

Table 31 Technology action plans for energy efficient in boiler

No.	Activities	Period			Related stakeholders	Key indicators	Priority	Fund sources
		Short	Medium	Long				
Financial								
C1	Apply for international supports for expensive devices	✓			(i) foreign agencies, (ii) central agencies (MoE, MoIn)	(i) number of system implemented, (ii) the increasing rate of implementation	High	International level
C2	Budget allocation for implementing energy efficiency in boiler project	✓			(i) central agencies (MoE, DEDE, EPPO, MoIn, DIW)	(i) number of implemented projects	High	National level
C3	Government supports private company investment for domestic based production e.g. soft loan, tax incentive, DSM bidding		✓		(i) central agencies (MoE, DEDE, EPPO, DIW)	(i) number of implemented projects	Normal	National level
C4	Investigate GHG reduction potential of CDM-PoA	✓			(i) central agencies (MoE, MOST, research agency, education institute)	(i) number of CDM-PoA projects (ii) reduction of GHG emissions	Normal	International level and national level
C5	Feasibility study for developing NAMA concept		✓		(i) central agencies (TGO, MoE, education institute)	(i) number of NAMA project, (ii) The GHG mitigation potential	Normal	National level
Policy and Regulatory								
C6	Develop the roadmap and action plan for energy efficient in boiler burner	✓			(i) central agencies (MoE, DEDE)	(i) the roadmap for energy efficient boiler	Very high	National level

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C7	Develop policies/regulations to support the NEEP (Northeast Energy Efficiency Partnerships) with a clear framework and timeline	✓			(i) central agencies (MoE, DEDE, EPPO)	(i) the roadmap or action plan	Very high	National level
C8	Study international standard and safety issues of energy consumption in burner		✓		(i) central agencies (DIW, DEDE), (ii) foreign standard	(i) the new regulation in safety (if required)	High	International level and national level
C9	Establish research institute or encourage research works in this area	✓			(i) central agencies (DIW, DEDE)	(i) established institute	Very high	International level and national level
C10	Regulatory/guideline/standard on fuel use per ton of steam production in each fuel type		✓		(i) central agencies (DIW, DEDE), (ii) foreign standard	(i) the new guideline/regulation in consumption (if required)	High	International level and national level
Technology								
C11	Sector or industry prioritization to be implemented the selected technologies (i.e. modulating burner and once-through boiler)	✓			(i) central agencies (DIW, DEDE)	(i) the study report (ii) the timeline	Very high	National level
C12	Feasibility study of possible technologies	✓			(i) central agencies (DIW, DEDE), (ii) education/research institute	(i) reports or publications	Very high	National level
C13	Develop technology transfer mechanism both domestic and international level		✓	✓	(i) central agencies (DIW, DEDE), (ii) National Industry institute	(i) number of pilot projects	High	National level

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C14	Support domestic based production	✓	✓		(i) central agencies (DIW, DEDE), (ii) National Industry institute	(i) number/unit of domestic based production (ii) the market penetration of new efficient boiler	High	National level
C15	Monitoring the results of implementing the project, especially in boiler equipment market		✓		(i) central agencies (DIW, DEDE), (ii) National Industry institute	(i) the impact from new energy efficient burning system report (ii) the SWOT analysis	Normal	National level
C16	Study the GHG emissions reduction		✓		(i) central agencies (TGO, education institute)	(i) the guideline of GHG mitigation from smart grid system	Normal	International level and national level
Capacity Building								
C17	Develop research network among academic institutes	✓			(i) education and research institute, (ii) foreign education institute/center/fund, (iii) industrial sector	(i) number of participants in network (ii) number of research papers	High	International level and national level
C18	Technology transfer and approach in modulating burner and once-through boiler	✓	✓	✓	(i) central agencies (DEDE, DIW) (ii) industrial institutes, (iii) industrial sector	(i) number/unit of technology transfer in industry (ii) the market penetration of new efficient boiler	Very High	International level and national level
C19	Develop the technician and operator training programs in burner/boiler operation	✓	✓		(i) central agencies (DEDE, DIW) (ii) industrial institutes (iii) industry sector	(i) number of participants in smart grid network/programme, (ii) MOU with international agencies	Very high	National level

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C20	Training programs for developing and maintaining, applying best practices case studies		✓		(i) central agencies (DEDE, DIW) (ii) industrial institutes (iii) industry sector	(i) The number of scholarship granted, (ii) Budget ratio	High	National level