073					
			4075	98%				
			4076	98%				
			4077]		
			4078					
			4079					
				5070				1

	K P I 1		212	V I	213	V I	214
 Cumulative Number of		Cumulative tCO2e savings		Cumulative Number of		Cumulative tCO2e savings	
 Homes - GLA	Supplier Score	GLA 4082	Supplier Score 98%	Homes - ERDF	Supplier Score	ERDF	Supplier Score
		4082	98%				
		4084	98%				
		4085	98%				
		4086	98% 98%				
		4087					
		4089	98%				
		4090	98%				
		4091	98%				
		4092 4093	98% 98%				
		4093	98%				
		4095	98%				
		4096	98%				
		4097	98%				
		4098 4099					
		4100	99%				
		4101	99%				
		4102	99%				
		4103					
		4104					
		4105					
		4107	99%				
		4108	99%				
		4109	99%				
	_	4110					
		4111 4112	99% 99%				
		4112					
		4114					
		4115	99%				
		4116					
		4117	99%				
		4118 4119					
		4120					
		4121	99%				
		4122					
	_	4123					
		4124 4125					
		4125					
		4127					
		4128					
	_	4129					
		4130 4131	99% 99%				
		4131					
 		4133					
		4134	99%				
 		4135					
 		4136 4137	99% 99%				
	+	4137					
		4138					
		4140	99%				
 		4141					
 	+	4142					
	1	4143					
1	1	4144					
		4146	100%				
		4147	100%				
 		4148					
 +	+	4149 4150					
1	1	4150	100%				
 		4152	100%				
		4153	100%				
		4154					
	+	4155 4156					
+		4156					
1	1	4157					
 		4159	100%				
		4160					
		4160					

MAYOR OF LONDON

Appendix G – Innovation Unit – Process & Gateway Papers

From: To:	<u>RE:NEW</u>
Subject: Date:	Latest news from RE:NEW 05 July 2018 12:23:11



THE LATEST NEWS FROM RE:NEW

Welcome to the July edition of the RE:NEW newsletter.

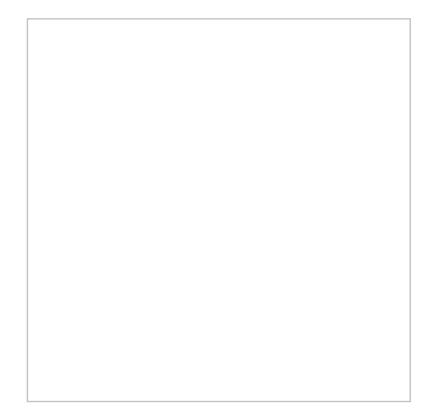
Read about how RE:NEW has supported Tower Hamlets Homes with a communal heating project, take a look at the London Environment Strategy and register your interest for a Retrofit Coordinators course to enhance your expertise in retrofitting.

For more information on the articles in this newsletter and how RE:NEW can support your home energy efficiency and renewables projects, please contact the RE:NEW Support Team.

GDPR Update

The General Data Protection Regulation (GDPR) came into force on 25 May 2018. The Greater London Authority has updated our privacy policy which can be viewed <u>here</u> and we intend to continue to stay in touch with you on the basis of Legitimate Interest in or having previously consented to our content. If you would like to unsubscribe now or in future you can do so by following the link below.





RE:NEW awarded 'Energy Efficient Project of the Year' at the BusinessGreen Leaders Awards

RE:NEW is delighted to have been awarded the 'Energy Efficiency Project of the Year' award in this year's BusinessGreen Leaders Awards.

The awards recognise the UK's leading green businesses and the progress made by the green business community in recent years. The judges were impressed with the scale of the projects's ambition and the wide range of integrated services it is providing to deliver energy efficiency upgrades and clean tech deployments across the capital.

READ MORE

2	

Retrofit Coordinators Course

RE:NEW is offering discounted places on a <u>Retrofit Coordinators course</u> run by the Retrofit Academy.

This course will help you to:

- create a better business case for retrofit
- plan and organise projects more efficiently
- lower the risks of retrofit by gaining an understanding of a best practice approach
- train your workforce at all levels around a common methodology

The course consists of six sessions run in three blocks from September to November, dates to be confirmed, and will include the following modules:

Block 1

- Introduction to domestic retrofit
- Assessing dwellings for retrofit
- Building physics for retrofit (Part 1)

Block 2

- Building fabric retrofit
- Building services retrofit

Block 3

- Air-tightness and ventilation for domestic retrofit
- Building physics for retrofit (Part 2)
- Retrofit coordination and risk management and assessment

Please contact renew@london.gov.uk if you are interested in booking a place.

REGISTER YOUR INTEREST

Tower Hamlets Homes upgrades communal heating systems

The RE:NEW support team has been providing support to Tower Hamlets Homes (THH) to help improve its communal heating systems. Support started with our popular communal heating benchmarking report which included a desktop review of every communally heated system in THH's portfolio and ranked their performance against key

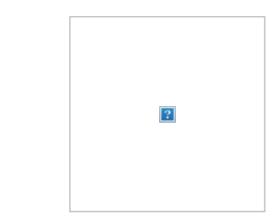
metrics e.g. gas use per dwelling and R² value (a measure of how effectively the heating is controlled). The benchmarking process also included identifying data anomalies, reviewing key asset data and discussing the results with the asset team to understand the findings.

THH appointed a contractor to conduct plant room and dwelling surveys, with RE:NEW quality-assuring the work by reviewing survey outputs and conducting a sample of comparative surveys. Peter David, THH's planned investment manager, collated survey recommendations across all stock, again with RE:NEW's support, leading to the creation of short and long term investment plans comprising more than £4m of capital improvement works.

The RE:NEW team continues to provide further support to THH through the provision of more detailed surveys and as a critical friend with insight into this important but sometimes confusing market. <u>Read our blog</u> on a detailed guide to the communal heating benchmarking process.

Contact for support with your communal heating projects.

CONTACT TOM VOSPER



Responsible retrofit: rethinking quality

Research published by Sustainable Homes and Soltherm External Insulation challenges the sector to rethink quality and procurement when delivering retrofit projects. The research looks at the housing sector supply chain's response to the challenges of funding, quality and the uncertain policy landscape in the wake of the Grenfell disaster. The report examines perceptions of external wall insulation and energy efficiency in the housing sector.



RE:NEW expert

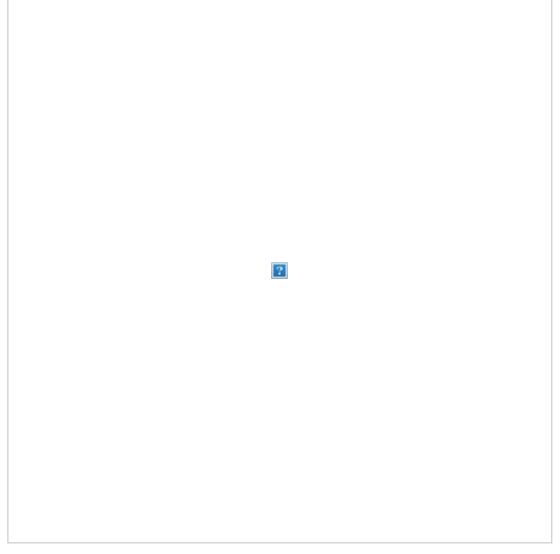
Solar Together London

As part of the Energy for Londoners programme, the Mayor of London is piloting <u>Solar</u> <u>Together London</u>, a group buying scheme for solar PV. Several London boroughs are working in partnership with the Mayor on this innovative scheme to offer homeowners high quality solar PV panels at competitive prices.

After a 'reverse auction', where pre-vetted suppliers bid to work with the 3,750 customers registered with the scheme, SolarCentury won with a proposal offering savings to homeowners of up to 35 per cent dependent on the system size. Over 4,000 customers are expected to register for the scheme culminating in around 700 installations.

Contact <u>RE:NEW</u> for support with your solar PV projects.

READ MORE



Mayor sets out bold strategy to make London the greenest global city

The Mayor of London, Sadiq Khan, has set out his vision for London's environment in 2050, focusing on cleaning up the capital's toxic air, greening its streets, reducing waste and tackling climate change.

The strategy outlines the Mayor's plans for making the city a greener, cleaner and

healthier place and making London a zero-carbon city by 2050 with energy efficient buildings, clean transport and energy.

READ THE STRATEGY

The Mayor of London's RE:NEW programme is helping to cut carbon emissions and reduce fuel poverty by supporting organisations to deliver domestic retrofit projects in the capital. The RE:NEW Support Team is currently working with 70 organisations and the team is always looking to support more organisations with retrofit projects and discuss new ideas with partners in the retrofit community.

CONTACT US

For more information visit our website

Email us: renew@london.gov.uk

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MAYOR OF LONDON

LILL LILL I LILLY

RE:NEW Helping to make London's homes more energy efficient

² Helping to make London's homes more energy efficient

RE:NEW is the Mayor of London's award winning domestic retrofit programme designed to cut carbon emissions and fuel bills and help tackle fuel poverty.

The programme provides FREE guidance and assistance to help the development and delivery of high impact retrofit projects across the capital.

RE:NEW supports social housing providers, local authorities and others by:

- Helping to reduce repair and maintenance costs
- Reducing fuel bills, tackling fuel poverty and providing occupants with safer and warmer homes
- Generating income from housing stock
- Reducing carbon emissions

Retrofitting London's homes

The Mayor has a set target to cut the capital's carbon emissions by 60% by 2025. London's homes make up 36% of these emissions and it is estimated that 80% of existing homes will still be in use in 2050. Retrofitting is essential to meet the Mayor's target.

Two successful phases of RE:NEW have retrofitted over 100,000 homes, saving over 22,000 tonnes of carbon emissions each year. Phase three was launched in August 2014 to support the retrofit of 175,000 homes across London to reduce carbon emissions by 93,000 tonnes each year.

The RE:NEW Support Team will help to deliver energy efficiency programmes by providing support in developing, tendering and implementing domestic retrofitting activities.

Helping to reduce repairs and maintenance costs

The RE:NEW Support Team provides expertise and guidance to help optimise current repairs and maintenance budgets to allow significant energy efficiency improvements.

Research demonstrates that inadequately heated and ventilated homes can create a substantial drain on repairs and maintenance budgets. By working with the RE:NEW Support Team, landlords can reduce spend on both reactive and planned maintenance programmes.

Reducing fuel bills, tackling fuel poverty and providing occupants with safer and warmer homes

The RE:NEW Support Team will analyse current housing stock and prioritise retrofit improvements to those properties with an urgent need.

High energy bills, resulting from the low energy efficiency of many homes, mean financial hardship and fuel poverty for many Londoners. This can often lead to poor health and, in the worst cases, winter deaths. Tackling fuel poverty not only improves health, it also saves money – with every pound spent on reducing fuel poverty, a return of 42 pence is expected in NHS savings.¹

The benefits

Generating income from housing stock

Feasibility studies, investment modelling and procurement support are just some of the services provided by the RE:NEW Support Team to enable a return on investment.

The business case for renewable technologies, including photovoltaic solar energy, is demonstrating a return on investment of between 7% and 9%.²

Reducing carbon emissions

The RE:NEW Support Team will help London boroughs and landlords to achieve carbon emission reduction targets by helping to maximise the energy savings of retrofit.

Improving energy efficiency and reducing carbon emissions go hand in hand.

Support Team services

RE:NEW provides a highly skilled and experienced Support Team which offers FREE support to social landlords and mixed tenure schemes to increase the scale of domestic retrofit.

The support is tailored to each organisation and comprises:

- A review of retrofit potential
- Formulation of retrofit projects
- Funding and procurement advice
- Support through the procurement process

The RE:NEW Support Team can support projects involving all types of efficiency measures.

Typical measures include:

- Loft and cavity insulation
- Internal and external solid wall insulation
- Heating upgrades
- Water efficiency measures
- Double glazing and draught proofing

The team can also support with district heating upgrades, and renewable schemes that provide opportunities for revenue generation.



SUPPORTING

SKILLS AND CAPACITY TO HELP WITH RETROFIT PROJECTS

Our team of retrofit experts can offer support under ten service areas – carefully designed to assist our partners at every stage of the process from initial strategy to project delivery.



STRUCTURED APPROACH TO OVERCOME CHALLENGES

We work with partners to identify challenges and opportunities, generate ideas to meet those challenges, develop the best ideas into a solid business case, and help our partners make the business case pay.





ENABLING

CONTINUALLY DEVELOPING TOOLS AND SERVICES TO MAKE RETROFIT EASIER

This includes a fully OJEU compliant procurement framework of suppliers to help increase the speed of contracting and achieve greater value for money, a user-friendly technical risk tool to help achieve better quality retrofits, and specific support for the private rented sector.

Support Team services



Opportunity analysis

The starting point is an understanding of your stock's retrofit potential. This requires the best possible stock data which RE:NEW can provide with address or area level analysis. This will help scope projects, integrate retrofit into existing programmes and assess the potential for external funding.



Strategy development support

Whether you are new to the retrofit process or well down the track. RE:NEW will work with you to develop the most effective approach. The Support Team will help you answer the key questions for developing realisable programmes, these being: Where are we now? Where do we want to be? How do we get there?



Technical advice

RE:NEW will advise on the risks and issues associated with individual measures in order to avoid failure, inappropriate installation, underperformance and longer term damage.



Funding and finance support

RE:NEW will help organisations to identify and secure the right mix of funding and finance for retrofit programmes.







G E PLANNING

Planning support

savings are explored.

Training and coaching

Following on from the technical

advice service, RE:NEW will help

your organisation to build internal

capability through coaching and

Programme optimisation

Programme optimisation is strongly linked to opportunity analysis and

funding and finance support. It is

on investment from existing and

planned programmes and ensure

all opportunities to increase energy

designed to ensure the best return

training for specific projects,

measures and tools.

Planning requirements are recognised to be a significant obstacle to retrofit, particularly in traditional buildings. RE:NEW support is aimed at developing an understanding of planning requirements and how they affect the technical aspects of retrofit.



Marketing and engagement advice

RE:NEW offers specialist marketing and communication services to help your retrofit schemes and projects achieve maximum uptake.



Procurement support

RE:NEW will support you through the retrofit procurement process, from providing procurement options, through to strategy development and specification review, to tender assessment and moderation.

50 SUPPORT DURING PROJECT DELIVERY

Support during project delivery

During delivery the RE:NEW Support Team are available to provide a range of support services and best practice to help you to maximise return on investment and minimise and pre-empt any issues or challenges.



For more information visit www.london.gov.uk/renew



RE:NEW Sponsors' Board Terms of Reference

RE:NEW

RE:NEW is the Mayor of London's programme for domestic retrofitting. The aim of RE:NEW is to reduce carbon emissions across London through enabling the installation of energy and water efficiency measures and renewable energy technologies. It is a partnership programme with the London boroughs and registered providers of housing associations.

To date (from summer 2009 to April 2013), through RE:NEW, the GLA has successfully worked with local authorities and social housing providers to retrofit ~96,000 homes and save ~19,000 tCO₂ per annum. However, a step change in delivery is required to meet London's carbon reduction targets and overcome the challenges associated with delivery.

The GLA is now building on the success of RE:NEW and establishing a long-term resource available to London boroughs and social housing providers, that will facilitate and enable the process of procuring domestic retrofit projects.

The RE:NEW Support Team supports social housing providers and local authorities to enable domestic retrofit projects to be delivered faster, bigger and with better value for money, through providing support in tendering services and works to implement domestic retrofitting activities in London in order to reduce carbon emissions.

Role of the RE:NEW Sponsors' Board

The high-level strategic lead for the programme sits with the RE:NEW Sponsors' Board. The role of the RE:NEW Sponsors' Board is as follows:

- Advises on the strategic direction of RE:NEW.
- Provides strategic challenge on the programme.
- Consults with the wider stakeholder networks represented by each member on strategic issues.
- Assists with resolving strategic level issues and risks.
- Provides those directly involved in the programme with guidance as required.
- Represents the views and expectations of key stakeholders and ensures effort and expenditure are appropriate to stakeholder expectations.
- Uses influence and authority to assist the programme in achieving its outcomes including gaining support and feedback among Leaders, Chief Executives and other senior stakeholders for the overall direction and management of the RE:NEW.
- Assists with communications and is a 'voice' to the outside world.
- Provides advice and guidance for engaging with stakeholders.

Relationship with the decision making role / scrutiny board at the GLA

As a GLA programme, RE:NEW must follow internal procedures for reporting and approvals, including providing regular reports to, and seeking approval from, the Housing and Land Senior Management Team (SMT), the Housing Investment Group (HIG) and the Investment Programme Board (IPB).

The RE:NEW Programme Manager is responsible for providing these reports and seeking approvals, and will ensure that the advice and guidance from the Sponsors' Board is taken into account when preparing documents. Key reports and approval documents will be circulated to the Sponsors' Board for comment. If timings do not allow for the Board input to be given at the next Sponsors' Board meeting, this will be done via email.

Responsibility of the RE:NEW Chair

, Chief Executive of the London Borough of Sutton, is the RE:NEW Sponsors' Board Chair. Should he be unable to attend a meeting, he will nominate an alternative Chair. The responsibilities of the Chair include:

- Making the purpose of each meeting clear to members and explains the agenda at the beginning of each meeting.
- Clarifying and summarising what is happening throughout each meeting.
- Keeping the meeting moving and to time.
- Encouraging broad participation from members in discussion by calling on different people.
- Ending each meeting with a summary of decisions and assignments.
- Following up with consistently absent members to determine if they wish to discontinue membership.
- Supporting the RE:NEW Programme Manager in finding replacements for members who discontinue participation.

Responsibilities of the RE:NEW Sponsors' Board members

The responsibilities of the RE:NEW Sponsors' Board members include:

- Understanding the goals, objectives, and desired outcomes of the programme including understanding the strategic implications of these.
- Understanding and representing the interests of programme stakeholders.
- Taking a genuine interest in the programme's outcomes and overall success.
- Acting on opportunities to communicate and consult about the programme and being an advocate for the programme's outcomes.
- Ensuring the requirements of stakeholders are met by the programme's outputs.
- Helping balance conflicting priorities and resources.
- Providing guidance to the programme team and users of the programme's outputs.
- Actively participating in meetings through attendance, discussion, and review of minutes, papers and other RE:NEW Sponsors' Board documents.
- Supporting open discussion and debate, and encouraging fellow RE:NEW Sponsors' Board members to voice their insights.
- Supporting the RE:NEW Programme Manager in finding replacements for members who discontinue participation.

Membership

The RE:NEW Sponsors' Board members should:

- Have the authority to help shape political decision making at the most senior levels throughout London
- Come from a range of backgrounds (e.g. environment, housing and finance)
- Provide linkages with the geographical sub-regions of London
- Represent key stakeholders including London's local authorities and registered providers of social housing.

Job title	Organisation	Area of expertise / networking link	Sub-region
Chief Executive	London Borough Sutton	Local authorities - Chief Executives	South West London
Deputy Mayor for Housing, Land & Property	Greater London Authority	Mayoral Advisor	Pan-London
Corporate Director Policy & Public Affairs	London Councils	Leaders / members	Pan-London
	London Councils	Leaders / members	Pan-London
Director of Environment & Regeneration	London Borough Merton	Local authorities - Environment	South West London
Director of Finance,	London Borough	Local authorities - Finance	North London

Resources and	Enfield		
Customer Services			
Project Director	London Borough	Local authorities -	South East
Housing	Greenwich	Housing	London
Interim Director of	Affinity Sutton	Housing Associations	Pan-London
Customer Services	-	(G15)	
Head of Homes and	NHF	Registered Providers Social	Pan-London
Land		Housing (NHF)	

RE:NEW Programme Team members who will attend the RE:NEW Sponsors' Board meetings:

Job title	Role
Senior Manager, Programme Delivery	Oversees all GLA energy retrofit programmes
RE:NEW Programme Manager	Responsible for the delivery of RE:NEW
RE:NEW Programme Manager	Responsible for the delivery of RE:NEW
Policy Officer	Provides policy input, lobbying and support
Business Support Officer	Minuting the RE:NEW Sponsors' Board meetings

Frequency of meetings

The RE:NEW Sponsors' Board shall meet approximately every two months. The dates of the meetings will be planned up to 6 months in advance, but may be subject to change. As much notice as possible will be given.

Meetings shall be held at City Hall.

Minutes and Meeting Papers

The RE:NEW Programme Manager is responsible for producing and distributing all relevant Sponsors' Board documents.

The minutes of each meeting will be recorded by the Business Support Officer and will record key decisions and actions. Full copies of the minutes shall be provided to all RE:NEW Sponsors' Board members in a timely fashion following each meeting.

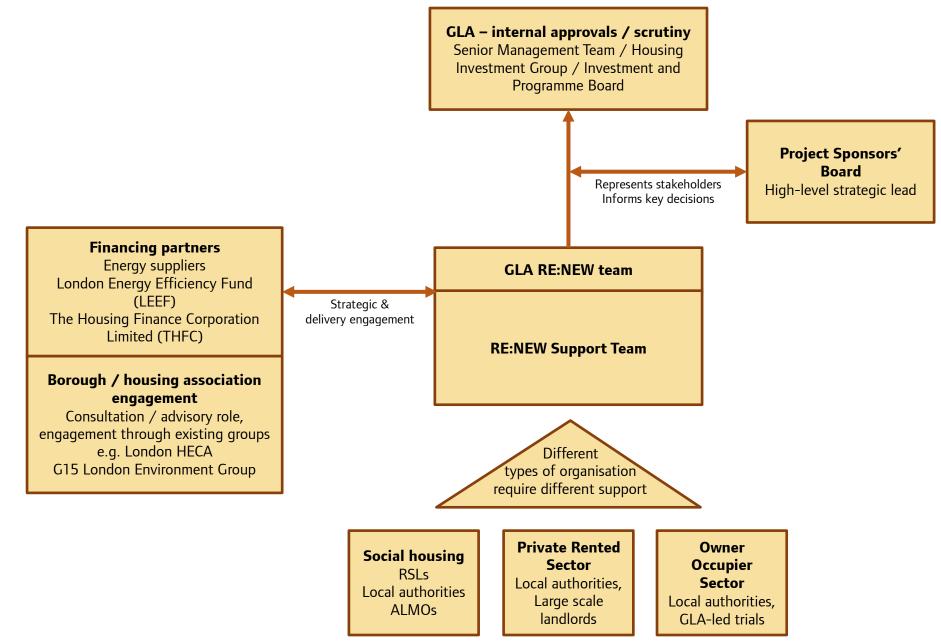
A package will be sent to members three to five business days in advance of a Sponsors' Board meeting. This package will include the following:

- Agenda for upcoming meeting.
- Minutes of previous meeting.
- A progress report for the programme.
- Any other documents/information to be considered at the meeting.

By agreement of the RE:NEW Sponsors' Board, out-of-session decisions will be deemed acceptable. Where agreed, all out-of-session decisions shall be recorded in the minutes of the next scheduled Sponsors' Board meeting

Quorum requirements

A minimum of six RE:NEW Sponsors' Board members is required for the meeting to be recognised as an authorities meeting for the recommendations or resolutions to be valid.





ECONOMICS · RESEARCH · ANALYSIS



RE:NEW phase 3 programme evaluation



A final report by Regeneris Consulting GLA

RE:NEW phase 3 programme evaluation

December 2016

Regeneris Consulting Ltd www.regeneris.co.uk

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Executive summary

Background

- Regeneris Consulting and CAG Consultants were appointed by the Greater London Authority (GLA) in August 2016, to undertake an evaluation of phase three of RE:NEW – the Mayor of London's home energy efficiency retrofit programme.
- ii. The evaluation has involved analysis of the changing delivery context and the project's financial and performance data, consultations with the delivery team and wider stakeholders, and a survey of project beneficiaries.
- iii. The RE:NEW programme was established in 2009 with the aim of reducing carbon emissions and energy bills in London's homes, to contribute to meeting the then Mayor's targets to cut carbon emissions in the capital by 60 per cent by 2025 and 80 per cent by 2050.
- iv. Now in its third phase, RE:NEW is a technical assistance programme which seeks to achieve this aim primarily by working with London boroughs, housing associations, and universities by providing them with expert end to end support. The programme also includes a framework of suppliers, saving time and resource when procuring retrofit services. This phase of RE:NEW, which is funded by the European Investment Bank (EIB) European Local Energy Assistance (ELENA) programme and the GLA, ends in July 2017.

Changing delivery context

- v. A number of significant changes to national policy and programmes affected delivery and achievements of phase three of the RE:NEW programme. These include:
 - changes to the Energy Company Obligation, including reductions in the overall scale of funding invested nationally and reduced levels of solid wall insulation funded (for which there is greater need in London than outside)
 - cessation of Green Deal funding
 - cuts to feed in tariffs, particularly for solar photovoltaic (PV) installations
 - cuts to local authority budgets, negatively impacting on funding available to invest in retrofit and staffing for retrofit projects
 - the rent reduction of one per cent a year for housing associations and a proposed extension of right to buy to housing association stock, disrupting existing retrofit investment plans and making future ones less likely.

Programme delivery

- vi. The programme is delivering a range of activity strands including:
 - beneficiary support through development and delivery of support plans which aim to assist the design and realisation of retrofit projects
 - procurement framework providing free use of a framework of pre-qualified suppliers for retrofit services, tailored to meet the requirements of domestic retrofit in the public sector



- innovation unit supporting the generation, investigation and implementation of new ideas and initiatives which could help to deliver the programme's aims
- marketing through direct contact, monthly newsletters, events programme, and materials published online and in hard copy.

Management and governance

- vii. The main management and governance resources and structures include:
 - leadership provided by a programme manager, with support from a project manager, both based in the GLA's Housing and Land Directorate
 - delivery of the support service, which was tendered, provided by Capita, with an average of around seven full time equivalent posts supporting delivery throughout the contract period
 - oversight by senior staff within the GLA Housing and Land Directorate, with reporting channels upward to senior levels within the GLA
 - a Sponsors Board retained from previous phases of RE:NEW, involving a range of expert partners from relevant bodies to advise on the strategic direction of the programme, provide critical challenge on progress and champion the programme externally
 - bi-yearly reporting to the European Investment Bank
 - regular corporate progress-reporting within the GLA, including [monthly] governance meetings with the Deputy Mayor for Environment and Energy and, under the previous Mayoral administration, the then Deputy Mayor for Housing
 - as with all aspects of the Mayoral work, scrutiny by the London Assembly, including through the Mayor's Questions.

Programme performance

- viii. Phase three of the RE:NEW programme has a total budget of £2.8m, comprising £2.52m from the European Investment Bank (EIB) ELENA fund and £0.28m from the GLA. Around 75 per cent (£2.1m) of the total budget had been spent by September 2016, which is on track given where the programme is through the delivery period.
- ix. The programme has two sets of key performance indicator targets. The first set was agreed with the EIB, based on a contractual obligation to deliver a £50m capital expenditure leveraged target. The second more stretching targets were set by GLA and represent what were believed at the time to be realistic aims.

Progress to date against key performance indicators, up to end of September 2016 (69% through the delivery period)

	Achieved to	EIB targets		GLA targets	
	Sept 2016	Target	% of target achieved	Target	% of target achieved
Support plans agreed**	69	19	363%	134	51%
Retrofitted homes	18,823	24,994	75%	175,000	11%
Capital expenditure leveraged (£m)	£78m	£50m	156%	£352m	22%



	Achieved to	EIB targets		GLA targets	
	Sept 2016	Target	% of target achieved	Target	% of target achieved
Total floor area supported for retrofit (million m ²)	1.36	1.75	78%	12.25	11%
Funding supported (£m)*	£0.6	£26	2%	£186	0%
Carbon savings (tCO ₂ per annum)	17,281	13,283	130%	93,000	19%
Energy saved (kWh) (millions)	58	63	92%	440	13%

Source: GLA monitoring data *Refers to sources such as ECO, Green Deal or the Department for Energy and Climate Change. ** A support plan is a plan of retrofit activity agreed and signed off with the beneficiary, setting out the details of the project and the support that will be provided.

x. There have been very significant changes to the delivery context since these targets were set (see section three). An analysis has therefore been undertaken to see whether the GLA targets can be considered as realistic, given these changes. The original targets were (partly) based on the assumption that the programme would secure £186m of ECO funding. However, the changes to ECO have meant that the programme could only actually be expected to secure £46m of ECO. The targets for the programme have been recalculated on this basis and are set out below. In the context of these more realistic targets, the programme has performed well.

Recalculated targets and performance				
	GLA targets set in 2013	Recalculated targets	Performance to date (September 2016)	Expected performance by July 2017
Retrofitted homes	175,000	40,100	18,823	26,798
Capital expenditure leveraged £m)	£352	£81	£78	£111
Carbon savings (tCO ₂ per annum)	93,000	21,300	17,281	24,063

Conclusions

- xi. The table below summarises the initial aims and objectives for RE:NEW and provides a summary of achievement against these aims. For each aim and objective we provide an overall verdict of either: success, partial success, less successful or failure.
- xii. We subsequently explore the overall performance with respect to the relevance, effectiveness, efficiency and impact of the programme.

Conclusions on achievement against aims and objectives		
Original aims and objectives	Programme achievements	
Overall aim : to maximise energy saving and carbon reduction in London's housing by providing support to local authorities, social housing providers and others to increase the value for money, scale and	 The programme's engagement with these beneficiaries (local authorities and social housing providers) has been strong, and the support offered has been flexible and highly valued. Although far fewer schemes have been delivered than originally anticipated, evidence suggests that the programme has helped to maximise energy savings and carbon reduction in London's social housing, in a challenging policy climate. 	



Original aims and objectives	Programme achievements
delivery speed of retrofit projects	 With the lack of success and subsequent loss of Green Deal funding, it is recognised that supporting energy savings and carbon reduction in private housing through this programme has become extremely challenging, and as a result little progress has been made in this area. 76 per cent of respondents to the beneficiary survey said that support from RE:NEW has reduced the delivery risk for their project and 84 per cent identified it has improved value for money of their retrofit investment. Of the 13 beneficiary organisations which have projects in contract that completed the evaluation survey, five stated that the support has helped bring the project forward more quickly (by up to 18 months). None of the beneficiaries suggested the support has helped to increase the size of the project, however some of these projects have been downsized due to the changing delivery conditions, which may partly explain this. Seven of the beneficiary organisations noted that the programme had led to an increase in carbon reduction are significantly lower than GLA targets set for the programme. However, the national policy context (particularly the reduced availability of ECO funding) has significantly affected the ability of the programme to achieve those targets. Given this context, the programme has helped to maximise energy saving and carbon reduction in London's housing, though not to the extent that was originally envisaged.
Objective : To address the lack of technical expertise and (increasingly) capacity within many boroughs and housing associations	 Gaps in capacity and expertise to deliver retrofit interventions appear to have increased over the course of the programme, making this objective more important than it was at the outset. 89 per cent of beneficiaries feel they lack all of the capacity and expertise needed to deliver domestic energy efficiency retrofit projects, and over 25 per cent highlight that this capacity has reduced in recent years. The quality and usefulness of the support received from the RE:NEW programme is rated very highly by beneficiaries, with around 90 per cent describing this as good or excellent. Verdict: success – RE:NEW delivers a comprehensive programme of high quality services, helping to meet clear gaps in capacity and expertise among local authorities and housing associations, to enhance delivery of domestic energy efficiency retrofit projects.
Objective : To streamline the procurement and delivery of domestic retrofit by providing a bespoke framework of suppliers to enable projects to be procured quickly, simply and efficiently	 The supplier framework has been successfully established. However, while valued by beneficiaries, it has been used far less than originally anticipated. This partly reflects the lower number of projects getting to contract, but also that several contracted projects have opted for alternative procurement routes. Of the nine framework contractors, four were consulted as part of the evaluation, and alongside some beneficiaries identified how the framework could be improved. This includes: eliminating duplication (where information is requested to get onto the framework, then sought again for individual tenders), improving marketing and increasing the amount of work being tendered through the framework. Verdict: less successful – although broadly supported by stakeholders, the framework has been underused and has provided



Original aims and objectives	Programme achievements
	limited overall value to phase three of RE:NEW, particularly given the resources involved in setting it up and managing it.
Objective : To attract external investment and maximise London's share of Government subsidy	 The programme has exceeded its investment leverage target for the ELENA funding, but has fallen far short of the targets set by the GLA. However, the major changes to national policy, including to ECO and Green Deal funding, have meant that Government subsidy and finance opportunities have been substantially lower than originally anticipated, with Green Deal failing to yield what was expected and then being terminated, and ECO funding lower than had been expected when RE:NEW phase three was designed. Reductions to solar PV feed in tariffs and the additional pressure on local authority funding and the one per cent a year rent reductions for housing associations has also substantially reduced the opportunity for these partners to develop projects and subsequently to invest capital into them. Based on the recalculated targets, £81m was identified as being a realistic target for capital expenditure leveraged. By September 2016, the programme has leveraged £78m, and is projected to exceed this recalculated target by the end of the programme. Verdict: partial success - the programme has helped to maximise leverage in the context of the reduced subsidies available (the opportunities for which were significantly lower than when the programme was devised).

Relevance of the programme

- xiii. The fundamental challenge that the programme has faced has been the significant change in national policy, upon which the programme rationale was based.
- xiv. Closures or scaling down of ECO, the Green Deal and feed-in tariffs, as well as increased pressure on local authority and housing association budgets, have changed the inherent business case to invest in domestic energy efficiency retrofit and the opportunities for organisations to finance such investments.
- xv. At the outset of the programme, the Government subsidy and financing available provided a relatively strong business case for investment. This meant that the main focus of the programme when it was devised was to support organisations to fully understand and overcome the technical challenges to delivering schemes.
- xvi. Over the course of the programme, however, this business case has become more difficult to make, and so more time has been dedicated to identifying cost-efficient opportunities for retrofit schemes (i.e. the programme optimisation strand) and developing bespoke business cases for investment.
- xvii. For this technical assistance model to remain relevant over the coming years, there is likely to be a need to include other support activities which have been less prominent so far but which can help to:
 - support more compelling business cases for investment among housing associations and local authorities, in order to generate a stronger pipeline of potential beneficiaries which want to invest, and simply require support to make it happen



 provide financial opportunities to enable investments to go ahead, as even with a clear business case for investment, the potential beneficiary organisations for this programme face significant budgetary challenges, and so require a realistic financing opportunity to help them make the decision to invest (e.g. access to low interest loans or energy performance contracting).

Effectiveness of the programme

- xviii. Programme effectiveness relates to the extent to which the activities delivered by the programme led to the intended scale and type of outputs.
- xix. The evaluation found that the support delivered by the programme has been effective in delivering the types of outputs expected, although not at the scale needed to meet the GLA targets.
- xx. The marketing and engagement approach has largely been successful in engaging London boroughs and housing associations, with 69 support plans having been agreed, a newsletter circulation audience of 1,800 built up and over 200 stakeholders having attended events.
- xxi. Similarly, the range of support on offer has largely met the needs of beneficiaries throughout the development of projects, and is rated very highly in terms of quality and usefulness. Beneficiaries have not suggested the support available leaves any substantial gaps.
- xxii. The framework, although used relatively rarely, is still recognised by stakeholders as a useful resource.
- xxiii. The programme cannot be expected to achieve the original GLA targets, given the significant changes to the policy context. In particular, the level of ECO funding that the programme can be expected to secure is only about a quarter of that originally envisaged when the original targets were devised. In terms of the recalculated targets based on this more realistic level of ECO, the programme has performed well.

Efficiency and impact of the programme

- xxiv. It is estimated that the programme has delivered a net additional impact¹ of around 88,100 tonnes of CO₂ saved, equivalent to a net present value² of £1.5 million.
- xxv. Based on the delivery costs of the scheme, this represents £1.70 of value generated for every £1 of public expenditure invested.
- xxvi. These figures are subject to sensitivities around the value of carbon and the net additionality assumption used in the modelling (which was based on a relatively small number of respondents able to estimate the scale of effect that RE:NEW had on their project³).

³ Four out of seven respondents identifying that RE:NEW had helped increase carbon savings were able to quantify this.



¹ Net additional impact refers to the impact that can be directly attributed to the programme. This excludes impacts that would have been achieved anyway without the support received from the programme.

² Net present value takes into account all of the costs and benefits delivered by the programme that can be quantified. Net present value can be positive or negative, with a positive net present value meaning that the benefits were greater than the costs of the scheme.

- In the worse cases of this modelling, the net present value is negative, with the lowest figure being -£870,000 (equivalent to a return of £0.59 for every £1 invested).
- In the better cases, the figures are significantly higher, with the highest figure modelled being +£3.35m (equivalent to a return of £2.56 for every £1 invested).

Recommendations

- xxvii. Substantial progress in domestic energy efficiency will be vital, particularly as London works towards meeting the Mayor's target of being a zero carbon city by 2050. The rationale for GLA investment in a programme to support domestic energy retrofit is therefore stronger than ever.
- xxviii. London boroughs, ALMOs, housing associations and universities remain critical partners in coordinating and delivering domestic energy efficiency retrofit across social, private rented and owner occupied housing, and the gaps in capacity and expertise across all of these bodies is still large. As such, there is a continued justification for the GLA to provide support for their domestic energy efficiency retrofit activities.
- xxix. Based on the findings of this evaluation, the must-get-right factors for a successor programme are as follows:
 - ambition given the scale of the decarbonisation challenge, the GLA's domestic energy efficiency retrofit programmes need to be ambitious and maximise their additional carbon emission savings
 - fitness for purpose the establishment of the Mayor's overarching Energy for Londoners (EfL) programme will yield new opportunities to increase domestic energy efficiency retrofit in the capital. The shape and structure of EfL is currently in development. However, this could, for example, include new policy incentives, financing solutions, and delivery vehicles which a successor programme to RE:NEW could capitalise upon. A successor programme therefore needs to be fit for purpose, building on this new delivery context, and drawing on evidence of what works from RE:NEW phase three and other programmes
 - wide engagement designing an effective successor technical assistance programme requires detailed insights into the specific capacity, needs and future investment plans of key organisations (such as London Boroughs, ALMOs, housing associations and universities), as well as their buy-in from the design stage, to ensure the programme can be delivered successfully in collaboration with these bodies
 - development of output and impact measurement the outputs used to measure progress of the programme ultimately play a significant part in how the programme is delivered, and so getting this right is critical. The evaluation highlights that fuel poverty was not a key measure of this programme. However, given the Mayor's aim to tackle fuel poverty, and the feedback from some consultees that it should have a greater focus in any successor programme, this needs to be factored into future indicators. Similarly, the addition of a 'net additional carbon savings' indicator could help to sharpen the focus of the programme on projects which might not have gone ahead without RE:NEW and where the greatest value can be added. Targets set for a successor programme should be based on an understanding of what was achievable in this phase of RE:NEW.
 - **governance that works** as a GLA programme the overall governance and decision making for the programme needs to happen within the GLA. For the RE:NEW phase three programme, an external Sponsors Board was retained from previous phases of RE:NEW. However as this lacked direct decision making, interest in attending has waned. The



stakeholders involved are potentially important influencers and champions for the programme and domestic energy efficiency agenda. Future governance therefore needs to continue to engage this group (and other potential influencers and champions) and harness their contributions in an effective way.

Recommendations for the remainder of RE:NEW phase three

- xxx. At the time of the evaluation, eight months remain of the current phase of the RE:NEW programme. This means that there are still opportunities to further adapt delivery, in order to enhance the overall programme outputs and impacts, but also to further analyse and develop plans for a successor programme to support domestic energy efficiency retrofit.
- xxxi. In particular, the following recommendations are proposed for the remainder of this phase of the programme:
 - continue to prioritise more intensive engagement with the projects most likely to come to fruition, to ensure all beneficiaries are organisations which have capacity gaps that are constraining the development of their projects (i.e. ensure the focus is on creating net additional benefits)
 - 2) further explore opportunities to build the business case for interventions, building on the team's more recent work in this area, in particular the business case development work with Orbit Group. As part of this, it is important to consider what is most vital in making this business case to potential programme beneficiaries and how bespoke business plans for retrofit investment for individual organisations can be developed in the most cost-effective way
 - 3) review the role of the RE:NEW Sponsors Board to consider better ways to harness the knowledge, contacts and influence of Board members. The Sponsors Board can continue to provide an important sounding board for the development of a successor programme over the next six months. However, it would also be useful to hold a session with the group to explore whether and how they would like to be involved with, and contribute to, the programme. This should include exploring their potential roles in intelligence gathering, influencing potential beneficiaries, championing RE:NEW and co-ordinating with other activities, as well as practical questions about how they would like to be kept updated about the programme, how often they would like to meet, and how much resource they can offer to support the programme's aims
 - 4) **explore the potential for greater engagement at a political level locally, to support local politicians to remain better engaged with the programme.** This could help to widen awareness and buy-in to the domestic energy efficiency retrofit agenda and help to broker new relationships and project opportunities across London. This might be considered across a number of GLA energy efficiency programmes, potentially led under the banner of Energy for Londoners
 - 5) where practical, test potential new delivery approaches that could be part of a successor programme, which could include, for example, initiatives to drive greater solar PV deployment and trialling GLA's Energy Leap delivery model for zero energy retrofitting (akin to the Dutch Energiesprong⁴)

⁴ Energiesprong is a model of whole-home retrofit, tied to a particular procurement approach and payback method and with potential to link to wider neighbourhood regeneration.



- 6) **explore opportunities for better marketing of the procurement framework**, drawing on lessons that can be learned from other framework such as Fusion 21, Scape, LHC and Green Services Hub
- 7) **undertake further market research among potential beneficiaries** on their future plans for domestic energy efficiency retrofit and what they need from the programme to make them happen. This should be part of the engagement process in designing a successor programme, and the services delivered should respond directly to these findings.



1. Introduction

- 1.1 Regeneris Consulting and CAG Consultants were appointed by the Greater London Authority (GLA) in August 2016, to undertake an evaluation of phase three of RE:NEW the Mayor of London's home energy efficiency retrofit programme.
- 1.2 The evaluation has involved analysis of the changing delivery context and the project's financial and performance data, consultations with the delivery team and wider stakeholders, and a survey of project beneficiaries.
- 1.3 The report covers the following:
 - Section 2 sets out an overview of RE:NEW and a detailed logic model for the programme, explaining the rationale and intended aims, inputs, interventions, outputs and impacts of the scheme
 - Section 3 explains the changing delivery context and market conditions and the effects that these changes had on delivery of RE:NEW
 - Section 4 details the overall position on programme performance against key indicators, and an analysis of the reasons behind this performance
 - Section 5 explores the effectiveness of different aspects of the support delivered through RE:NEW
 - Section 6 provides a review of the management and governance arrangements for the programme and their effectiveness in supporting delivery
 - Section 7 summarises the net additional impacts, value for money and wider impacts that RE:NEW has delivered
 - Section 8 sets out a series of conclusions on the relevance, effectiveness, efficiency and impact of the RE:NEW programme and recommendations for the remainder of the phase 3 programme.



2. Programme overview and logic model

Programme overview

- 2.1 The RE:NEW programme was established in 2009 with the aim of reducing carbon emissions and energy bills in London's homes, to contribute to meeting the then Mayor's target to cut carbon emissions in the capital by 60 per cent by 2025.
- 2.2 Now in its third phase, RE:NEW seeks to achieve this aim by working with London boroughs, housing associations, and universities by providing them with expert end to end support, as well as a framework of suppliers, saving time and resource when procuring retrofit services.

Earlier phases of RE:NEW

- 2.3 RE:NEW has been through two earlier phases, centred around engaging with households of all tenures on a street-by-street, community basis to conduct survey work, deliver a package of energy and water saving advice, and install free measures such as low energy light bulbs.
- 2.4 The surveys also determined whether other energy efficiency measures (such as loft, cavity and solid wall insulation) were applicable to the household and whether households were eligible for sources of funding (such as the CERT, Warm Front and local borough grant schemes). The scheme aimed to leverage external sources of funding primarily through the Carbon Emissions Reduction Target (CERT), Community Energy Savings Program (CESP) and Energy Company Obligation (ECO).
- 2.5 The first stage of the development of RE:NEW included three relatively small-scale technical trials designed to test the concept of area-based schemes. A good practice manual was developed to provide guidance on how to deliver an area based scheme in a London borough. Following this, the GLA provided funding to the boroughs to enable a RE:NEW area intervention in every borough between July 2011 and April 2012.
- 2.6 This was followed by phase two of RE:NEW, where the GLA let five contracts using the RE:NEW framework (one for each of the housing sub-regions) to three delivery agents. This focused on accessing ECO funding, using a refined delivery model of phase one.
- 2.7 Before phase three began, an interim support team was also set up to pilot the broad approach to be used for the phase three scheme.

Logic model

- 2.8 In seeking to evaluate any programme it is important to first establish and understand the rationale of the programme, both in terms of why it was set up in the first place and the target outputs and outcomes the programme was seeking to achieve.
- 2.9 The logic model for the RE:NEW programme sets out an overview of the programme, showing the causal links that lead from the programme's original rationale to its objectives, and then through into the inputs for delivery and the activities delivered, as well as the outputs, results and impacts of the interventions. It provides a foundation for evaluating the relevance, efficiency and effectiveness of the programme.
- 2.10 The sections below provide detail on each part of the logic model, with a summary diagram presented at the end of the section.



Programme rationale

Strategic context

- 2.11 The original strategic framework for addressing climate change and improving London's environment was set out in the GLA's bid to the European (EIB) Local Energy Assistance Fund (ELENA). This included the following documents:
 - The Mayor's Climate Change Mitigation and Energy Strategy (October 2011) sets out a path for reducing emissions by 60 per cent by 2025 and 80 per cent by 2050 on 1990 levels. This was the primary strategy that RE:NEW was established to help deliver.
 - **The London Water Strategy** (October 2011) sets out a plan to ensure London has a secure, affordable water supply that safeguards the environment and improves the water efficiency of existing buildings, especially homes.
 - **The Air Quality Strategy** (December 2010), which relies on the then Mayor's domestic and public building retrofit programmes to save over 120 tonnes of nitrous oxide by 2015, achieved primarily through retrofitting gas heating systems.
 - **The London Climate Change Adaption Strategy** (October 2011) aims to identify the priority risks associated with climate change and proposes adaption measures which are designed to ensure that the city's infrastructure and services cope under a changing climate.
 - **London Plan** (July 2011) A spatial development strategy that supports delivery of the then Mayor's climate change mitigation and energy strategy.
 - **The UK Climate Change Act** (2008) provides a legally binding target of an at least 80 per cent reduction in emissions by 2050 and a system of five-year statutory carbon budgets.

Baseline context

- 2.12 The original RE:NEW programme documents highlight the following main baseline context points:
 - homes account for 36 per cent of London's carbon emissions, and at least 80 per cent of London's existing buildings will still be standing by 2050. Retrofitting homes across the capital will therefore be essential to meeting carbon emission reduction targets, as well as providing opportunities to help householders to reduce fuel bills, stimulate the local economy, attract investment, generate income and achieve wider priorities such as healthrelated outcomes
 - London has approximately 3.3 million homes and in order to meet carbon targets it is essential that a step-change is made in the level of insulation being installed in homes across the capital. The GLA undertook analysis as part of the design of RE:NEW phase three, which concluded that the establishment of a RE:NEW support team was the best way to catalyse the domestic retrofit market in London and implement retrofit activity.

Market failures

- 2.13 The market failures that the programme was seeking to address were not explicitly set out in the background programme documents, but we have outlined our understanding of these:
 - negative externalities domestic carbon emissions impose a cost on society. The costs associated with the negative environmental consequences are not borne by those who produce and consume energy. Therefore a greater amount of energy is used than is socially desirable



- **imperfect information** many landlords, housing associations and local authorities lack the right information and/or expertise required to make optimal decisions with regards to investment in energy efficiency measures. Lack of accurate and accessible information limits their ability to invest in the most appropriate low carbon solutions
- **split incentives** are a barrier to the deployment of energy efficiency measures in buildings where those responsible for paying energy bills (tenants) are not the same as those making the capital investment decisions (landlord or building owner). Therefore the landlord may not be incentivised to carry out the required works to enable energy savings.

Programme aims and objectives

- 2.14 This phase of the RE:NEW programme aims to maximise energy savings and carbon reduction in London's housing by providing support to local authorities, social housing providers, universities and others to increase the value for money, scale and delivery speed of retrofit projects. To achieve this aim it seeks to:
 - address the lack of technical expertise and (increasingly) capacity within many boroughs and housing associations
 - streamline the procurement and delivery of domestic retrofit by providing a bespoke framework of suppliers to enable projects to be procured quickly, simply and efficiently
 - attract external investment and maximise London's share of Government subsidy.

Programme delivery

Inputs

- 2.15 The overall funding agreed for phase three of the RE:NEW programme was £2.8 million. £2.51 million of this was from the European Investment Bank (EIB) European Local Energy Assistance (ELENA) facility and £279,500 from the GLA.
- 2.16 The ELENA fund was set up to support EU municipalities and regions that lack the technical expertise and organisational capacity to implement large energy efficiency and renewable projects.

Delivery and activities

2.17 The overall delivery programme was structured under five main work streams as outlined in Table 2.1 below.

Table 2.1 Main work streams		
Work stream	Activities	
Core service: support	Develop and engage with an agreed pipeline of organisations and provide	
team	skills and capacity to support the delivery of domestic retrofit projects	
Enabling projects	Development of tools and services to make retrofit easier for clients	
	including the RE:NEW framework to help procure retrofit projects	
	efficiently, effectively and economically	
Innovation Unit	A structured approach to identify, evaluate and develop new approaches to	
	retrofit that have the potential to make significant contribution toward KPIs	
Marketing and	Promote RE:NEW support team services, share best practice and encourage	
communications	investment in the retrofit market	
Programme	Overall programme management	
management		



- 2.18 The main services offered to beneficiaries are:
 - a retrofit **support team** offering technical assistance to housing associations, boroughs and universities. Commissioned and led by the GLA and delivered by Capita (contracted to provide support from August 2014 until 31 July 2017)
 - a **bespoke framework of suppliers** to enable projects to be procured quickly, simply and efficiently (contracted to be available from August 2015 until August 2019).

RE:NEW support team

2.19 The RE:NEW support team offers free support to social landlords, local authorities and universities to help get domestic energy efficiency retrofit projects up and running across London. The following table provides a detailed overview of the main assistance provided by the support team:

Area of support	Description
Opportunity analysis	A comprehensive assessment of stock's retrofit potential to help scope retrofit
	project opportunities
Strategy development	Support with developing realisable investment programmes
Technical support	Advice on the risks and issues associated with individual measures in order to avoid failure, inappropriate installation, underperformance or long term issues
Funding and finance	Help to identify and secure the right mix of funding and finance for retrofit
support	programmes. The RE:NEW Funding Guide also summarises the latest funding and financing available for retrofit
Training and coaching	Helping to build internal capability through coaching and training for specific projects, measures and tools
Programme	Ensuring the best return on investment from existing and planned programmes
optimisation	and ensuring all opportunities to increase energy savings are explored
Planning support	Developing an understanding of planning requirements and how they affect the technical aspects of retrofit
Marketing and engagement advice	Specialist marketing and communication services to help retrofit schemes achieve maximum uptake
Procurement support	Support through the retrofit procurement process, from providing procurement
	options, through to strategy development and specification review, to tender assessment and moderation
Support during	A range of support services and best practice to help maximise return on
project delivery	investment and minimise and pre-empt any issues or challenges
Innovation	Providing a structured approach to overcoming the barriers associated with delivering domestic retrofit

2.20 The support team assists projects involving all types of energy efficiency and renewable energy measures. Typical measures are illustrated in the table below.



Figure 2.1 RE:NEW support team efficiency measures



Source: Regeneris Consulting

RE:NEW framework

- 2.21 The RE:NEW framework is designed to help public sector organisations procure energy reduction and generation measures efficiently, effectively and economically. The framework seeks to reduce the time taken from procurement to installation, support value for money, and gives assurance to buyers through pre-qualification of suppliers.
- 2.22 The framework is fully managed and supported by the RE:NEW support team, and is free to use and specifically designed to meet the requirements of domestic retrofit in the public sector. The framework is available to use until 2019.

Management and governance

- 2.23 The original ELENA bid document set out the role of the GLA, the London boroughs and the then Department of Energy and Climate Change (DECC), to work in partnership under the proposed RE:NEW programme.
- 2.24 The GLA has an important strategic role to play in drawing together and co-ordinating the 33 London boroughs and multitude of housing associations to achieve a step-change in the levels of domestic retrofit. By taking a strategic approach, London can create significant economies of scale to ensure delivery happens at a much greater scale. The GLA's role within the RE:NEW support team was set out in the original bid to:
 - develop the programme
 - oversee and direct the work programme
 - monitor and report on the programme
 - evaluate performance.
- 2.25 Main elements of the RE:NEW programme management and governance structure include:
 - a Sponsors Board overseeing programme delivery
 - a management team for the programme within GLA (with internal reporting processes such as the retrofit programme internal governance group and monthly status reports to the then Mayor's Office and senior managers)
 - externally appointed delivery contractors (Capita).



Targets

2.26 The RE:NEW programme was monitored against two main sets of programme targets: GLA targets which were set in 2013 and later revised in late 2013, and targets set as part of the bid for ELENA funding from the European Investment Bank (EIB)⁵. Both sets of targets are set out below.

Output targets

Table 2.3 Programme targets		
KPI	GLA target by 2017	EIB minimum leverage target by 2017
Number of retrofitted homes supported	175,000	24,994
Floor area supported for retrofit (million m2)	12.25	1.75
Capital expenditure leveraged (through retrofit contracts) (£m)	£352	£50.3
Number of support plans agreed	134	19
Funding supported (£m)	£186	£26.6

Outcome targets

Table 2.4 Programme targets			
КРІ	GLA target by 2017	EIB minimum leverage target by 2017	
Carbon dioxide savings (tCO ₂ per annum)	93,000	13,283	
Energy saved (MWh per annum)	439,890	62,827	

2.27 Further analysis of the assumptions behind these original targets is provided in the retrospective target analysis at Appendix C.

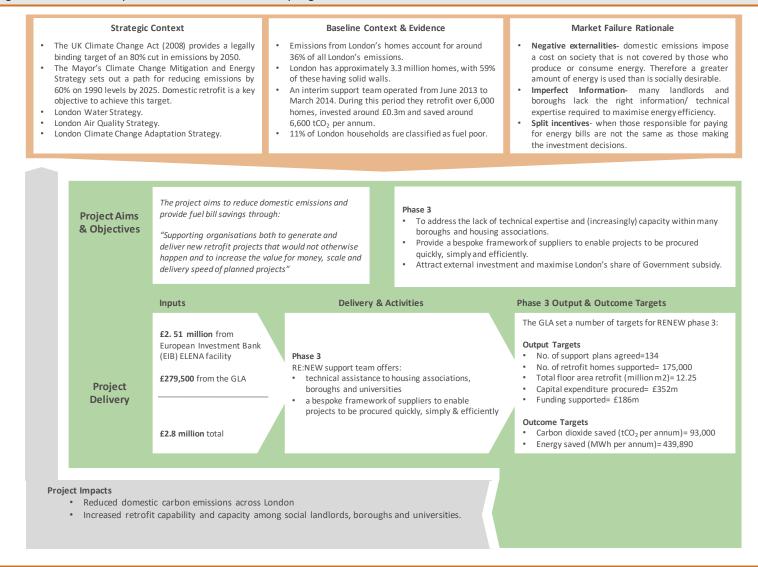
Impact targets

- 2.28 The RE:NEW programme set out to achieve the following main impacts:
 - reduced domestic carbon emissions across London
 - increased retrofit capability and capacity among social landlords, boroughs and universities.

⁵ Note: capital expenditure leveraged was the primary target set by EIB for the project, and all other EIB targets are pro-rated from the GLA targets on the basis of this measure.



Figure 2.2 Logic chain model for phase three of the RE:NEW programme



Source: Regeneris Consulting



3. Delivery and market context

- 3.1 This section is a summary of the most important changes to the delivery context and housing and energy market conditions over the course of delivery of the RE:NEW phase three programme, focusing on those which had greatest effect on programme delivery. This includes national and local policy and strategy changes, changes to funding and financial incentives and political and organisational changes.
- 3.2 A short summary of each change is provided, with a summary table at the end of the section, setting out impacts on the RE:NEW programme.

Factor 1 – changes to the Energy Company Obligation (ECO)

- 3.3 ECO was designed to work alongside the Green Deal, providing funding for energy efficiency measures through three main obligations: the Carbon Emissions Reduction Obligation (CERO), focused primarily on the installation of insulation measures in hard-to-treat properties; the Carbon Saving Community Obligation (CSCO), focused on low income areas; and the Home Heating Cost Reduction Obligation (HHCRO) (also known as 'Affordable Warmth'), focused on reducing heating costs for consumers on certain types of benefits as a way of targeting vulnerable households.
- 3.4 At the outset of phase three of the RE:NEW programme, there was uncertainty about the future of ECO. However, the changes subsequently introduced to the scheme still had a significant impact on RE:NEW. In 2014⁶ changes to ECO came into force which included, alongside other changes, CERO would be reduced by 33 per cent and that CERO would include lower cost measures such as loft insulation and cavity wall insulation. This had the effect of reducing the overall levels of investment and further diluting delivery of solid wall insulation (SWI), which was already lower than anticipated because of energy suppliers focusing instead on hard-to-treat cavity wall insulation.
- 3.5 When RE:NEW phase three was designed, it was still anticipated that ECO would deliver significant levels of solid wall insulation. DECC had expected ECO to deliver 100,000 solid wall insulation measures per year from 2015 onwards. When it became apparent that this would not materialise, DECC set a target for ECO to deliver 100,000 solid wall insulation measures in total by 31 March 2017, much of which was already in the ECO pipeline. The National Audit Office calculated that this equates to an average of 23,500 installations per year nationally, compared with 83,500 per year when the predecessor schemes were delivering at their peak (National Audit Office, 2016).
- 3.6 The impact of this in London, which has around a fifth of all solid walls in England, was reflected in feedback from housing associations, with Circle highlighting that the impact of changes to ECO in 2014 meant that their expectation of securing £3m from ECO for solid wall insulation works on 400 homes was reduced to an expectation of only £300,000 to support 30-40 homes and others reporting projects had been delayed or cancelled⁷.

Factor 2 – cessation of funding for the Green Deal

3.7 Government funding for Green Deal loans ceased in July 2015. Only 14,000 Green Deal loans had been made by 31 December 2015, of which around 1,000 were in London. Far less retrofit funding was taken up by the able-to-pay households targeted by the Green Deal than would have been

⁶ These changes had been initially announced in December 2013 for consultation, before the RE:NEW targets were finalised. However the full details of these were not confirmed and introduced until 2014, after RE:NEW Phase 3 had begun.



⁷ http://www.insidehousing.co.uk/short-sighted-eco-cuts-will-hit-tenants/7003367.article

fully anticipated at the start of RE:NEW phase three. Reporting on the Green Deal, the National Audit Office concluded that '*The Department [DECC]* has not succeeded in stimulating private investment in energy efficiency' (National Audit Office, 2016, p.2).

- 3.8 The Green Deal and ECO were intended to work in tandem so the failure of the Green Deal undermined delivery of ECO. ECO was intended to provide additional support for measures that were not fully financeable under the Green Deal. The failure of the Green Deal was therefore one of the reasons for the lower than anticipated numbers of solid wall insulation installations.
- 3.9 Commenting on the impact of the changes to ECO and failure of Green Deal on retrofit in London, the Association for the Conservation of Energy (ACE) suggested that 'despite the significant potential, local practitioners have found that changes to national energy efficiency schemes in the last few years have meant that funding for low income households is harder to get hold of and incentives for 'able to pay' households to undertake costlier upgrades are no longer available (London's short-term Boiler Cashback scheme aside)' (ACE, 2016, p8).

Factor 3 – cuts to Feed-in-Tariffs (FiTs)

- 3.10 Feed-in-Tariff (FiT) rates for renewable electricity installations have been reducing over previous years. However, in December 2015 it was announced that from February 2016 the tariff rate for rooftop solar PV installations would be significantly cut from 12.47p/kWh to just 4.39p/kWh (equating to a 65 per cent reduction). This had a significant impact on the level of domestic PV installations. It is not possible to fully quantify the impact of this cut on installation rates in London due to gaps in the published data but, drawing on figures from Ofgem and BEIS, it was reported that, nationally, 21MW of small solar was installed in February and March 2016, compared to 81MW in the same period in 2015⁸.
- 3.11 Research by the RE:NEW support team (drawing on data from Ofgem) in October 2016 highlights that:
 - London currently has the lowest take-up of PV of any UK region. The next lowest region is the North East, which has more than double the number of installations
 - average quarterly uptake in London was relatively consistent in the period between the FIT cuts of March 2012 and announcement of proposed cuts in 2015
 - during 2016, following the FIT changes, installations during February to May stood at 198, while there were only 55 during July, August and September.

Factor 4 – wider Government policy changes

3.12 Alongside the changes to ECO, the cessation of Green Deal funding and the cuts to FiTs, wider Government policy changes have disrupted the market for delivery of domestic energy improvements. For example, in the 2014 Queen's Speech it was announced that legislation would be introduced to allow for the creation of an allowable solutions scheme to enable all new homes to be built to a zero carbon standard from 2016. In the following year, the Government announced that it would scrap the zero carbon homes policy. The House of Commons Energy and Climate Change Committee reported on the impact of this and other policy changes on consumers and the supply chain: 'Policy changes, under both the previous and current Government, have led to a degree of uncertainty within the energy efficiency market. This has led to a complex and confusing landscape for consumers to navigate. This lack of stability has also been detrimental to the supply



⁸ UK solar power installations plummet after government cuts, Guardian, 8 April 2016.

chain, which has suffered job losses' (House of Commons Energy and Climate Change Committee, 2016, p.15).

- 3.13 The Government did take steps to increase delivery rates and underpin the market, principally through the Green Deal Home Improvement Fund, which was launched in June 2014. This gave households in England and Wales the chance to claim cashback for installing energy-efficiency measures. However, the funding was limited and was released in three short phases, with each phase being quickly exhausted. Some viewed such an approach as being damaging to the market in the longer term because of the lack of consistency which it offered: *Offering large numbers of sizeable Green Deal Home Improvement Fund grants at random intervals creates a market that comes to 'expect' grants and subsidies and then waits for them to appear. It also creates 'feast and famine' patterns of demand for the underdeveloped supply chains. Both of these are disincentives to the SME building trades that need to be at the heart of the SWI supply chain and which are (a) already busy with their normal home improvement and refurbishment building work and (b) wary of subsidy and grant programmes as they aren't a feature of their current markets and imply unwelcome paperwork and official scrutiny (CSE, 2015, p.4).*
- 3.14 Other changes offered the potential to boost retrofit activity. In March 2015, a regulation known as the minimum energy efficiency standards (MEES) passed into law. It requires all those in the private rented sector (PRS) to have a minimum energy efficiency rating of 'E' on their Energy Performance Certificate (EPC) by April 2018. In addition, with effect from 1st April 2016 tenants have been able to request consent from their landlords to carry out energy efficiency improvements to privately rented properties. The landlord will not be able to unreasonably refuse consent.
- 3.15 We have no data on the extent to which these regulatory changes have driven retrofit activity in the PRS but the absence of Green Deal funding to support such activity is likely to have limited its impact. The regulations are closely linked to the Green Deal (e.g. necessary measures under MEES measures which cannot be refused by a landlord are those deemed within the Green Deal's Golden Rule) so the failure of the Green Deal is likely to have led to uncertainty about their implementation. The Government has acknowledged the need for a finance mechanism in place of the Green Deal to support implementation of the MEES. The Residential Landlords Association report that a replacement fund has been promised but it is not expected until 2017 at the earliest⁹.

Factor 5 – disruption of housing association investment plans

- 3.16 A number of factors are likely to have disrupted housing association investment plans and reduced the funding being invested in retrofit, including:
 - the requirement to reduce rents by one per cent each year from 2016/17 onwards and until (and including) 2019/20, (estimated by the National Housing Federation to wipe £3.9bn from housing association balance sheets over four years¹⁰)
 - the planned extension of Voluntary Right to Buy (which is currently being piloted by five housing associations, including L&Q which owns housing in Croydon, Enfield, Greenwich, Haringey, Lambeth, Lewisham, Newham and Southwark)
 - reorganisations and mergers within the sector driven by the two policies above.
- 3.17 The box below provides an example of the effect the one per cent rent cut had on a housing association working with the RE:NEW support team.

¹⁰ <u>http://nationalhousingfederation.newsweaver.com/Newsletter/1730uwlxbt4?a=2&p=49004462&t=22194695</u>



⁹ <u>http://www.rla.org.uk/landlord/guides/minimum-energy-efficiency-standards.shtml</u>

Example of disruptive effects on housing association investment plans

The housing association agreed funding for a £10m energy efficiency programme in 2015, to bring 5,041 homes which fell below the Standard Assessment Procedure (SAP) 60 target up to that target before 2020. The project was to be funded via the Technical Services/Asset Management budget. The budget included:

- £4.6m for energy efficiency measures (modelled on the carbon reduction options for housing managers (CHROM))
- £0.7m for 220 solar PV installs, £450,000 for resident engagement and behavioural change
- £0.6m for reactive insulation subsidised by ECO
- £0.4m for LED lighting to communal areas.

After the rent reductions were initially announced, the budget was reduced to £8 million, but with the same deliverables agreed.

Through ongoing budget reductions across Technical Services as a result of the rent cut, the budget was cut to £5 million before procurement began in 2016, and the target reduced to hitting SAP 55 with approximately 1,400 properties which are modelled to fall below that target. The new £5m budget includes:

- £4.1m for energy efficiency measures and resident engagement (modelled on CHROM)
- £35k for 24 Solar PV installs
- £87k for reactive insulation subsidised by ECO
- No budget for LED lighting to communal areas

Source: GLA RE:NEW support team

Factor 6 – increasing constraints on local authority funding

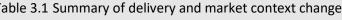
- 3.18 There have been increasing constraints on local authority funding since 2010/11 but these constraints have increased further during phase three of RE:NEW. The Local Government Association outlined the nature of these constraints, including: a 40 per cent cut in central government funding between 2011/12 and 2015/16; consistent reductions in council tax referendum thresholds; a £1bn cut to local council tax support funding to April 2016; and growing cost pressures from, for example, care service reforms, additional public health duties and increasing pressures on social care (LGA, 2014). In early 2016, an LGIU survey found that nearly 40 per cent of councils planned in their budgets to make cuts to frontline services that would be evident to the public (LGIU, 2016). This gives a clear indication of the extent of the constraints faced.
- 3.19 Work by the Institute for Fiscal Studies (IFS) suggests that London councils may have been particularly badly hit. They reported that cuts to net service spending have tended to be larger in those areas that were initially more reliant on central government grants (as opposed to locally-raised revenues) to fund spending. These are areas that have, historically, been deemed to have a high level of spending need relative to their local revenue-raising capacity. The cuts to spending per person were also higher on average in areas that saw faster population growth. Taking these factors into consideration, the IFS calculated that London boroughs, the North East and the North West have seen the largest average cuts to spending per person. They go on to report that net service spending per person in London in recent years has been cut nearly twice as hard as in the wider South East (IFS, 2015).
- 3.20 Although they would, to some extent, have been anticipated at the outset of RE:NEW phase three, these constraints will have meant fewer resources (finances, officer time and expertise) being available to engage in non-statutory services such as energy efficiency schemes. DeSmog UK, for example, has accessed data from around ten per cent of councils in England, which shows more than half have cut climate and sustainability positions since 2011 (DeSmog UK, 2016).



Summary

The table below sets out a summary of the most significant contextual changes. 3.21

Factor	Description	Effect on RE:NEW
Changes to ECO	Reduction in overall scale and lower level of SWI	Greater difficulty in accessing funding for SWI. Nationally, only 25 per cent of the originally anticipated level of SWI will be delivered under ECO – which was not fully known at the time RE:NEW targets were set
Cessation of Green Deal funding	Government funding halted	Greater difficulty in accessing funding for SWI and for all measures in able-to-pay households. Having been anticipated to be a key funding stream, the number of Green Deal-funded retrofits was negligible.
Cuts to FiTs	Significant reduction in rates for domestic PV	Undermined delivery of schemes involving domestic PV. Nationally, the level of PV installations dropped by c.75 per cent. Research by the RE:NEW support team suggests a similar drop in London, and the RE:NEW solar PV pipeline of projects significantly reduced following this cut.
Wider Government policy changes	Disruption to the market for delivery of domestic energy improvements	Likely to have undermined the supply chain and caused confusion amongst consumers, although the level of impact is unclear.
Disruption of housing association investment plans	Requirements for rent reductions, extension of Right to Buy and reorganisations and mergers in the sector	Delays and disruption to housing association investment and less funding available for retrofit.
Increasing constraints on local authority funding	Cuts in central funding and growing cost pressures	Fewer resources (funding, officer time and expertise) available for non-statutory responsibilities.





4. Programme performance

4.1 This chapter provides a summary of the performance of RE:NEW phase three against its EIB and GLA spend and performance targets, as well as against more realistic targets recalculated for this evaluation in the light of the cuts to ECO funding.

Financial performance targets

- 4.2 Phase three of the RE:NEW programme had a total budget of £2.8m (comprising £2.52m from the EIB ELENA fund and £279,500 from the GLA).
- 4.3 Around 75 per cent (£2.1m) of the total budget has been spent by September 2016, which is on track given how far the programme is through the delivery period.

Output and result performance targets

4.4 The programme's achievements to date (September 2016) are reviewed both against the targets set for both GLA and the EIB¹¹ in December 2013. These targets were based on the availability of ECO funding and wider policy context at that time. These targets have been assessed as unrealistic in light of the changing delivery context, and performance against revised targets is set out below.

Table 4.1 Progress to date against key performance indicators, up to end of September 2016					
	Achieved to	EIB targets		GLA targets	
	Sept 2016	Target	% of target achieved	Target	% of target achieved
Support plans agreed	69	19	363%	134	51%
Retrofitted homes	18,823	24,994	75%	175,000	11%
Capital expenditure leveraged (£m)	£78m	£50m	156%	£352m	22%
Total floor area supported for retrofit (million m ²)	1.36	1.75	78%	12.25	11%
Funding supported (£m)*	£0.6	£26	2%	£186	0.3%
Carbon savings (tCO ₂ per annum)	17,281	13,283	130%	93,000	19%
Energy saved (kWh) (millions)	58	63	92%	440	13%

Source: GLA monitoring data *Refers to sources such as ECO, Green Deal or the Department for Energy and Climate Change

Expected future performance

- 4.5 The GLA has undertaken an assessment of expected achievement against a number of the key performance indicators by the end of the contract on 31 July 2017. These are summarised in the table below.
- 4.6 Expected performance is assessed on a weighted scale using the following approach for different categories of project:

¹¹ Note: capital expenditure leveraged was the main target for the EIB, with all other EIB targets set at a pro rata rate from the wider GLA targets, based on this capital expenditure figure.



- achieved (100 per cent weighting): projects that have been confirmed as in contract and are counted as eligible toward KPIs based on completion of a support plan and agreement from GLA to include
- procurement (75 per cent weighting): projects for which the procurement process has commenced and an anticipated contract start date has been established
- pipeline (50 per cent weighting): projects where firm details are known e.g. number of dwellings included, Capex value, types of measures to be delivered, sources of funding, key milestones including procurement timescale
- potential (25 per cent weighting): longer term/less certain opportunities where level of detail on the project is not comprehensive, but the organisation has formally agreed to receive RE:NEW services and support
- identified (10 per cent weighting): longer term/less certain opportunities where level of detail on the project is not comprehensive and the organisation has not signed up to **RE:NEW** services.

Table 4.2 Expected progress by end of the programme against key performance indicators					
	Expected	EIB t	argets	GLA targets	
	achievement	Target	% of target	Target	% of target
	by July 2017	Target	achieved	Target	achieved
Retrofitted homes	26,798	24,994	107%	175,000	15%
Capital expenditure leveraged (£m)	£111m	£50m	222%	£352m	31%
Carbon savings (tCO₂ per annum)	24,063	13,283	181%	93,000	26%
Energy saved (kWh) (millions)	71	63	113%	440	16%

Source: GLA weighted programme projections at December 2016.

Review of individual indicators

Carbon savings

- 4.7 Progress against carbon savings targets has already exceeded the EIB target, but is currently only at around 19 per cent of the target set by GLA. The support team anticipate further progress against this up to the end of the programme. However, even this would only take progress to around 26 per cent of the GLA target.
- 4.8 The carbon savings target was intended to make a substantial contribution to the then London housing carbon reduction target to 2015.
- 4.9 It is clear that the targets for phase three of RE:NEW were more ambitious than for other comparable carbon reduction programmes run by the GLA, based on cost per tonne of carbon reduced. A number of examples are shown in the table below.



Table 4.3 Targets set by other GLA carbon reduction programmes			
Programme	Public investment (£m)	Carbon reduction target (tonnes CO2 per annum)	Cost per tonne of carbon reduced (£)
RE:NEW phase three	2.8	93,000	30.1
RE:FIT 2016-19	4.2	23,477	178.9
Decentralised energy for London 2011-15	2.7 ¹²	44,000	62.3
RE:NEW 2011-12 (Actual achievement)	5.7	9,458	604.8

- 4.10 This much higher target (and the value-for-money shown in the cost per tonne of carbon reduction) reflects the extent to which RE:NEW phase three programme was designed as an enabling programme which relied on other policy incentives and external funding (for example ECO and the Green Deal) in order to be successful. Changes to that policy context would then affect the ability of the programme to realise this target.
- 4.11 In the original GLA target quantification work, achieving these carbon reduction targets relied particularly on:
 - Leveraging funding from ECO however, as described in Section 3, ECO funding was substantially reduced in late 2014¹³, just months into the RE:NEW phase three programme. DECC targets for solid wall insulation retrofit were reduced to around a quarter of its earlier targets (23,500 installations per year compared with 100,000)
 - Delivery of a 40,000 home project pipeline already assembled however, as described in Section 3, the additional budgetary pressures and other contextual changes facing both London boroughs and housing associations affected the ability of organisations to take many of these schemes forward. As part of the beneficiary survey for this evaluation, around half of respondents¹⁴ cited that the changing external delivery context over the course of the RE:NEW programme had led to delays to projects.

Support plans

- 4.12 A total of 69 support plans had been agreed by September 2016, which is significantly higher than the target set by EIB, but is only 51 per cent of the target for GLA.
- 4.13 The original GLA support plan targets assumed there would be 85 social housing support plans covering 1,800 homes each (with 80 per cent progressing to contract) and 50 private sector housing support plans (of which 7 per cent would progress to contract).

4.14 In practice:

- the changes to Green Deal funding have meant that the national incentives to enable private sector housing retrofit schemes has significantly reduced, and the programme has had to focus primarily on social housing (which was still where the majority of impacts were originally expected to be generated)
- there have been 69 social housing support plans, with 28 progressing to contract (41 per cent), and an average of 670 homes per contract. The conversion rate of support plans and



¹² €3.3m programme, exchange rate estimated on average exchange rate of £0.83:€1 over 2011-15

¹³ Note however, that initial announcements about these changes were made in December 2013, and the programme targets were based on awareness that changes were coming in.

¹⁴ Eight out of 17 respondents to this question.

the number of homes covered per support plan are therefore significantly lower than original targets

4.15 In consultations, some support team and wider stakeholders highlighted that the number of support plans may have been ambitious, considering that approximately ten London boroughs have no or little housing stock and many housing associations are estimated to have fewer than 50 homes.

Capital expenditure leveraged, retrofitted homes and floor area supported for retrofit and energy savings

- 4.16 While the number of support plans produced is around half of the original target (51 per cent), other indicators suggest that the conversion of these plans to projects delivered and impacts achieved, is similarly around half of what was originally expected. This can be seen in the GLA targets, such as capital expenditure leveraged and carbon savings (at 22 per cent and 19 per cent of target respectively). In summary this suggested that only half as many organisations signed up to support plans as was expected, and then only around half as many as expected of those successfully progressed to contract (hence achievement against these indicators is just under a quarter).
- 4.17 Through the beneficiary survey, organisations outlined the reasons that projects had not moved forward to contract. Of the twelve respondents to this question:
 - five stated budget pressures
 - two stated external policy changes
 - two stated technical issues
 - others cited factors such as organisational changes, external finance environment, lack of political or senior-level buy-in, lack of staff capacity to explore the opportunity.
- 4.18 In consultations, some support team and wider stakeholders suggested that organisations with greater capacity internally were more likely to have been successful in getting projects to contract. However, the survey of beneficiaries undertaken for this evaluation suggests that this was not a major factor. Although there was some difference in average number of staff working on retrofit between different types of organisation, there was little difference between those organisations which had successfully took a project forward to contract and those which had not.



Figure 4.1 Average FTE staff working on energy efficiency retrofit by organisation type

Source: Regeneris Consulting Web Survey, 2016. Responses: 38.

4.19 By September 2016, only 11 per cent of the original GLA target for the number of retrofitted homes and the amount of floor area supported for retrofit had been achieved. However, progress against targets for the capital expenditure leveraged and carbon savings are close to double this rate of



achievement (22 per cent and 19 per cent respectively). This suggests that although fewer homes have been retrofitted, there has been more investment and deeper retrofit per home, yielding more carbon emission savings per home than originally expected. The original assumptions were that 0.53 tonnes of carbon would be saved per retrofitted home. However, in practice carbon savings to date are actually an average of 1.09 tonnes per retrofitted home.

- 4.20 In consultations, the RE:NEW support team and external stakeholders identified the number of homes retrofitted as a less useful target than other indicators, as the overall amount of carbon savings is more important than the specific number of homes supported, and this finding reinforces that view.
- 4.21 The GLA capital expenditure leveraged target performance (22 per cent of target achieved) is slightly higher than that for carbon emission savings (19 per cent of target achieved), suggesting that the programme has secured slightly weaker value for money (carbon emissions per pound invested) in projects than was originally anticipated. This could be due to a number of projects being downsized as a result of external changes, which would weaken economies of scale.
- 4.22 Progress against the GLA energy saved target performance (13 per cent of target achieved) is lower than against the carbon emission reduction target performance (19 per cent of target achieved). Carbon emission savings from the programme are directly linked to energy saved, so progress against these indicators would be expected to be the same. The fact that they are not suggests that the assumptions used in setting the original targets (about the relationship between energy saved and carbon emission reduction) need adjusting.
- 4.23 These two indicators This suggests that the carbon savings may reflect that there is lower energy saved per the original assumptions around energy savings tied to carbon emissions retrofit were slightly too high.

Funding supported

4.24 Performance against the GLA target for funding supported is at 0.3 per cent (as of September 2016) reflecting that funding secured through ECO, Green Deal and the Department for Energy and Climate Change has been far lower than originally anticipated.

Other possible indicators

- 4.25 In addition to the main indicators measured by this programme, members of the support team and wider stakeholders highlighted other possible indicators which could have been incorporated into the programme measurement, or which might be considered for a future programme:
 - **fuel poverty** some stakeholders felt that there should have been a specific fuel poverty target embedded in the key indicators. This would have potentially changed the focus of programme investment. To build this into a future programme would require specific mechanisms being designed for this, and could lead to trade-offs with maximising carbon emission reductions
 - net additional carbon savings the impact analysis in Section 7 outlines the proportion of carbon savings which can be attributed to the support provided by RE:NEW as net additional carbon savings. The chart below shows that some projects would not go ahead at all without the support from RE:NEW, while others would still go ahead (although may not have delivered the same level of carbon savings). Clearly, RE:NEW will have greatest impact where it supports carbon savings that would not otherwise have been realised. In the future, the use of an indicator specifically focused on achieving <u>net additional</u> carbon savings attributed to RE:NEW might help to sharpen the focus of the programme on



schemes which might not have gone ahead without RE:NEW support. This is a more challenging indicator to measure on an ongoing basis however, and further consideration would be needed on how best to monitor this.

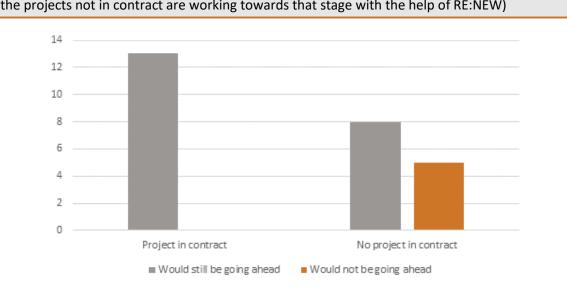


Figure 4.2 Extent to which projects would have gone ahead in some form without RE:NEW (note the projects not in contract are working towards that stage with the help of RE:NEW)

Source: Regeneris Consulting Web Survey, 2016. Responses: 26.

- capacity building although the programme's objectives identify a need for capacity building, and this was a part of some of the activities delivered e.g. newsletter information provided and capacity building events. Some consultees felt there should have been a more explicit target for this. Several beneficiaries also highlighted the need to embed technical and financial/commercial understanding of retrofit across more staff in their organisations to support them in taking projects forward. Again however, careful consideration would need to be given as to how best to capture this through output and outcome measures.
- evaluating CO₂ savings savings were estimated at the time of installation but no evaluation was undertaken post-installation to verify that these estimated savings were realised. This is the standard approach used in measuring carbon savings from publicly funded projects. However, some consultees highlighted that more assurance regarding CO₂ savings could be gained if the programme tested output assumptions around CO₂ reductions. Doing this would have significant cost and time implications and so this would need to be factored into the overall programme costings.

RE:NEW targets -

- 4.26 As part of this evaluation, the key targets set for this phase of the RE:NEW programme were recalculated based on more realistic assumptions about the levels of Government funding it would lever in (see Appendix C). A summary of this is provided below.
- 4.27 The targets set for RE:NEW Phase 3 were based entirely on an assumed level of ECO funding that the programme could help partners in London to secure for domestic retrofit projects. The target for ECO funding secured by RE:NEW Phase 3 was £186m.



However, various changes to national policy meant that actual investment in ECO which RE:NEW was able to support organisations to secure was actually much lower than originally anticipated, as shown in the table below.

Table 4.4 Summary of actual ECO spend	
	£m
Average annual ECO spend across Great Britain	362
Average annual amount invested in the private rented or social housing sector (around 28% of all investment)	101
Average annual amount which would represent London's fair share (based on having 14% of national housing stock)	14.2
Realistic three year target for ECO funding which could be secured by RE:NEW	46.2
Actual ECO funding within contracted projects supported by RE:NEW	0.03

- 4.28 This analysis demonstrates that in light of the actual ECO funding available, a more realistic target for ECO funding secured would have been around £46m, which is less than a quarter of the actual target set. In practice only £0.03m of ECO funding was secured as part of the projects supported by RE:NEW.
- 4.29 The targets for the programme have been recalculated on this basis and are set out below. In the context of these more realistic targets, the programme has performed well.

Table 4.5 Summary of quantification assumptions				
	GLA targets set in 2013	Recalculated targets	Performance to date (September 2016)	Expected performance by July 2017
Retrofitted homes	175,000	40,100	18,823	26,798
Capital expenditure leveraged £m)	£352	£81	£78	£111
Carbon savings (tCO ₂ per annum)	93,000	21,300	17,281	24,063



5. Programme support

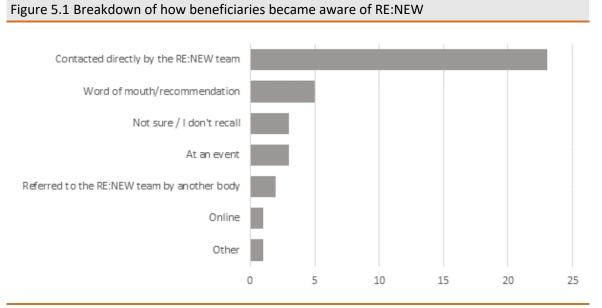
5.1 This chapter provides an assessment of programme delivery including marketing, project support process, main delivery strands and the supplier framework.

Programme marketing

- 5.2 The programme's marketing and communications plans sets out three main objectives: promoting opportunities, influencing decisions, and supporting delivery.
- 5.3 The first and second can be seen as linking directly to delivery of the support plans target, while the second and third also contribute to supporting more plans to be converted into contracted projects. In the sections below we consider key aspects of programme marketing delivery, then assess the overall achievement against these three objectives.

Awareness of RE:NEW phase three

- 5.4 Marketing was seen as an important part of the programme's strategy to increase awareness amongst clients regarding the breadth of services on offer and to influence their decision making around domestic energy efficiency retrofit projects.
- 5.5 The chart below highlights the feedback from the beneficiary survey, indicating where beneficiaries reported first hearing about the programme. The chart clearly highlights that the majority of beneficiaries became aware of RE:NEW through direct contact with the RE:NEW team (63 per cent). Other lead generation has come from word of mouth and awareness-raising at events.



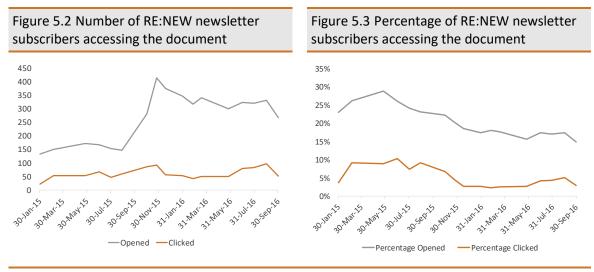
Source: Regeneris Consulting Web Survey, 2016. 38 Responses.

Monthly newsletter

5.6 RE:NEW currently distributes a monthly newsletter via email to almost 1,800 subscribers at the last monthly count. The figures below show the total number and percentage of subscribers that opened the email and clicked the link to access the newsletter, illustrating that the newsletter has



reached a growing audience of stakeholders over time. However, a diminishing percentage of this larger group were opening the newsletter email. This suggests that this marketing approach remained valuable to the audience, although there were diminishing returns as the subscriber base grew (i.e. there is a core group of stakeholders who got most value from this).



Source: GLA Data Collection

N.B – Opened - refers to the email containing the newsletter being opened. Clicked - refers to the hyperlink within the email being opened.

5.7 The RE:NEW newsletter attracted mixed feedback from different stakeholder consultees with some indicating that it helped maintain awareness of the programme to a wide range of stakeholders and supported knowledge transfer as part of a wider capacity building benefit that the programme delivers. Others, however, felt that it was a potential distraction from the main focus of the programme and added limited value to the ultimate objectives, using resources which could have been invested elsewhere¹⁵.

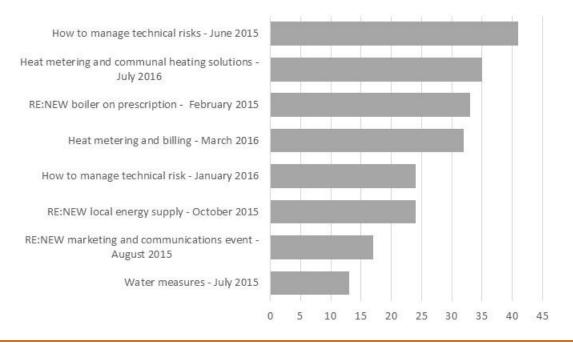
Events programme

- 5.8 Events have also been used by RE:NEW as a means of best practice sharing and to enable conversations to take place between stakeholders. In total RE:NEW has held eight events up to September 2016, with a total of over 200 attendees. Figure 5.4 below details the breakdown of attendance at each event. Members of the RE:NEW team, from both GLA and Capita have also spoken at 25 events and attended many others, providing a further means to increase awareness of the RE:NEW programme.
- 5.9 The events helped to build capacity and knowledge in energy efficiency retrofit among the attending stakeholders, but also provided an important opportunity for the RE:NEW support team to gain face to face time with potential clients. Given that Figure 5.1 shows direct contact by the team was the main route to engaging beneficiaries, the events represent an important opportunity to establish those relationships in order to engage beneficiaries.

¹⁵ Capita estimate that the total cost of newsletter production to date has been around £66,000 (approximately 3% of total programme spend to date)



Figure 5.4 Numbers of attendees at RE:NEW events between February 2015 and September 2016



Source: GLA

Published materials

- 5.10 In terms of the quality of the marketing material used, feedback on the whole was generally positive. Consultees referenced the consistent and identifiable brand image of RE:NEW documents and web content as being effective in establishing programme quality and raising awareness.
- 5.11 However, a number of consultees highlighted potential weaknesses:
 - there was a lack of clarity for some around exactly what the role of RE:NEW was particularly amongst local authorities and housing associations which had not engaged with the programme. Some still linked the programme name to earlier phases of the scheme, not recognising the significant change to the support offer under phase three
 - the name RE:NEW was noted by some as adding a degree of confusion, as the name does not explain immediately what the programme is trying to achieve
 - the approach of setting out ten specific service areas was also felt to be offering too much information, which has affected overall clarity of the offer, and was not the most effective way of conveying the programme's offer. As such, over the course of the delivery period, the support team increasingly sold the expertise of their team, breadth of expertise and past projects they have delivered to best introduce and explain the offer
 - one of the main challenges in selling the programme was that the primary aim of the scheme, to make CO₂ savings, did not fully resonate with clients, who prioritised cost savings and addressing fuel poverty over this aim
 - much of the marketing material appears to have been targeted at officer level as opposed to senior managers and decision makers. However, as the delivery context has shifted, the business case for investment has become more difficult to make due to reduced national policy incentives to invest in domestic retrofit and increased financial pressures on



potential delivery organisations. As such, this latter audience has been increasingly important.

Summary of programme marketing

5.12 The table below sets out a summary of achievement against the three marketing and communication plan objectives.

Table 5.1 Summ	nary of programme marketing achievements
Objective	Achievements
Promoting opportunities	 Broadly successful, programme engaged widely and used newsletters and events to establish and maintain relationships as well as support capacity building. From January 2016 the support team re-prioritised support to focus more on organisations already engaged, and so promoting opportunities to organisations not already engaged has been a lower priority.
Influencing decisions	 Several consultees felt this had been a weaker area for the programme. The more challenging delivery context made this an increasingly important element of the programme, and while the support team responded, for example by investing more in developing the business case for retrofit investment, there is scope for more to be done. Section 6 considers the role of the Sponsors Board for the programme which could potentially have played a greater role in supporting this objective.
Supporting delivery	 Promoting the successfully delivered schemes has been an increasingly important part of marketing the programme, and through the RE:NEW website, case studies are used to demonstrate the benefits of energy efficiency retrofit investment.

Support process

- 5.13 The main delivery process by which beneficiaries received support was relatively straightforward:
 - beneficiaries began by having a pre-scoping telephone consultation with one of the support team to explore initial needs and opportunities, and whether the RE:NEW scheme was able to provide support
 - those suitable for support then received a nominated engagement manager from the support team and had a detailed face-to-face scoping discussion
 - a support plan was then drafted, agreed and signed off, setting out the details of the project and the support that will be provided. This was then signed off by the beneficiary body
 - once the support plan was signed off, the support team would deliver the support required by the project, according to the support plan
 - the support team would then work with the project and monitor progress. In several cases, other support needs and project opportunities have arisen through this process, leading back to updates to the support plan.
- 5.14 Overall, the delivery process ran effectively despite the challenging market conditions. Several consultees highlighted that the process has been most successful where the support team has been able to develop in-depth engagement with clients over a longer period. This was important, as each stage of the project development and delivery process requires different specialist skills, and organisations low on capacity and expertise for this type of project have often found new gaps in capacity and expertise are identified at each stage of the process (prior to receiving support from RE:NEW).

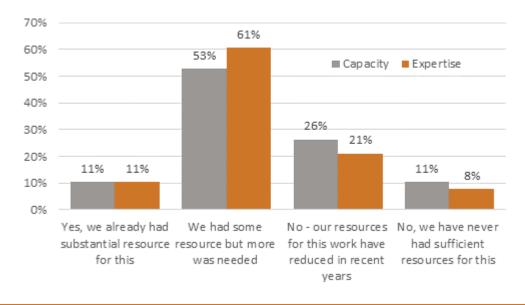


5.15 Of the beneficiaries consulted, a small minority said they would have paid for equivalent support through an alternative consultancy had it not been for RE:NEW (with those beneficiaries indicating they would have sought additional support around data analysis, procurement support, and quantification of costs and benefits). Beneficiaries did not indicate which organisations they would have sought support from.

Delivery strands

- 5.16 The RE:NEW programme was established partly to address capacity and expertise gaps in beneficiary organisations relating to domestic energy efficiency retrofit schemes. The beneficiary survey analysis in Section 3 showed that organisations engaging with the RE:NEW phase three programme had an average of between two and three full time equivalent employees working on energy efficiency retrofit, which suggests a basic level of capacity to support schemes was realistically required within organisations to take projects forward.
- 5.17 The survey also highlights that the large majority of organisations receiving support felt that they lacked sufficient capacity and expertise to deliver these schemes, and more than a quarter felt that this capacity had reduced over recent years.

Figure 5.5 Prior to receiving RE:NEW support did the respondent feel their organisation had sufficient capacity and expertise to effectively take forward domestic retrofit projects?



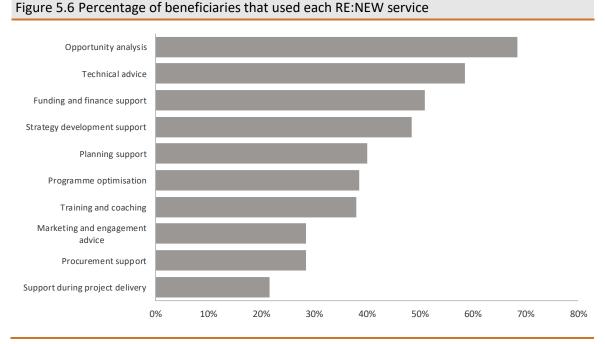
Source: Regeneris Consulting Web Survey, 2016. 38 Responses.

- 5.18 The RE:NEW programme marketed ten specific strands of support, although the support team has been highly flexible and offer any relevant support they are able to, to enable projects to be delivered.
- 5.19 Figure 5.6 below identifies the ten main strands of support and highlights the ones that were most widely taken up by beneficiaries, drawing on analysis undertaken by the GLA support team.
- 5.20 The analysis from stakeholders and beneficiaries highlighted a number of areas of support that have been highlighted as particularly beneficial:
 - **opportunity analysis**. The customer satisfaction data from the support team identified this as one of the best used services offered by RE:NEW and beneficiaries particularly highlighted the added value provided by use of the CROHM (Carbon Reduction Options for



Housing Managers) stock energy audit tool, used to help in assessing the most economically advantageous option for domestic energy efficiency retrofit across the stock. The opportunity analysis clearly ties into the information failure rationale, reflecting that the lack of detailed understanding about potential for energy efficiency savings (and related cost savings and reduced fuel poverty) remains an important barrier to be addressed

- programme optimisation. This activity area has also had a large amount of take-up from beneficiaries and reflects an increased emphasis on cost efficient delivery as budgets have become increasingly tightened for many of the beneficiaries. Optimisation enables domestic energy efficiency retrofit investments to be made alongside wider domestic maintenance activity, creating efficiency savings, with the RE:NEW team having supported beneficiaries to identify the optimal opportunities to incorporate this additional retrofit activity into planned maintenance schemes
- making the business case for investment. Over the course of the delivery period, as a range of national financial incentive and support schemes for domestic energy efficiency retrofit have been withdrawn or scaled down and the budgets of beneficiary organisations have been squeezed, it has become increasingly difficult for these organisations to make the case for investment. As a result this has become an increasingly important part of the RE:NEW offer (tied most closely to the strategy development support activity).
- Although these areas were the ones most frequently cited as having been particularly beneficial, a 5.21 range of other services were highlighted as important for different stakeholders, reflecting the need for, and benefits of, providing a wide umbrella of services.



Source: RE:NEW Customer Satisfaction Survey Data, 2015 and 2016. Note: Figures provided are an average of 2015 and 2016 – responses are not significantly different between the two years.

Other delivery strands

5.22 The innovation unit has played an important role in the delivery of phase three of the RE:NEW programme, reflecting the constantly evolving delivery context and the need to continue to generate new ideas which could be operationalised to help to deliver the programme's aims. The innovation unit had a nominated lead from the support team who convened meetings of senior



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officers in the team (from both GLA and Capita) to discuss new ideas and approaches. Where these were felt to be potentially beneficial, a more detailed business plan would be developed, and where this was felt to be viable, the ideas were operationalised. Over the course of the programme, the innovation unit identified and explored an estimated 25 new ideas, of which eight were operationalised. This has included a focus on solar PV installation, and more recently, a proposal to lead work aggregating demand across a range of beneficiaries for solar PV installation, which could then be reverse auctioned, to enable a more competitive price for the work, based on economies of scale.

- 5.23 The programme also provided a range of **online information and guidance**, available for download, to provide beneficiaries with a library of useful documentation. Although very comprehensive, the online materials were not widely accessed, with the most downloaded document only being accessed by 99 unique visitors between January and October 2016. The most downloaded documents over this period were:
 - RE:NEW Brochure (99 unique visitors)
 - Funding Guide (85 unique visitors)
 - RE:NEW Buyers Guide (42 unique visitors).

RE: NEW framework

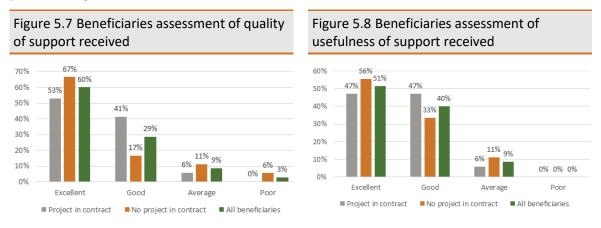
- 5.24 The framework was noted to be a sensible approach, particularly in terms of addressing the costly and resource intensive process of procurement for local authorities and housing associations facing increasingly tight budgets.
- 5.25 Key selling points of the framework include the following:
 - offers a framework of pre-qualified suppliers to save time and resources for organisations procuring retrofit services and works
 - tailored to meet the requirements of domestic retrofit in the public sector, with the flexibility to cover retrofit services or works as either a single measure, or complex projects with multiple measures
 - procurement guidance and support is available from the RE:NEW support team, to help develop the specification and answer any procurement questions
 - free to use for the client and contractor.
- 5.26 In practice, as described above, there has been a much weaker flow of projects reaching contract stage following support by RE:NEW than originally expected, and of the ones which have, several have used alternative frameworks which the organisations felt were more suitable. From the RE:NEW team's perspective, whichever route to procurement is felt to be most preferable for beneficiaries is supported by the team, so there has not been a concerted attempt to influence beneficiaries to use the RE:NEW framework.
- 5.27 Four framework contractors were consultees as part of the evaluation, and while the framework was recognised by these consultees as a sensible approach in principle, there were areas where they felt improvements could be made:
 - some felt the bidding process for the RE:NEW programme was more resource intensive than for other comparable frameworks
 - with only four contracts coming through the framework to date, there were some concerns among contractors at the relatively low level of work that had been commissioned through the framework, given the level of resource involved in bidding



- some were frustrated at having a number of assessment areas tested in the original framework which were then, in some cases, repeated for individual tenders
- it was highlighted that a lack of events focusing on bringing clients and contractors together had been a missed opportunity to instil a better understanding of the commercial realities amongst beneficiaries.
- 5.28 Other frameworks including Scape, Green Services Hub, LHC and Fusion 21 were quoted as examples of good practice where there is a stronger approach to marketing and bringing contractors and clients together. This reflects that these frameworks are being run on a commercial basis and so have larger marketing budgets available, whereas RE:NEW has been run at no cost to client or contractor.
- 5.29 Additionally, use of the framework was not a specific objective for the RE:NEW programme, so in practice resources were focused on delivering retrofit projects, regardless of whether those projects used the RE:NEW framework or an alternative.
- 5.30 An overview of a number of alternative frameworks and their benefits is set out in Appendix D.

Summary of programme delivery

5.31 Across all services delivered, 89 per cent of beneficiaries rated the quality of support as good or excellent (with the majority stating excellent), and 91 per cent rating the usefulness of support provided as good or excellent.

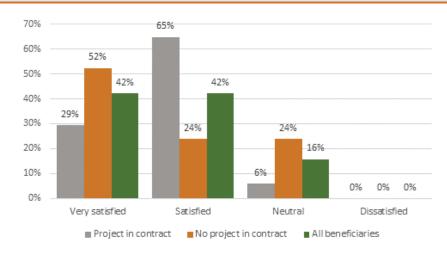


Source: Regeneris Consulting Web Survey, 2016. 35 Responses

5.32 Beneficiaries also rated their overall satisfaction with the services received from RE:NEW, with over 80 per cent highlighting that they were satisfied or very satisfied, and no beneficiaries reporting they were dissatisfied with the services received.



Figure 5.9 Beneficiaries satisfaction levels of services received



Source: Regeneris Consulting Web Survey, 2016. 35 Responses.



6. Management and governance

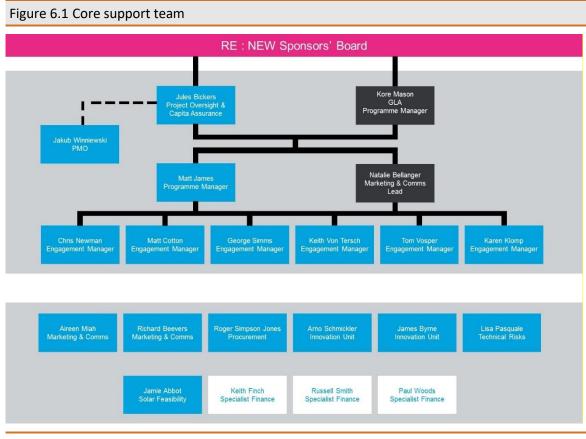
- 6.1 The main management and governance resources and structures for the RE:NEW phase three programme can be summarised as follows:
 - the programme is led by a programme manager, with support from a project manager within the GLA Housing and Land Directorate. These officers are based at the GLA but also operate a hot-desking approach at the main delivery contractors, Capita
 - delivery of the main contract services was openly tendered, with Capita successfully commissioned to lead this work. Capita put in place a team of approximately 25 staff to work on the programme, with six sub-contractors providing specialist additional services (some of which were appointed at a later stage of the programme in response to changing needs and opportunities). Based on actual time spent on delivery, this has equated to around seven full time equivalent posts
 - the programme is overseen by senior staff within the GLA Housing and Land Directorate, with reporting channels upward to senior levels within the GLA
 - in addition, a Sponsors Board which had been put in place for previous phases of RE:NEW was retained, involving a range of expert partners from related bodies, with an aim to support the strategic steering of the programme, provide critical challenge on progress and champion the programme externally
 - the programme also produces bi-yearly reports to the European Investment Bank, as a primary funder, and held quarterly update meetings with the then Deputy Mayor for Housing and the then Deputy Mayor for Environment and Energy. Additional scrutiny of the programme was provided through Mayor's Question Time and other London Assembly channels, as required over the course of the programme.
- 6.2 The main evaluation findings refer to the effectiveness of the support team (including the GLA and Capita teams), and to the Sponsors Board, which are discussed in more detail below.

Support team

- 6.3 The changing nature of the delivery context over the programme period has meant that the team has needed to be able to respond quickly and be flexible to evolving needs and opportunities for domestic energy efficiency retrofit. The evolution of the offer, use of the innovation unit for ideas generation and implementation of these ideas all reflect that the team has been successful in their role.
- 6.4 Feedback from stakeholders consulted has been very positive about the capabilities of the core support team. As shown in Figure 5.7 above, beneficiary satisfaction with the quality of technical knowledge deployed by the team has been very positive.
- 6.5 The working relationship between the GLA and their contractors, Capita, has been felt to be very positive from both sides, with a clear sense of trust and autonomy allowed to Capita, and sensible use of hot-desking for GLA staff within Capita which has often helped to enable quick decision making. Monthly team management meetings have been used to ensure a strong focus on key indicators and progress across pipeline projects.
- 6.6 A number of consultees have highlighted that while the support team has been very strong on technical support, engaging primarily with officer level staff, the programme may have benefitted from having more senior inputs from both Capita and the GLA, engaging with more senior decision



makers within beneficiary organisations (i.e. London boroughs, housing associations and universities). This might have allowed the programme to have a greater effect in influencing and making the case for new energy efficiency retrofit at strategic levels, which has become increasingly difficult over the course of the delivery period. To a large extent, the success of this also relies on the strength of the underlying business case, which the support team have been working to develop further in light of the national policy changes.



Source: GLA

Sponsors Board

- 6.7 The Sponsors Board was set up to:
 - advise on strategic direction and provide strategic challenge to the support team
 - represent the views and expectations of key stakeholders, consult with wider stakeholder networks on strategic issues and advise on engaging with stakeholders
 - use influence and authority to assist the programme in achieving its outcomes, including gaining support and feedback among Leaders, Chief Executives and other senior stakeholders
 - assist with communications and be a voice to the outside world.
- 6.8 The Sponsors Board has met quarterly over the course of programme delivery, with meetings typically lasting around one hour.
- 6.9 While the membership of the Board is broad ranging (including representatives from GLA, Capita, London boroughs, London Councils, National Housing Federation and housing associations), attendance has not been strong or consistent, and consultees broadly agreed that the meetings



have become more of a progress update session, rather than offering the strategic direction and critical challenge originally envisaged.

- 6.10 There is a common view that the Board has not delivered to its potential. Much of the frustration with the lack of activity stems from the Board having no decision making powers. As a GLA programme, all decision making for RE:NEW phase three is internal to the GLA, meaning the Board can only be advisory. Without the ability to make decisions and steer the programme, several attendees highlighted there is little sense of ownership of the programme, and without this, interest has reduced.
- 6.11 While certain members of the Board, including the Chair, were noted as having championed the programme externally and been proactive in offering support, this has not happened consistently across all members.



7. Programme impacts

Methodology and sample

- 7.1 The primary modelling of programme impacts is around the economic value of carbon savings, based on estimates provided by the GLA. The analysis draws on responses from the beneficiary survey on programme additionality and government guidance on valuing carbon savings and discounting future benefits¹⁶. Wider impacts are considered separately following the main impact assessment.
- 7.2 It should be noted that no targets for net additional impacts were set, either by GLA or EIB, and that based on a search of available evidence, we have found no similar energy efficiency technical assistance programme for which there is comparable evidence of net additional impacts, to benchmark RE:NEW against.
- 7.3 Our economic impact model derives estimates of gross lifetime reduction in CO₂ emissions from programme data and applies an assessment of net additionality based on beneficiary survey responses. Using national valuation data on the value of carbon emission reduction, a value is placed on the net additional carbon emission reductions, from which we estimate value for money of the RE:NEW programme to date.
- 7.4 Our approach to moving from gross to net is summarised below.

Deadweight

- 7.5 Deadweight assessment considers the gross impacts that would have happened anyway without any intervention from the RE:NEW programme. The net additional impacts focuses on impacts that only occurred because of the RE:NEW programme. The beneficiary survey explored the extent to which the support from RE:NEW helped projects to:
 - come forward more quickly than they otherwise would
 - be delivered at a larger scale than they otherwise would
 - deliver greater levels of carbon emissions than they otherwise would.
- 7.6 The economic impacts from the first two elements were negligible¹⁷, and therefore the deadweight assessment is based on the third element the carbon emission savings which would have occurred without the programme, and conversely, the additional carbon emission savings achieved as a result of the support received from RE:NEW.

Leakage

- 7.7 Leakage assessment considers the extent to which the economic value generated takes place outside of the main area being considered by the evaluation.
- 7.8 The value of carbon emission reduction is estimated as a national societal value, and as a result there is no consideration of leakage of impacts outside of the area considered within this analysis.

¹⁷ No projects indicated that the RE:NEW support helped to increase the scale of the project delivered; around 38% suggested that RE:NEW programme helped the project to come forward slightly more quickly, however the economic value of this was negligible.



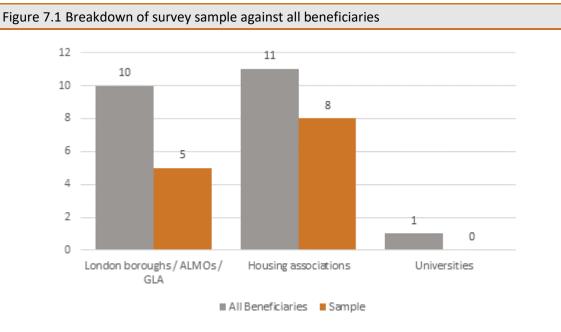
¹⁶ DECC (December 2015), Valuation of energy use

Displacement

- 7.9 Displacement takes into consideration how support to the programme's beneficiaries would result in reduced activity elsewhere. Based on the nature of this support programme, it is assumed that the activities delivered did not displace any projects delivering carbon emission reductions elsewhere, so there is assumed to be no displacement effect.
- 7.10 Net additional carbon savings attributable to the RE:NEW programme are therefore based on netting deadweight carbon savings off from the gross carbon savings estimated by projects delivered.

Summary of sample

7.11 The impact analysis has used data gathered only from those organisations with projects in contract. Of the 22 organisations having at least one project in contract, the survey engaged with 13. The chart below shows a breakdown, reflecting a relatively good split across different types of organisation.

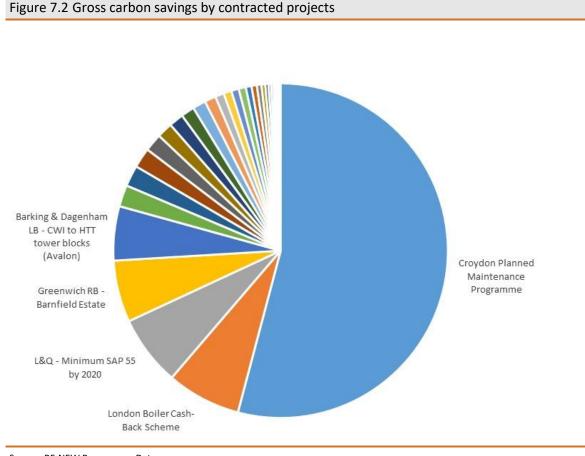


Source: Regeneris Consulting Web Survey, 2016.

- 7.12 Notably, one organisation accounted for more than half of all gross lifetime carbon savings recorded by the programme to date, with the top five accounting for almost 80 per cent of gross carbon emissions. These main projects are shown in the chart below.
- 7.13 Importantly, the survey did engage with the one organisation which accounted for more than half of all carbon savings, helping to maximise robustness of the analysis.
- 7.14 In the following section, net additional impacts are presented for the sample of beneficiaries with projects in contract surveyed (13 beneficiaries) and estimated for all beneficiaries with projects in contract receiving assistance (22 beneficiaries). The beneficiaries that have been consulted account for 79 per cent of the gross carbon emission reduction across all projects.
 - The **sample impacts** refer to the impacts reported directly by the 13 organisations which participated in the beneficiary survey.



• The impacts relating to **all beneficiaries** have been estimated by grossing up the sample impacts to reflect the 22 beneficiaries with projects in contract which have received support from the RE:NEW programme by the end of October 2016.



Source: RE:NEW Programme Data

Statistical validity of results

- 7.15 The beneficiaries surveyed account for 79 per cent of all gross carbon emission reductions, providing a high level of confidence in the robustness of findings.
- 7.16 However, when quantifying the scale of deadweight impact a number of respondents were unable to specify the scale of additional carbon savings achieved due to the support received from RE:NEW. As such, we have included a base-case using an average of responses from other beneficiaries. However, we have also added some sensitivity analysis for this important assumption (included at Appendix E).



Carbon savings¹⁸

Gross carbon savings

- 7.17 The gross carbon savings from RE:NEW have been collected and provided by the RE:NEW programme team. These are based on the estimated annual carbon savings data by type of retrofit measure and the expected lifetime of each measure (taken from the Energy Company Obligation (ECO) scheme) to generate a lifetime carbon saving for each project.
- 7.18 The latest monitoring data from the GLA (to end October 2016¹⁹) outlines that to date, the projects in contract supported by the RE:NEW programme phase 3 will generate annual savings of 18,300 tonnes of CO₂ which translates to total lifetime savings of 337,000 tonnes of CO₂.

Net additional carbon savings

- 7.19 Of the 22 beneficiaries with one or more projects in contract, 13 responded to the beneficiary survey.
 - All 13 respondents stated that if there had been no support received from RE:NEW, the project would still have gone ahead.
 - Six respondents stated that if there had been no support from RE:NEW, the project would have still delivered the same level of lifetime carbon emissions savings. Seven stated that the RE:NEW programme had led to an increase in carbon emissions savings than there would otherwise have been.
 - Where there was an increase in lifetime carbon emissions savings, those beneficiaries were asked to estimate the proportion of additional carbon savings that could be attributed to the support received from the RE:NEW programme. Four were able to quantify this, while three stated they were unable to estimate.
 - In the table below we model the net additional carbon savings, using an assumed 31 per cent net additionality for those beneficiaries which identified that the RE:NEW programme had helped to increase lifetime carbon emissions savings, but were unable to estimate the impacts of this. 31 per cent is based on an average of the other responses. We have also sensitivity tested this assumption (included at Appendix E).

¹⁹ Note, while the main analysis of output data took the end of September as a cut-off point, the data for impact analysis was slightly extended to allow for more data to be included, increasing robustness of findings.



¹⁸ A parallel piece of analysis was undertaken by GLA Economics calculating that the discounted cost per gross tonne of carbon abated as a result of RE:NEW Phase 3 has been £351. However this analysis was based on gross carbon savings rather than net additional savings, and took into account all public investment across schemes, rather than just the investment in the RE:NEW programme in isolation. As such the GLA Economic analysis is not comparable to the analysis set out here.

Table 7.1 Net additional carbon savings					
	Beneficiaries	Projects	Gross lifetime carbon savings	Net additionality	Net additional lifetime carbon savings
Beneficiaries where RE:NEW did not enable additional carbon savings	6	12	44,157	0%	0
Beneficiaries where RE:NEW enabled additional carbon savings - able to quantify this	4	4	9,892	31%	3,098
Beneficiaries where RE:NEW enabled additional carbon savings - unable to quantify this	3	4	212,343	assumed 31%	66,491
Beneficiaries where RE:NEW enabled additional carbon savings	7	8	222,235	31%	69,589
Total sample	13	20	266,392	26%	69,589

Table 7.1 Net additional carbon savings

- 7.20 Taking account of both the beneficiaries for which there was no additional lifetime carbon emission saving benefits as a result of RE:NEW, and those for which there is an estimated 31 per cent additionality, this creates an average additionality across all projects of 26 per cent.
- 7.21 The estimated net additional lifetime carbon savings of the sample are therefore estimated at around 69,600 tonnes of CO_2 across the lifetime of interventions.
- 7.22 Based on a search of available evidence, we have found no similar energy efficiency technical assistance programme for which there is comparable evidence of net additional impacts, to benchmark RE:NEW against.

Total programme net additional lifetime carbon savings

7.23 To calculate the total lifetime carbon emissions reductions of the programme, using the sample data, we need to scale up the lifetime carbon emissions savings in proportion to the gross lifetime carbon savings of the programme as a whole. This is summarised in the table below.

Table 7.2 Scaling up sample to all programme savings				
	Sample	All Beneficiaries		
Number of beneficiaries	13	22		
Number of projects	20	30		
Gross carbon savings (tonnes)	266,392	337,367		
Net additionality	26%	26%		
Net additional carbon savings	69,589	88,129		

7.24 The estimated net additional lifetime carbon savings across all beneficiaries are therefore estimated at around 88,100 tonnes of CO₂ across the lifetime of interventions.



Economic impact and value for money

- 7.25 The government has set carbon values that should be used in policy appraisal and evaluation of energy efficiency projects²⁰. In order to correctly value changes in emissions, the projected changes in carbon emissions resulting from a programme or policy proposal must be mapped to either the traded (that is those emissions covered by the EU Emissions Trading System, EU ETS) or the non-traded sector (those emissions not covered by the EU ETS)²¹. All direct fuel consumption by households is classified within the non-traded carbon emissions sector.
- 7.26 The carbon pricing is set out in the table below, and we have applied these to the total net additional carbon savings as a result of the RE:NEW phase three programme.

Table 7.3 Carl	Table 7.3 Carbon prices (f/tCO_2e) and value of carbon savings (fm)				
	Department of Energy and Climate RE:NEW additional Non-discounted				
	Change non-traded carbon price, 2016	carbon savings	value of savings		
	(£/tCO2e)		(2016 £millions)		
Low	32		£2,820,141		
Central	63	88,129	£5,552,154		
High	95		£8,372,295		

Source: Government green book guidance and Regeneris model

Note: Estimates are based on a range of assumptions around carbon pricing and estimated savings.

- 7.27 Taking the central price of the non-traded carbon price of £63 per tCO₂, the total non-discounted value of carbon savings generated through the RE:NEW programme is estimated to be £5.6m.
- 7.28 Sensitivity analysis is set out in Appendix E to consider the impacts at the low and high carbon values.

Discounted benefits

- 7.29 When comparing costs and benefits that occur in different time periods, we must apply a discount rate to convert all costs and benefits to 'present values', based on the principle that generally people prefer to receive goods and services now rather than later. The Government Green Book guidance recommends a discount rate of 3.5 per cent, which we have applied to the monetary value of future carbon savings over the weighted average project lifetime of the measures implemented to date. The net present value is the difference between the estimated present benefits and present costs of the RE:NEW programme.
- 7.30 The table below illustrates the estimated net present value of the lifetime benefits generated from the RE:NEW programme investments to date.

Table 7.4 Calculating the net present value		
Principle	Value (£ millions)	
Present cost	£2.15	
Estimated present benefits	£3.65	
Net present value (benefits – costs)	£1.50	

²⁰ See data table 3: https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-forappraisal

²¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/483278/Valuation_of_energy_use_and_ greenhouse_gas_emissions_for_appraisal.pdf



7.31 Based upon the main analysis the programme has delivered a positive net present value of £1.50m.

Value for money

- 7.32 Value for money is assessed by comparing the net present benefits delivered by the scheme and the net present delivery cost of the scheme.
- 7.33 On that basis, the programme has generated £1.70 of value in carbon emission savings for every £1 invested. This represent a positive return on investment, as the value generated by the programme is higher than the costs incurred.

Wider impacts

- 7.34 Although the main focus of the RE:NEW programme has been on reduction in carbon emissions, a range of wider benefits can be associated with energy efficiency retrofit investments.
- 7.35 At this stage of the programme, the beneficiary survey has suggested that all of the projects supported would have gone ahead without the support received, and although carbon emissions savings were greater as a result of RE:NEW, these wider benefits may not have been. Given the unknowns involved in this, the evaluation has not attempted to quantify the net additional benefits from these wider impacts, however the potential benefits are discussed in the table below.
- 7.36 These include: reduction in energy use, job and economic value creation, reduction in fuel poverty, and savings in health spending due to improved health of residents, and impacts on water efficiency.

Table 7.5 Summary of wider impacts of RE:NEW				
Type of Impact	Summary of Impacts			
Reduction in energy use	 This evaluation has not incorporated a net additional analysis of reduction in energy use, however energy savings would provide additional benefits. 			
	 At the end of September 2016 the contracted projects supported by RE:NEW were delivering annual energy saving of 57,700 MWh. 			
	 The net additionality of this was not assessed through this evaluation, however this measure could be quantified as part of future programme evaluation, in line with recent GLA appraisal guidance²². 			
Jobs and economic value	• Programme data suggests that projects supported by RE:NEW have led to over 2,100 person years of employment being supported.			
	• However, as all consulted beneficiaries with projects in contract identified that projects would have gone ahead without support from RE:NEW (albeit delivering lower carbon savings), we cannot assume any of these jobs supported are attributable to the RE:NEW programme.			
	 Clearly if RE:NEW had supported projects to contract which would not have otherwise gone ahead, then these job impacts would have represented an additional positive impact of the scheme. 			
Reduction in fuel poverty	 Although fuel poverty was not the primary focus of the RE:NEW programme, the support team has used a proxy to estimate the number of fuel poor households which have been supported by RE:NEW backed interventions, and brought out of fuel poverty. 			
	 Based on the gross number of households supported, the support team estimates show a total of over 2,500 households are expected to have been lifted out of fuel poverty through interventions backed by RE:NEW. 			

²² GLA Economics (November 2016) Mayors Energy Efficiency Programmes: Methodology to the value for money assessments



Type of Impact	Summary of Impacts
	 Again however, the specific net additional benefits of this have not been assessed through this evaluation.
Health spending savings	 A number of studies have been undertaken analysing the economic value of health savings from investment in energy efficiency retrofit, including a study from the University of Ulster, estimating this value at a saving of £0.42 per £1 investment. While this methodology has not been analysed or attempted to be reproduced in this evaluation, it is clear that there is significant scope to generate highly valuable health savings which are in addition to the benefits linked to carbon emissions, and these could be quantified as part of future programme evaluation. Again, however, as all consulted beneficiaries with projects in contract identified that projects would have gone ahead without support from RE:NEW (albeit delivering lower carbon savings), we cannot assume any of these health benefits are directly attributable to the RE:NEW programme.
Water efficiency	 Although water efficiency was not a primary focus of the RE:NEW programme, a water measures service was offered to all organisations and through briefings, a water efficiency event and a newsletter article the programme has helped to raise awareness of water efficiency. In total, RE:NEW has supported the implementation of water measures in over 1,000 homes through a number of the organisations supported by the programme. As above, these cannot however be assumed to be net additional benefits of RE:NEW as these installations may have gone ahead anyway without the RE:NEW support.

- 7.37 The RE:NEW beneficiary survey revealed a number of wider impacts that are not captured through the economic impact analysis.
- 7.38 The majority of survey respondents reported that the RE:NEW services had some impact with respect to reducing delivery and implementation risk of their retrofit project, and enhancing value for money gained from their retrofit project.
- 7.39 Of these, the most common response from beneficiaries was that the RE:NEW services had a:
 - medium impact in reducing delivery and implementation risk of the retrofit project, and this was notably higher amongst those with projects in contract, which may reflect a greater importance of the support from RE:NEW in later stages of contracting
 - minor impact in enhancing value for money gained.



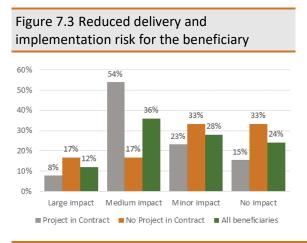
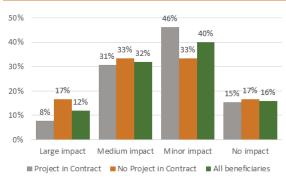


Figure 7.4 Improved value for money for the beneficiary



Source: Regeneris Consulting Web Survey, 2016. 25 responses

- 7.40 These wider benefits around RE:NEW reducing delivery and implementation risk is supported by the recently published 'Every Homes Counts' (also known as The Bonfield Review), jointly published by BEIS and DCLG in December 2016. Commissioned as an 'Independent Review of Consumer Advice, Protection, Standards and Enforcement,' the Review was focussed on how consumers families, couples and individuals can be protected and advised when they install energy efficiency and renewable energy measures in their homes.
- 7.41 The review argues that improvement in the customer journey requires a clear, recognisable and trusted source of information and advice, the availability and clear analysis of data to ensure energy efficiency measures are better targeted towards the right homes and that standards of installation need to be improved. These recommendations support the approach taken by the RE:NEW support team.
- 7.42 The RE:NEW support team addresses many of Bonfield's recommendations as they apply to the social housing sector which has been the main focus of RE:NEW. Core RE:NEW services including Opportunity Analysis, Programme Optimisation and Technical Advice, directly address the need to ensure that properties are targeted with the appropriate energy efficiency measures. The Technical Risk review service helps clients to ensure that works are properly specified and managed to reduce quality issues and manage risk. The Innovation Unit has helped to support business case development and uptake of emerging technologies and approaches such as solar PV, battery storage and Energiesprong²³.
- 7.43 An example of this was RE:NEW's work with a large social housing provider:
 - Their programme will survey 2,300 homes below the SAP target and install measures to improve the minimum SAP energy efficiency rating across their stock. It is based on an initial analysis from CROHM which identified properties likely to be under the target and presents a list of measures required to increase their SAP ratings.
 - The RE:NEW programme took this analysis further by applying its risk assessment matrix. This matrix assigns a risk value based on the measures required and how those measures interact on a property. On the back of this analysis, the support team were able to divide the properties into three categories:
 - high-risk properties involved solid wall insulation or had a high number of measures required

²³ A net-zero whole-house retrofit approach, developed in the Netherlands



- medium-risk projects had measures which could interact to create longer term problems
- low-risk properties required minimal measures for improvement.
- These categories provide the project manager at the housing association with a ready list of properties that will need close attention. The high-risk properties will be dealt with as a specific project within the overarching programme, while the medium-risk properties will require notification from the contractor before work is signed off.
- The project manager does not have a technical background so it was crucial to put in place a system to flag any properties for risks in a timely fashion.
- Ventilation was identified as the most significant risk within the programme and a comprehensive procurement specification for each measure, alongside a set of watch points that the contractor will follow to ensure a quality installation, was put in place.
- A system to flag properties that might be at risk of ventilation problems, based on the measures identified during the home survey, was also developed. This allows the housing association to manage a wide ranging programme that will lead to significant fuel bill savings. It also puts them in an excellent position to deliver deeper retrofits as their internal targets increase for future programmes.



Conclusions and recommendations 8.

8.1 This final section sets out the conclusions and future recommendations for the RE:NEW programme.

Conclusions

- 8.2 The table below summarises the initial aims and objectives for RE:NEW and provides a summary of achievement against these aims. For each aim and objective we provide an overall verdict of either: success, partial success, less successful or failure.
- 8.3 We subsequently explore the overall performance with respect to the relevance, effectiveness, efficiency and impact of the programme.

Original aims and	Programme achievements
objectives Overall aim: to maximise energy saving and carbon reduction in London's housing by providing support to local authorities, social housing providers and others to increase the value for money, scale and delivery speed of retrofit projects	 The programme's engagement with these beneficiaries (local authorities and social housing providers) has been strong, and the support offered has been flexible and highly valued. Although far fewer schemes have been delivered than originally anticipated, evidence suggests that the programme has helped to maximise energy savings and carbon reduction in London's social housing, in a challenging policy climate. With the lack of success and subsequent loss of Green Deal funding, it is recognised that supporting energy savings and carbon reduction in private housing through this programme has become extremely challenging, and as a result little progress has been made in this area. 76 per cent of respondents to the beneficiary survey said that support from RE:NEW has reduced the delivery risk for their project and 84 per cent identified it has improved value for money of their retrofit investment. Of the 13 beneficiary organisations which have projects in contract that completed the evaluation survey, five stated that the support has helped bring the project forward more quickly (by up to 18 months). However, none suggested the support has helped to increase the size of the project. Some of these projects have been downsized due to the changing delivery conditions, which may partly explain this. Verdict: partial success – energy savings and carbon reduction are significantly lower than GLA targets set for the programme. However, the national policy context (particularly the reduced availability of ECO funding) has significantly affected the ability of the programme to achieve those targets. Given this context, the programme has helped to maximise energy saving and carbon
Objective : To address the lack of technical expertise	 reduction in London's housing, though not to the extent that was originally envisaged. Gaps in capacity and expertise to deliver retrofit interventions appear to have increased over the course of the programme, making this
and (increasingly) capacity within many boroughs and housing associations	objective more important than it was at the outset. 89 per cent of beneficiaries feel they lack all of the capacity and expertise needed to deliver domestic energy efficiency retrofit projects, and over 25 per cent highlight that this capacity has reduced in recent years.



e

Original aims and objectives	Programme achievements
	 The quality and usefulness of the support received from the RE:NEW programme is rated very highly by beneficiaries, with around 90 per cent describing this as good or excellent. Verdict: success – RE:NEW delivers a comprehensive programme of high quality services, helping to meet clear gaps in capacity and expertise among local authorities and housing associations, to enhance delivery of domestic energy efficiency retrofit projects.
Objective : To streamline the procurement and delivery of domestic retrofit by providing a bespoke framework of suppliers to enable projects to be procured quickly, simply and efficiently	 The supplier framework has been successfully established. However, while valued by beneficiaries, it has been used far less than originally anticipated. This partly reflects the lower number of projects getting to contract, but also that several contracted projects have opted for alternative procurement routes. Of the nine framework contractors, four were consulted as part of the evaluation, and alongside some beneficiaries identified how the framework could be improved. This includes: eliminating duplication (where information is requested to get onto the framework, then sought again for individual tenders), improving marketing and increasing the amount of work being tendered through the framework. Verdict: less successful – although broadly supported by
	stakeholders, the framework has been underused and has provided limited overall value to phase three of RE:NEW, particularly given the resources involved in setting it up and managing it.
Objective : To attract external investment and maximise London's share of Government subsidy	 The programme has exceeded its investment leverage target for the ELENA funding, but has fallen far short of the targets set by the GLA. However, the major changes to national policy, including to ECO and Green Deal funding, have meant that Government subsidy and finance opportunities have been substantially lower than originally anticipated, with Green Deal failing to yield what was expected and then being terminated, and ECO funding lower than had been expected when RE:NEW phase three was designed.
	 Reductions to solar PV feed in tariffs and the additional pressure on local authority funding and the one per cent a year rent reductions for housing associations has also substantially reduced the opportunity for these partners to develop projects and subsequently to invest capital into them. Based on the recalculated targets, £81m was identified as being a realistic target for capital expenditure leveraged. By September 2016, the programme has leveraged £78m, and is projected to exceed this recalculated target by the end of the programme. Verdict: partial success - the programme has helped to maximise leverage in the context of the reduced subsidies available (the opportunities for which were significantly lower than when the programme was devised).

Relevance of the programme

- 8.4 The fundamental challenge that the programme has faced has been the significant change in national policy, upon which the programme rationale was based.
- 8.5 Closures or scaling down of ECO, the Green Deal and feed-in tariffs, as well as increased pressure on local authority and housing association budgets, have changed the inherent business case to



invest in domestic energy efficiency retrofit and the opportunities for organisations to finance such investments.

- 8.6 At the outset of the programme, the Government subsidy and financing available provided a relatively strong business case for investment. This meant that the main focus of the programme when it was devised was to support organisations to fully understand and overcome the technical challenges to delivering schemes.
- 8.7 Over the course of the programme, however, this business case has become more difficult to make, and so more time has been dedicated to identifying cost-efficient opportunities for retrofit schemes (i.e. the programme optimisation strand) and developing bespoke business cases for investment.
- 8.8 For this technical assistance model to remain relevant over the coming years, there is likely to be a need to include other support activities which have been less prominent so far but which can help to:
 - support more compelling business cases for investment among housing associations and local authorities, in order to generate a stronger pipeline of potential beneficiaries which want to invest, and simply require support to make it happen
 - provide financial opportunities to enable investments to go ahead, as even with a clear business case for investment, the potential beneficiary organisations for this programme face significant budgetary challenges, and so require a realistic financing opportunity to help them make the decision to invest (e.g. access to low interest loans or energy performance contracting).

Effectiveness of the programme

- 8.9 Programme effectiveness relates to the extent to which the activities delivered by the programme led to the intended scale and type of outputs.
- 8.10 The evaluation found that the support delivered by the programme has been effective in delivering the types of outputs expected, although not at the scale needed to meet the GLA targets.
- 8.11 The marketing and engagement approach has largely been successful in engaging London boroughs and housing associations, with 69 support plans having been agreed, a newsletter circulation audience of 1,800 built up and over 200 stakeholders having attended events.
- 8.12 Similarly, the range of support on offer has largely met the needs of beneficiaries throughout the development of projects, and is rated very highly in terms of quality and usefulness. Beneficiaries have not suggested the support available left any substantial gaps.
- 8.13 The framework, although used relatively rarely, is still recognised by stakeholders as a useful resource.
- 8.14 The programme cannot be expected to achieve the original GLA targets, given the significant changes to the policy context. In particular, the level of ECO funding that the programme can be expected to secure is only about a quarter of that originally envisaged when the original targets were devised. In terms of the recalculated targets based on this more realistic level of ECO, the programme has performed well.



Efficiency and impact of the programme

- 8.15 It is estimated that the programme has delivered a net additional impact²⁴ of around 88,100 tonnes of CO₂ saved, equivalent to a net present value²⁵ of £1.5 million.
- 8.16 Based on the delivery costs of the scheme, this represents £1.70 of value generated for every £1 of public expenditure invested.
- 8.17 These figures are subject to sensitivities around the value of carbon and the net additionality assumption used in the modelling (which was based on a relatively small number of respondents able to estimate the scale of effect that RE:NEW had on their project²⁶).
 - In the worse cases of this modelling, the net present value is negative, with the lowest figure being -£870,000 (equivalent to a return of £0.59 for every £1 invested).
 - In the better cases, the figures are significantly higher, with the highest figure modelled being +£3.35m (equivalent to a return of £2.56 for every £1 invested).

Recommendations

- 8.18 Substantial progress in domestic energy efficiency will be vital, particularly as London works towards meeting the Mayor's target of being a zero carbon city by 2050. The rationale for GLA investment in a programme to support domestic energy retrofit is therefore stronger than ever.
- 8.19 London boroughs, ALMOs, housing associations and universities remain critical partners in coordinating and delivering domestic energy efficiency retrofit across social, private rented and owner occupied housing, and the gaps in capacity and expertise across all of these bodies is still large. As such, there is a continued justification for the GLA to provide support for their domestic energy efficiency retrofit activities.
- 8.20 Based on the findings of this evaluation, the must-get-right factors for a successor programme are as follows:
 - **ambition** given the scale of the decarbonisation challenge, the GLA's domestic energy efficiency retrofit programmes need to be ambitious and maximise their additional carbon emission savings
 - fitness for purpose the establishment of the Mayor's overarching Energy for Londoners (EfL) programme will yield new opportunities to increase domestic energy efficiency retrofit in the capital. The shape and structure of EfL is currently in development. However, this could, for example, include new policy incentives, financing solutions, and delivery vehicles which a successor programme to RE:NEW could capitalise upon. A successor programme therefore needs to be fit for purpose, building on this new delivery context, and drawing on evidence of what works from RE:NEW phase three and other programmes
 - wide engagement designing an effective successor technical assistance programme requires detailed insights into the specific capacity, needs and future investment plans of key organisations (such as London Boroughs ALMOs, housing associations and

²⁶ Four out of seven respondents identifying that RE:NEW had helped increase carbon savings were able to quantify this.



²⁴ Net additional impact refers to the impact that can be directly attributed to the programme. This excludes impacts that would have been achieved anyway without the support received from the programme.

²⁵ Net present value takes into account all of the costs and benefits delivered by the programme that can be quantified. Net present value can be positive or negative, with a positive net present value meaning that the benefits were greater than the costs of the scheme.

universities), as well as their buy-in from the design stage, to ensure the programme is able to be delivered successfully in collaboration with these bodies

- development of output and impact measurement the outputs used to measure progress of the programme ultimately play a significant part in how the programme is delivered, and so getting this right is critical. The evaluation highlights that fuel poverty was not a key measure of this programme. However, given the Mayor's aim to tackle fuel poverty, and the feedback from some consultees that it should have a greater focus in any successor programme, this needs to be factored into future indicators. Similarly the addition of a 'net additional carbon savings' indicator could help to sharpen the focus of the programme on projects which might not have gone ahead without RE:NEW and where the greatest value can be added. Targets set for a successor programme should be based on an understanding of what was achievable in this phase of RE:NEW.
- governance that works as a GLA programme the overall governance and decision making for the programme needs to happen within the GLA. For the RE:NEW phase three programme, an external Sponsors Board was retained from previous phases of RE:NEW. However as this lacked direct decision making, interest in attending has waned. The stakeholders involved are potentially important influencers and champions for the programme and domestic energy efficiency agenda. Future governance therefore needs to continue to engage this group (and other potential influencers and champions) and harness their contributions in an effective way.

Recommendations for the remainder of RE:NEW phase three

- 8.21 At the time of the evaluation, eight months remain of the current phase of the RE:NEW programme. This means that there are still opportunities to further adapt delivery, in order to enhance the overall programme outputs and impacts, but also to further analyse and develop plans for a successor programme to support domestic energy efficiency retrofit.
- 8.22 In particular, the following recommendations are proposed for the remainder of this phase of the programme:
 - continue to prioritise more intensive engagement with the projects most likely to come to fruition, to ensure all beneficiaries are organisations which have capacity gaps that are constraining the development of their projects (i.e. ensure the focus is on creating net additional benefits)
 - 2) **further explore opportunities to build the business case for interventions**, building on the team's more recent work in this area, in particular the business case development work with Orbit Group. As part of this, it is important to consider what is most vital in making this business case to potential programme beneficiaries and how bespoke business plans for retrofit investment for individual organisations can be developed in the most cost-effective way
 - 3) review the role of the RE:NEW Sponsors Board to consider better ways to harness the knowledge, contacts and influence of Board members. The Sponsors Board can continue to provide an important sounding board for the development of a successor programme over the next six months. However, it would also be useful to hold a session with the group to explore whether and how they would like to be involved with, and contribute to, the programme. This should include exploring their potential roles in intelligence gathering, influencing potential beneficiaries, championing RE:NEW and co-ordinating with other activities, as well as practical questions about how they would like to be kept



updated about the programme, how often they would like to meet, and how much resource they can offer to support the programme's aims

- 4) **explore the potential for greater engagement at a political level locally, to support local politicians to remain better engaged with the programme.** This could help to widen awareness and buy-in to the domestic energy efficiency retrofit agenda and help to broker new relationships and project opportunities across London. This might be considered across a number of GLA energy efficiency programmes, potentially led under the banner of Energy for Londoners
- 5) where practical, test potential new delivery approaches that could be part of a successor programme, which could include, for example, initiatives to drive greater solar PV deployment and trialling GLA's Energy Leap delivery model for zero energy retrofitting (akin to the Dutch Energiesprong²⁷)
- 6) **explore opportunities for better marketing of the procurement framework**, drawing on lessons that can be learned from other framework such as Fusion 21, Scape, LHC and Green Services Hub
- 7) **undertake further market research among potential beneficiaries** on their future plans for domestic energy efficiency retrofit and what they need from the programme to make them happen. This should be part of the engagement process in designing a successor programme, and the services delivered should respond directly to these findings.

²⁷ Energiesprong is a model of whole-home retrofit, tied to a particular procurement approach and payback method and with potential to link to wider neighbourhood regeneration.



Appendix A - Consultees

A.1 The stakeholders listed below have been consulted as part of this evaluation.

Name	Position	Organisation
Kore Mason	RE:NEW Programme Manager	GLA Buildings Energy Efficiency Team,
		Programme, Policy and Services Unit
		(Housing and Land Directorate)
Nathalie Bellanger	Retrofit Project Manager	GLA Buildings Energy Efficiency Team,
		Programme, Policy and Services Unit
		(Housing and Land Directorate)
Debra Levison	Senior Manager - Services,	GLA Programme, Policy and Services Unit
	Commissioning and Retrofit	(Housing and Land Directorate)
Matt James	Head of the support team	Capita
Keith von Tersch	Engagement Manager	Capita
Matt Cotton	Engagement Manager	Twin Earth (sub-contractor to Capita,
		providing RE:NEW services)
Richard Beevers	Head of support team's Marketing	Director, Customer Plus
	and Communications	
James Hardy	Strategic Programme Manager –	GLA Buildings Energy Efficiency Team,
	Energy	Programme, Policy and Services Unit
		(Housing and Land Directorate)
Virginie Caujolle-	RE:FIT Programme Manager	GLA Buildings Energy Efficiency Team,
Pradenc		Programme, Policy and Services Unit
		(Housing and Land Directorate)
Jamie Ratcliff	Assistant Director	GLA Programme, Policy and Services Unit
		(Housing and Land Directorate)
Andrew Richmond	Policy and Programme Manager	GLA Environment Team (Development,
		Enterprise and Environment Directorate)
Brooke Flanagan	Principal Policy Officer	GLA Environment Team (Development,
		Enterprise and Environment Directorate)
Niall Bolger	Chair (Chief Executive of LB Sutton)	RE:NEW Sponsors' Board (LB Sutton)
John Kolm-Murray	Chair (Seasonal Health and	ALEO (LB Islington)
	Affordable Warmth Co-ordinator in	
	LB Islington)	
Syed Ahmed	Director	Energy for London
Peter Smith	External Affairs Manager	National Energy Action
Steve Cole	Policy Leader	NHF
Katharina Winbeck	Head of Transport, Environment	London Councils
	and Infrastructure	
Patrick Allcorn	Head of Local Energy	BEIS (formerly DECC)
Mareike Schmidt	Service Manager - Energy	City of Bristol
Andy Merrin	Head of Energy and Innovation	Keepmoat Regeneration Ltd
Simon Green	Head of Sustainability	Lakehouse Contracts
Simon Evans	Director	Osborne Energy Ltd
Phil Green	New Business Director	Willmott Dixon Holdings Ltd
Martin O'Brien	Chair	Association of Local Energy Officers - Londor
Bevan Jones	Managing Director	Sustainable Homes



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Appendix C - RE:NEW targets analysis

- C.1 This note sets out a retrospective analysis of the key targets set for the RE:NEW programme in December 2013, which include:
 - £186m funding supported (from the Energy Company Obligation, ECO)
 - 175,00 retrofitted homes •
 - £352m capital expenditure leveraged
 - £93,000 tCO₂ saved per annum.
- C.2 The original targets set RE:NEW up as a programme to support organisations in London to use funding from the Carbon Emissions Reduction Obligation (CERO) and Carbon Saving Community Obligation (CSCO) strands of ECO in order to deliver home energy efficiency retrofit in London.
- C.3 In practice, weaker availability of ECO funding has meant that the RE:NEW team has needed to develop innovative new approaches to secure investment in energy efficiency retrofit which in many cases is not reliant on ECO funding.
- C.4 Nevertheless, this analysis revisits the original targets and the rationale and assumptions behind these, to test how realistic these assumptions were, in light of the scale and focus of ECO investment.
- C.5 Note: this analysis is based purely on modelling the original assumptions and the realism of those original assumptions in light of changing delivery circumstances. It does not consider wider contextual factors, which are explored in more detail through the evaluation report.

Original rationale

C.6 A number of GLA documents help to set out the original expectations of how carbon emission reductions would be achieved through the RE:NEW programme. This is summarised in the table below.

Table C.1 Carbon emission savings targets					
Type of intervention	Number of properties retrofitted	Contribution to RE:NEW carbon reduction target	Main ECO programme support option ²⁸		
Solid Wall Insulation	22,000	33%	CERO		
Cavity Wall Insulation – Hard to Treat	61,000	26%	CERO / CSCO		
Cavity Wall Insulation – Easier to Treat	34,000	15%	CERO		
Loft Insulation – Virgin	8,000	9%	CERO / CSCO		
Loft Insulation – Top up	25,000	7%	CERO / CSCO		
Boilers	25,000	10%	Affordable Warmth		
TOTAL	175,000	100%			

²⁸ Based on eligibility of fund to support – note: loft and easy to treat cavity walls were incorporated into CERO in 2014.



C.7 The modelling by GLA of potential carbon savings from RE:NEW assumed that all savings would come from securing ECO funds for London.

- C.8 <u>The target for ECO funding secured by RE:NEW was £186m</u>. This was split between social housing and private housing as follows:
 - £131m secured for the social housing sector
 - £56m secured for the private housing sector.

Original expectation of ECO funding available for London

- C.9 Although the national ECO targets set for energy companies were in carbon reductions rather than value invested, the Government initially estimated that annual national spend from ECO would be £1.3bn. This was anticipated to include 25 per cent, or £325m per year covering the affordable warmth objective (addressing fuel poverty but not carbon emission reductions), and 75 per cent, or £975m per year for CERO and CSCO the carbon emission reduction elements²⁹.
- C.10 At the time the RE:NEW targets were finalised in December 2013, a number of further announcements on changes to ECO had been made (subject to consultation), although had not yet come into force. This included the following points:
 - reducing the Carbon Obligation (CERO) target by 33 per cent
 - extending the ECO scheme to March 2017 with new targets for CERO, CSCO and AW at 2015 levels
 - enabling energy suppliers to carry forward any over delivery against 2015 targets to count towards their 2017 targets
 - enabling energy suppliers to carry forward over-performance from the predecessor schemes (CERT/CESP) and count it towards their ECO targets
 - allowing companies which have delivered substantial early progress against their current CERO target to benefit from an uplift in scores for the measures delivered
 - extending the CSCO element of ECO from the 15 per cent to the 25 per cent lowest areas on the Index of Multiple Deprivation and simplifying the qualifying criteria
 - including District Heating as an allowable primary measure under CERO
 - including loft and easy to treat cavity walls as an allowable primary measure under CERO
 - introducing and standardising measures to prevent fraud, particularly around loft and easy to treat cavity wall insulation
 - introducing a solid wall minima set at 100,000 measures to be delivered by 2017 across all companies and all elements of ECO.
- C.11 The carbon reduction targets for ECO before and following the announcements are summarised below.

²⁹ DECC, The Green Deal and Energy Company Obligation Consultation Document, November 2011



Table C.2 National carbon emission reduction targets for ECO				
Original (million tCO2) Revised Dec 2013 (million tCO2)				
CERO	20.9	14.0		
CSCO	6.8	6.8		
Total	27.7	20.8		
% of Original Target	100%	75%		

- C.12 With the overall target having reduced to 75 per cent or the original targets, the total original investment target of £975m per year for CERO and CSCO would also be expected to reduce accordingly. As such the overall national investment value for CERO and CSCO could have been expected to be around £731m per year.
- C.13 London has approximately 14 per cent of all UK housing³⁰, so the potential annual value of CERO and CSCO funding secured in London could have been expected to be around £102m.

C.14 Over the three-year RE:NEW programme, the potential ECO funding for London could therefore have been expected to be a maximum of around £306m.

Actual spend on ECO

- C.15 The changes to ECO announced in December 2013 provided a number of opportunities for energy companies to further reduce the initially expected spend on ECO. This included carrying forward over-delivery from CERT/CESP to count against their ECO targets, gaining an uplift in their scores for delivering measures earlier (hence meaning lower levels of investment in delivery overall), and allowing lower cost interventions to count towards targets.
- C.16 These changes had an effect on overall expenditure of ECO. The table below shows actual capital expenditure on CERO and CSCO across Great Britain, and specifically for London.

Table C.3 ECO Spending 2013-16					
Area	2013	2014	2015	2016 (half year)	Average Annual
Great Britain	£280m	£585m	£292m	£110m	£362m
London	£26m	£54m	£26m	£5m	£32m
% secured by London	9.3%	9.2%	8.9%	4.5%	8.8%

- C.17 The table highlights two important elements:
 - Firstly, that national spending on CERO and CSCO has been significantly lower than was originally expected, at around £362m per year, compared with the £731m per year which might have been expected based on the analysis above. This is just under 50 per cent of what might have been expected nationally
 - Secondly, that spending in London has been particularly low, at an average of £32m per year, compared to £102m per year which might have been expected based on the analysis

³⁰ DBEIS Household Energy Efficiency National Statistics, November 2016.



above. Actual spend in London is approximately 31 per cent of what might have been expected.

C.18 This latter point may particularly reflect the fact that London has a disproportionately large number of homes requiring solid wall insulation, which was originally a major focus for CERO, but for which spending was diluted by changes announced in December 2013 which allowed CERO to also fund other measures which could achieve target carbon savings at a lower cost (such as loft insulation and easier to treat cavity wall insulation).

ECO funding investment by tenure

- C.19 The RE:NEW programme was set up to provide support to housing associations, local authorities and universities to develop and deliver retrofit investment plans, drawing down ECO funding.
- C.20 Based on the target for securing ECO funding set for RE:NEW (£186m) and the potential funding available for London's fair share over three years (£306m), this suggests that <u>it was originally</u> <u>anticipated that RE:NEW would be involved in supporting retrofit projects comprising around 60</u> <u>per cent of CERO and CSCO investments in London.</u>
- C.21 Clearly the remaining ECO funding would be secured by:
 - other organisations securing ECO funding for retrofit plans without the support of RE:NEW
 - other individual households securing ECO funding without being part of a larger investment plan.
- C.22 Data from national investment of CERO and CSCO however shows the following tenure breakdown for the number of homes retrofitted, by tenure, up to the end of June 2016³¹:
 - 72 per cent owner occupied
 - 18 per cent social rented sector
 - 10 per cent private rented sector.
- C.23 Although in theory the RE:NEW support to London boroughs was intended to support borough-led projects to promote and co-ordinate private sector retrofit investment projects, the climate in local authorities (pressures for cost reduction limiting investment in non-statutory requirements and staff reductions on energy efficiency) meant that this was not a priority for local authorities and no projects for owner occupied tenure housing came forward.
- C.24 In practice therefore, the RE:NEW programme was delivered as a support programme for social housing and the private rented sector, which jointly comprised only 28 per cent of total national investment from CERO and CSCO.
- C.25 By combining the total average annual national investment in CERO and CSCO (£362m), and this breakdown by tenure, we can estimate that around £101m nationally was invested in retrofit for the social and private rented housing sector
- C.26 On the basis of London having 14 per cent of all UK housing, <u>the total amount of CERO and CSCO</u> <u>funding which RE:NEW could have provided support for organisations in London to secure would</u> <u>be £14.2m per year, or £42.6m over three years.</u>

³¹ DBEIS Household Energy Efficiency National Statistics, November 2016.



Revised targets for the RE:NEW programme

- C.27 The analysis above shows that based on the contextual changes, a more realistic maximum target for the RE:NEW programme would have been to secure £42.6m of ECO funding over three years, rather than the actual £186m target. This figure represents the total investment from CERO and CSCO in the social and private rented housing sector if London had secured an equal share of national ECO investment.
- C.28 In practice, the programme has sought innovative alternative options to secure the retrofit investment and carbon reductions, which in some cases have proven more successful than securing ECO funding. However, for the purposes of retrospectively establishing a more realistic set of programme targets, we have retained and updated the approach based on this more realistic funding leverage target from ECO.
- C.29 The table below sets out the original GLA targets for RE:NEW alongside revised targets based on a retrospective analysis of what would have been realistic and a short explanation in each case.

Table C.4 Summary of quantification assumptions				
	GLA target	Revised target based on retrospective analysis	Key assumptions	
Funding Supported (£m)	£186	£43	 The revised target, based on the above represents approximately 23% of the expected funding to be secured from ECO. 	
Retrofitted homes	175,000	40,100	 Revised figure based on the original assumption that ECO would provide an average of £1,072 in funding per property supported. 	
Capital expenditure leveraged £m)	£352	£81	 Revised figure based on the original assumption of an estimated average retrofit cost of just over £2,000 	
Carbon savings (tCO ₂ per annum)	93,000	21,300	 Target based on original assumption of an expected average of 0.53 tonnes CO2 saved per home retrofitted. 	



Appendix D - Alternative procurement frameworks

D.1 The table below sets out a summary of some of the alternative frameworks to the RE:NEW procurement framework, and particular benefits highlighted by each.

Framework	Overview	Retrofit/energy measures	Framework strengths
name		supported	
Fusion 21 – Retrofit Framework	Fusion21 provides an approach to procurement of Retrofit that is compliant and seeks to obtain best value. The framework hosts 66 suppliers and a variety of SME organisations operating nationally and regionally.	 Total retrofit External wall insulation Cavity wall and loft insulation Internal wall insulation measures and air tightness Cladding- thermal performance improvement Photo Voltaic installation Solar hot water systems Heat pumps Biomass Wind turbines Energy efficient lighting including street lighting Mechanical heat and ventilation recovery systems and flue gas heat recovery High performance window and doors High performance electrical heating Combined heat and power systems 	 National scope Strong marketing offer a number of industry conferences attended events targeted at key stakeholders strong social media presence
Scape – Facilities Management	Led by Carillion, the National Facilities Management Framework is designed to deliver a variety of work and service types for public sector bodies, from single service or work commissions to total facility management.	 Total facilities management Building management and fabric maintenance Mechanical and electrical services Front of house services Estates management Security management Catering services Cleaning services Asset maintenance, life cycle and project works Grounds maintenance Energy services and utilities management 	 Strong marketing offer: a strong approach to bringing contractors and clients together through events such as a 'market awareness day' and dedicated awards dinners a breadth of services outside of energy services and utilities management strong social media presence National scope



Framework name	Overview	Retrofit/energy measures supported	Framework strengths
LHC – Energy Efficiency and Refurbishme nt	 This framework provides compliant companies who supply and install energy efficiency and refurbishment measures, through three individual workstreams: 1. Energy consultants and project management services 2. Appointment of local SME's 3. Appointment of large main contractors 	 Building energy policy and strategy development Quantity/chartered surveyors and Green Deal Advice Reports BREEAM assessments Funding and finance assistance Building energy certificates Stock condition surveys and reports Product specification and procurement Energy audits and surveys Project management services Insulation measures Heating and renewable measures Biomass heating boiler systems Photovoltaic systems Air source heat pump systems District heating Traditional boilers and heating systems Refurbishment works Project management 	 National scope Strong marketing offer, attendance at several industry conferences informative tools such as webinars hosting of a series of events including industry awards and seminars. strong social media presence
Green Services Hub	Operated by Places for People the GSH provides a framework of experienced, professional companies who can fit the latest renewable technology - from solar panels and energy-efficient lighting to low- carbon heating.	Installation (supply and Fit) Solar panels Energy efficient lighting Low carbon heating Consultancy Environmental and sustainability strategy Stock survey Guidance on affordable warmth and fuel poverty Financial advice Green Deal Feed-in Tariff Renewable Heat Incentive Financial modelling Legal Support Energy performance contracting Environmental legislation Commercial property Procurement and EU requirements 	 National scope Strong marketing offer information events across the country presence at multiple industry conferences Tailored financial/commercial advice



Appendix E - **Sensitivity Analysis of Impacts**

Cost of carbon

- E.1 In the analysis at Section 7 we took the central carbon price as the main value for assessing the impacts of the carbon emission reduction. In the table below we have set out how the overall net present value and value for money figures would be affected by use of the low and high carbon values. On this basis:
 - net present value could range between -£0.30m and +£3.35m
 - value for money could range from £0.86 to £2.56 value generated for every £1 public funding invested.

Table E.1 Sensitivity testing of programme impacts – value of carbon				
Value of carbon	Net present value (£m)	Value for money (£ value per £1 invested)		
£32 (Low)	-0.30	0.86		
£63 (Central)	1.50	1.70		
£95 (High)	3.35	2.56		

Additionality assumptions

- E.2 One of the most important assumptions set out in the impacts analysis at Section 7 was around those beneficiaries who stated that RE:NEW had helped to increase carbon emissions savings achieved by their project but were unable to quantify this.
- E.3 We assumed that the proportion of net additional carbon savings due to RE:NEW support was equal to the average proportion for other beneficiaries that had quantified this (the average being 31 per cent of carbon savings being attributable to RE:NEW support).
- E.4 In the table below we set out the extent to which changes in this assumption would impact on the overall net present value and overall value for money of the programme.

Table E.2 Sensitivity testing of programme impacts – additionality assumption				
Assumed net additionality where not quantified by beneficiaries	Net present value (£m)	Value for money (£ value per £1 invested)		
10%	-0.87	0.59		
20%	0.24	1.11		
31%	1.50	1.70		
40%	2.47	2.15		

- E.5 The sensitivity testing shows that if this net additionality assumption was increased or decreased, between 10 per cent and 40 per cent:
 - the net present value would range from -£870,000 up to £2.5m
 - the value for money would range between £0.59 and £2.15 value generated per £1 public money invested.



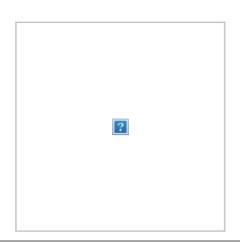
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From: To:	<u>RE:NEW</u>
Date:	Latest news from RE:NEW 05 July 2018 12:23:11



THE LATEST NEWS FROM RE:NEW

Welcome to the July edition of the RE:NEW newsletter.

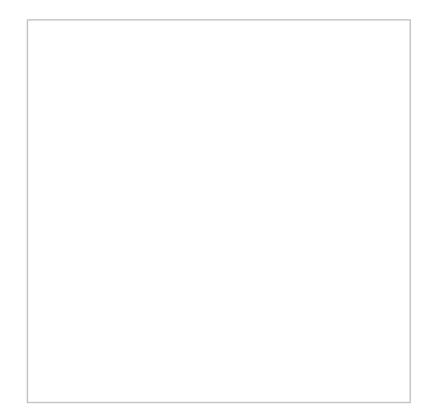
Read about how RE:NEW has supported Tower Hamlets Homes with a communal heating project, take a look at the London Environment Strategy and register your interest for a Retrofit Coordinators course to enhance your expertise in retrofitting.

For more information on the articles in this newsletter and how RE:NEW can support your home energy efficiency and renewables projects, please contact the RE:NEW Support Team.

GDPR Update

The General Data Protection Regulation (GDPR) came into force on 25 May 2018. The Greater London Authority has updated our privacy policy which can be viewed <u>here</u> and we intend to continue to stay in touch with you on the basis of Legitimate Interest in or having previously consented to our content. If you would like to unsubscribe now or in future you can do so by following the link below.





RE:NEW awarded 'Energy Efficient Project of the Year' at the BusinessGreen Leaders Awards

RE:NEW is delighted to have been awarded the 'Energy Efficiency Project of the Year' award in this year's BusinessGreen Leaders Awards.

The awards recognise the UK's leading green businesses and the progress made by the green business community in recent years. The judges were impressed with the scale of the projects's ambition and the wide range of integrated services it is providing to deliver energy efficiency upgrades and clean tech deployments across the capital.

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Retrofit Coordinators Course

RE:NEW is offering discounted places on a <u>Retrofit Coordinators course</u> run by the Retrofit Academy.

This course will help you to:

- create a better business case for retrofit
- plan and organise projects more efficiently
- lower the risks of retrofit by gaining an understanding of a best practice approach
- train your workforce at all levels around a common methodology

The course consists of six sessions run in three blocks from September to November, dates to be confirmed, and will include the following modules:

Block 1

- Introduction to domestic retrofit
- Assessing dwellings for retrofit
- Building physics for retrofit (Part 1)

Block 2

- Building fabric retrofit
- Building services retrofit

Block 3

- Air-tightness and ventilation for domestic retrofit
- Building physics for retrofit (Part 2)
- Retrofit coordination and risk management and assessment

Please contact <u>renew@london.gov.uk</u> if you are interested in booking a place.

REGISTER YOUR INTEREST

Tower Hamlets Homes upgrades communal heating systems

The RE:NEW support team has been providing support to Tower Hamlets Homes (THH) to help improve its communal heating systems. Support started with our popular communal heating benchmarking report which included a desktop review of every communally heated system in THH's portfolio and ranked their performance against key

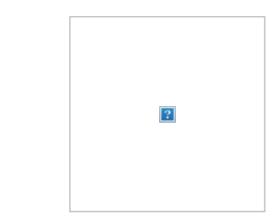
metrics e.g. gas use per dwelling and R^2 value (a measure of how effectively the heating is controlled). The benchmarking process also included identifying data anomalies, reviewing key asset data and discussing the results with the asset team to understand the findings.

THH appointed a contractor to conduct plant room and dwelling surveys, with RE:NEW quality-assuring the work by reviewing survey outputs and conducting a sample of comparative surveys. Peter David, THH's planned investment manager, collated survey recommendations across all stock, again with RE:NEW's support, leading to the creation of short and long term investment plans comprising more than £4m of capital improvement works.

The RE:NEW team continues to provide further support to THH through the provision of more detailed surveys and as a critical friend with insight into this important but sometimes confusing market. <u>Read our blog</u> on a detailed guide to the communal heating benchmarking process.

Contact for support with your communal heating projects.

CONTACT TOM VOSPER



Responsible retrofit: rethinking quality

Research published by Sustainable Homes and Soltherm External Insulation challenges the sector to rethink quality and procurement when delivering retrofit projects. The research looks at the housing sector supply chain's response to the challenges of funding, quality and the uncertain policy landscape in the wake of the Grenfell disaster. The report examines perceptions of external wall insulation and energy efficiency in the housing sector.



RE:NEW expert

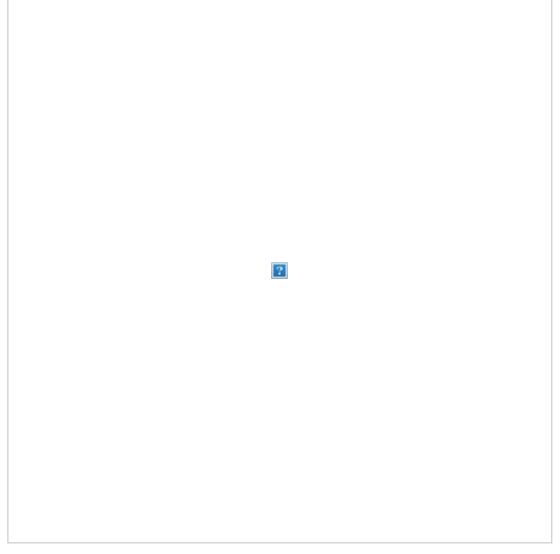
Solar Together London

As part of the Energy for Londoners programme, the Mayor of London is piloting <u>Solar</u> <u>Together London</u>, a group buying scheme for solar PV. Several London boroughs are working in partnership with the Mayor on this innovative scheme to offer homeowners high quality solar PV panels at competitive prices.

After a 'reverse auction', where pre-vetted suppliers bid to work with the 3,750 customers registered with the scheme, SolarCentury won with a proposal offering savings to homeowners of up to 35 per cent dependent on the system size. Over 4,000 customers are expected to register for the scheme culminating in around 700 installations.

Contact <u>RE:NEW</u> for support with your solar PV projects.

READ MORE



Mayor sets out bold strategy to make London the greenest global city

The Mayor of London, Sadiq Khan, has set out his vision for London's environment in 2050, focusing on cleaning up the capital's toxic air, greening its streets, reducing waste and tackling climate change.

The strategy outlines the Mayor's plans for making the city a greener, cleaner and