

**Way Forward for
Buildings Energy Efficiency Funding Schemes**

PURPOSE

This paper seeks Members' views on the proposed way forward for the Buildings Energy Efficiency Funding Schemes (BEEFS), for recommendation to the Environment and Conservation Fund (ECF) Committee.

RECOMMENDATION

2. The Subcommittee is proposed to recommend to the ECF Committee that -
 - (a) the BEEFS be brought to a close by the end of the three-year period on 7 April 2012, as announced upon the commencement of the Schemes in 2009; and
 - (b) additional funding, if necessary, be provided by the ECF to fund all successful applications submitted before the deadline in the event that the remaining balance is inadequate to meet the requirement.

BACKGROUND

3. With the support of this Subcommittee, the ECF Committee approved on 30 December 2008 to allocate \$450 million from the ECF to implement the BEEFS to promote building energy efficiency. BEEFS subsidise building owners on a matching basis to carry out energy-cum-carbon audits (ECA) and projects to upgrade the energy efficiency performance of building services installations (EEP) for communal use of the buildings. The amount of subsidies is capped at \$0.15 million per building per application for ECA, and \$0.5 million for EEP.
4. When the Schemes were launched on 8 April 2009, the Government announced that the Schemes will be opened for applications for three years (i.e. till 7 April 2012) or until the allocated \$450 million is fully utilized, whichever is the earlier.
5. By 31 December 2011, about 1,550 applications have been received under the BEEFS involving about 9,600 buildings. Among them, 791 applications have been approved with subsidies amounting to \$309.24 million, benefiting over 5,300 buildings in total.

6. The Electrical and Mechanical Services Trading Fund (EMSTF) has been charged to process the applications received under the BEEFS and monitor the progress of implementation of those approved.

REVIEW OF THE SCHEME

Effectiveness

7. Given the instrumental role of building energy efficiency in reducing greenhouse gas emissions and improving air quality, BEEFS were proposed to be set up in the 2008-09 Policy Address to provide financial incentive for encouraging the public to take concrete actions for this cause.

8. With progress achieved so far, we consider that BEEFS have been effective in respect of the following areas –

- (a) enhanced community awareness of building energy efficiency and encouraged building owners to take concrete actions to seek improvement - as at 31 December 2011, we received applications from about 9,600 buildings, which accounts for about 23% in our building stocks of some 41,000 buildings. Applications came from a broad sector of the community involving residential (70%), commercial (12%), industrial (9%) and composite buildings (9%). Applicants were building owners of different social classes, including owners of private buildings, as well as buildings under Tenant Purchase Scheme and Home Ownership Scheme. The messages on the benefits of building energy efficiency have been widely publicized;
- (b) substantial environmental benefits - by 31 December 2011, 791 applications have been approved. The estimated total electricity saving amounts to 140 million kWh per annum, equivalent to a reduction of carbon dioxide emissions by 100,000 tonnes;
- (c) enhanced appreciation of the benefits of buildings energy efficiency- In the first year of BEEFS operation, 80% of EEP applications concerned lighting installations, which usually involve low initial cost and short payback period. Only 21%¹ of the applications concerned lifts and escalators, which involve much higher capital costs and longer payback period. Yet, in the second year of operation, the share

¹ An application may involve more than one type of building services installation. So, the percentages may add up to more than 100.

of applications involving lighting installations dropped to 63%, whereas 36% of applications involved lifts and escalators. The success of quick-win projects may have induced an enhanced appreciation from the community on the benefits of building energy efficiency. Building owners are increasingly motivated to make bigger investment for more savings in the longer term; and

- (d) related sectors motivated to grasp new business opportunities - BEEFS have been a major driver of green business opportunities in the engineering sector since its launch. As at 31 December 2011, BEEFS created a total of over \$618 million business opportunities² and over 48,000 man-months of job opportunities. In fact, the engineering sector has been fully geared up for such new business opportunities. Since the launch of BEEFS, over 20 training courses on energy and/or carbon audits have been offered by the Hong Kong Institution of Engineers, Hong Kong Association of Energy Engineers, Energy Institute (Hong Kong Branch), and Li Ka Shing Institute of Professional and Continuing Education of The Open University, with over 800 participants in total. Moreover, the Vocational Training Council has also organized two training courses for technical staff. Relevant training programmes have helped prepare professional and technical staff in the sector for conducting projects under BEEFS.

Apart from the engineering sector, the property management sector has also played an important role in facilitating building owners to file applications and implement approved projects. District Councils and local associations have also provided assistance in publicity and encouraging building owners to make the best use of the schemes.

Latest Financial Position

9. The latest financial status report of the Schemes is at **Annex A**.
10. A table showing the number of applications received by month is at **Annex B**. As at 31 December 2011, there were 285 outstanding applications which require processing. Based on past trends³, we estimate that some 71 would be received between January and 7 April 2012. Assuming the current approval rate of about 63% would continue to apply⁴, we estimate that some

² As the fund is granted on a matching basis under BEEFS, the grant of HK\$309.24 million will create a total of over \$618 million business opportunities.

³ In the last quarter, 71 applications were received.

⁴ Of the 1,264 processed applications, 791 were approved, 340 rejected, and 133 withdrawn. Applications were rejected mainly because the applicants were not eligible or had not provided sufficient information despite repeated requests and reminders.

223 more applications would be approved before the Schemes come to a close.

11. Of the 66 approved applications in the third quarter of 2011, the average grant per application is \$0.45 million. Assuming that the average amount of subsidies for each of the 223 applications remains the same, the total amount of funding required will be **\$100.35 million**. On current estimate, the remaining balance of **\$141 million** would be able to cover applications to be received.

JUSTIFICATION

12. We consider it appropriate to bring the BEEFS to a close for the following reasons-

- (a) Objective achieved- BEEFS have already enhanced building owners' awareness on the benefits of building energy efficiency, and with many successful examples of achieving significant reduction in electricity consumption and savings in electricity bills, building owners should have sufficient incentives to take action on their own on this front;
- (b) Interested parties mostly already applied- as of now, more than 5 300 buildings have benefited from BEEFS. The number of applications received has dropped from about an average of 111 per month in 2009 to about 22 per month in 2011. It is time to focus efforts to enhance energy efficiency by other means (see (d) below); and
- (c) Relevant professionals geared up for action- professionals in particular those in the engineering sector have been geared up for new business opportunities in building energy efficiency. We observe that the engineering sector has been active in grasping business opportunities under BEEFS by providing practical solutions to building owners in enhancing building energy efficiency. With active services provided by the engineering sector and facilitation by the property management sector, we believe that building owners are well supported to pursue energy efficiency initiatives for their buildings. Circumstances are now mature to put a close to the financial incentives offered by BEEFS and let market forces drive future work in their place; and
- (d) Other initiatives to promote energy efficiency- we will continue to implement various initiatives to promote energy efficiency. Among other things, the new Buildings Energy Efficiency Ordinance (Cap.

610) will be brought into effect in September 2012 to mandate the minimum energy performance standards for four major types of building service installations and energy audit in specified building. Following the public engagement exercise conducted from August to December 2011, the Council for Sustainable Development is expected to come up with recommendations in the next couple of months for systemic enhancement and promotion of behavioural changes for enhancing building energy efficiency. We have been working on the tightening of the Building Energy Codes, and also proposed to conduct carbon audits in major Government buildings and public facilities, and encourage the business sector to participate through collaboration with major chambers of commerce and supporting organizations. Moreover, we will enhance community participation in energy conservation and other environmental protection initiatives through district-based education, promotion and publicity programmes and activities organized or sponsored by District Councils.

13. While our estimation of the outstanding funding requirements in paragraph 11 is made on a best endeavour basis with all information available to us, we would not rule out the possibility of an influx of last-minute applications or higher level of subsidies to be dished out within the remits of the Schemes. To maintain the integrity of the Schemes, we consider it important to meet the reasonable expectation of all eligible applicants who put up applications before the deadline. As such, we propose that additional funding, if necessary, be provided out of the ECF to fund all successful applications submitted before the deadline in the event that the remaining balance is inadequate to meet the requirements. We would manage the cashflow carefully and seek ECF's approval of the exact amount of any additional funds required as soon as we are in a position to do so upon closure of applications. On the other hand, should there be any remaining funding after processing all applications, it would be returned to the ECF.

NEXT STEPS

14. Subject to the agreement of this Subcommittee, the ECF Committee would be recommended to endorse the proposed way forward at its coming meeting to be held on 19 January 2012. With endorsement by the ECF Committee, we will announce in end January 2012 the close of BEEFS on 7 April 2012. This will allow sufficient time for potential applicants to file applications.

15. Upon closure of applications, EMSTF will continue to process the

received applications, and to monitor the progress of the approved applications. Since for the ECA applications, three annual progress reports will have to be submitted upon the completion of the audit, EMSTF will continue to vet such progress reports to be submitted. We would review the workload and suitably adjust the manpower requirements in the light of the number of applications received and follow-up work required. ECF has previously approved the manpower requirements for EMSTF up to January 2013. We would seek ECF's endorsement of future manpower requirements in due course.

ADVICE SOUGHT

16. Members are invited to provide views on the recommendations in paragraph 2 above.

**Environment Bureau
January 2012**

Project	Status as at 31Dec 2011								
	Cumulative No. of Applications Received		Applications Assessment Progress						
			Cumulative No. of Applications Approved			Cumulative No. of Applications Rejected		No. of Applications Withdrawn by Applicants	
	No.	Applied Project Sum (\$M) (A)	No.	Applied Project Sum (\$M) (B)	Approved Project Sum (\$M) (E)	No	Rejected Project Sum (\$M) (C)	No	Withdrawn Project Sum (\$M) (D)
Energy-cum-carbon Audit	220	14.321	119	6.663	6.31	57	3.808	36	2.626
Energy Efficiency Project	1,329	720.992	672	380.709	302.928	283	135.868	97	51.498
Total :	1,549	735.313	791	387.372	309.238	340	139.676	133	54.124

As at 31 Dec 2011

	ECA	EEP	
Total No. of Applications under assessment	8	277	285

	(\$M)	(\$M)
Total Funding of the Scheme	450.000	
Total Approved Project Sum (E)	6.310	302.928
Fund Balance of the Scheme (H)	140.762	

Number of Applications Received under BEEFS

Year	Month	Energy-cum-carbon audit	Energy efficiency projects
2009	April	2	5
	May	42	128
	June	96	298
	July	22	79
	August	19	82
	September	6	55
	October	4	34
	November	1	38
	December	7	79
2010	January	0	30
	February	2	14
	March	3	32
	April	1	17
	May	0	35
	June	1	31
	July	0	29
	August	1	19
	September	2	23
	October	1	16
	November	2	18
	December	0	13
2011	January	0	15
	February	0	11
	March	1	27
	April	1	13
	May	0	20
	June	1	31
	July	0	22
	August	1	20
	September	0	28
	October	0	15
	November	4	25
	December	0	27
Total		220	1 329