



FRAMEWORK CONVENTION ON CLIMATE CHANGE - Secretariat
CONVENTION - CADRE SUR LES CHANGEMENTS CLIMATIQUES -
Secrétariat

FCCC/WEB/2000/2

12 September 2000

**NATIONAL COMMUNICATIONS FROM PARTIES NOT INCLUDED
IN ANNEX I TO THE CONVENTION**

PROVISION OF FINANCIAL AND TECHNICAL SUPPORT

**List of projects submitted by Parties not included in Annex I to the Convention
in accordance with Article 12.4 of the Convention**

Note by the secretariat

I. MANDATE

1. By its decision 12/CP.4 (FCCC/CP/1998/16/Add.1), the Conference of the Parties requested the secretariat to compile and make available to Parties a list of projects submitted by non-Annex I Parties in accordance with Article 12.4 of the Convention.

II. APPROACH

2. In response to the above mandate, the secretariat reviewed the relevant sections of all 27 initial national communications submitted by non-Annex I Parties as of 1 August 2000 with a view to compiling the list of projects.

3. Pursuant to decision 10/CP.2 (FCCC/CP/1996/15/Add.1) and Article 12.4 of the Convention, developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reduction of emissions and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits.

4. In order to provide Parties with more frequent updates of the list of projects submitted in accordance with Article 12.4 of the Convention, the secretariat has compiled the information on these projects in a database. This information is posted on the secretariat's web site (www.unfccc.int/program/proglist.pdf and www.unfccc.int/resource/docs.html) and hard copies are available on request.



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
ARMENIA	Energy	Renewable	
		1. High efficiency photovoltaic (PV) module station: Manufacturing and testing	25
		2. Solar power supply for meteorological stations	40
		3. Solar hot water supply demonstration system for the international post-trauma rehabilitation centre (IPTRC)	200
		4. Introduction of solar water-heat collectors (SWHC) into the energy system	-
		5. Remove barriers for using fast growing tree plants in the private sector as a source of renewable energy	50
		6. Conditions of geothermal resource studies and perspectives for the practical use of geothermal energy	-
		7. Education, training and establishment of laboratories for a solar school	85
		Efficiency	
		8. Rehabilitation of heating and cooling of buildings by environmentally safe systems for the earthquake zone of Armenia	2,000
	9. Demonstration heating and cooling system implementation on the basis of environmentally safe heat pump equipment	20	
Transport	10. Development of a concept, strategy and action plan to reduce emissions from road vehicles	400	
Waste Management	11. Pilot production of biohumus by processing organic part of solid urban wastes and manure	65	



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
CHILE	Energy	1. Actividades Implementadas Conjuntamente (AIJ): CHILIPAVE - Chile cold mix in place: recycled asphalt pavement greenhousegas reduction project	-
		<i>Renewable</i>	
		2. Remoción de barreras para la electrificación rural con energías renovables	-
	Land-Use Change and Forestry	3. Actividades Implementadas Conjuntamente (AIJ): Wind energy in Northern Chile	-
		4. Actividades Implementadas Conjuntamente (AIJ): Secuestro de carbono río cóndor	-
		5. Actividades Implementadas Conjuntamente (AIJ): Secuestro de carbono forestal inversiones S.A	-
		6. Captura de CO ₂ : Medición de la captura de carbono en bosques de Chile y promoción en mercado mundial de carbono	-
7. Captura de CO ₂ : Demostración del aumento en la captura de carbono en bosque de Chile mediante inoculación de plántulas	-		
EL SALVADOR	Energy	<i>Renewable</i>	
		1. Expansion in the use of geothermal energy in electricity generation	-
		2. Construction of 2 small hydroelectric plants to generate electricity at Chaparral and La Honda	-
		3. Expansion in the use of hydroelectric energy to generate electricity	-
		4. Use of solar energy in residential facilities	-
<i>Efficiency</i>			
5. Program to conserve and efficiently use energy through seed fund	-		



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
EL SALVADOR		6. Technical upgrading and change of fuel in two thermal electric generation plants	-
		7. Building houses with efficient lighting	-
		8. Establishment of wastewater treatment plants to generate methane and electricity at the municipal level using recovered methane	-
		9. Technological upgrading in the cement industry	-
		Transport	10. Modernization and technical upgrading of the vehicular fleet
EGYPT	Energy	<i>Renewable</i>	
		1. Integrated solar thermal/natural gas power plant	-
	Transport	<i>Efficiency</i>	
		2. Energy efficiency improvement and GHG reduction	-
	Waste Management	3. Integrated system for zero or reduced emission fuel cell bus operation in Cairo	-
		4. Climate change early action technology measures: Retrofitting two-stroke engines	-
GEORGIA	Energy	<i>Renewable</i>	
		1. Geothermal hot water supply: Project of Tbilisi geothermal hot water supply	30,800
		2. Geothermal hot water supply: Project of Zugdidi geothermal heat supply	15,000
		3. Geothermal hot water supply: Project of the Hippodrome district geothermal hot water supply	860
		4. Small hydro: Project of STORI hydro-power plant	8,400



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)	
GEORGIA	Energy	5. Removing barriers to develop small hydro sector for the mitigation of greenhouse gas emissions	-	
		6. Small hydro: Project of Misaktsieli hydro-power plant rehabilitation	2,300	
		7. Small hydro: Project of Intsoba hydro-power plant rehabilitation	850	
		8. Small hydro: Project of Abasha hydro-power plant rehabilitation	1,000	
		9. Small hydro: Project of Martkopi hydro-power plant rehabilitation	750	
		10. Wind Power: "Karenergo" wind power plant project	5,000	
		11. Solar energy: Batumi heat supply with solar energy	21,800	
		12. Installation of electric and mechanical equipment for small hydro and wind power plants	11,000	
		<i>Efficiency</i>		
		13. Removing barriers to energy efficiency in municipal heat and hot water supply	211	
		14. Industry: Project on energy efficiency increase in Kaspi cement plant	1,000	
		15. Installation of electric filters for the Kaspi cement plant	500	
	Land-Use Change and Forestry	16. Forestry: Project of Tbilisi dendrological park restoration	230	
		17. Forestry: Project of reforestation of Kaspi district	350	
		18. Forestry: Project on aforestation of "Red Bridge" environs	250	
		19. Forestry: Project on "Nabadkhevi" forest rehabilitation	270	
	INDONESIA	Energy	<i>Renewable</i> 1. Application of renewable energy system to sustainable rural development (Demonstration hybrid system)	240 (AUS \$)



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)	
INDONESIA	Energy	2. Application of renewable energy system to sustainable rural development (Hybrid system)	3,400	
		3. Solar energy desalination	-	
		<i>Efficiency</i>		
		4. Paper sludge and solid waste	8,000 - 9,000	
		5. Waste recycling and emission capturing	-	
		6. New cooling system in cement production	-	
		7. Coal upgrading	-	
		8. Natural gas vehicles (NGV) refuelling station and conversion kit	32,800	
		9. Conversion of municipal waste to energy	-	
		10. Capturing CO ₂ emissions at steel plants for supplying soft drinks industries	-	
JORDAN	Energy	<i>Efficiency</i>		
		1. Crude oil distillation unit preheater for the charge heater 301 H1	2,500	
		2. Construction of co-boiler for the fluid catalytic cracking unit	2,740	
		3. Heat recovery from sulphuric acid plant (Jordan phosphate mining company)	26,000	
		4. Expansion of distillation capacity	80,000-40,000	
		5. Sulphur recovery plant	5,000-10,000	
		6. "Merox" upgrade	1,000	
		7. Continuous catalytic reformer (platformer)	85,000	
		8. Hydro desulphurisation for diesel	50,000-60,000	
		9. Modern fluid catalytic cracker	200,000	
		10. Isomerisation unit	30,000	
		11. Alkylation unit	30,000	
		12. Hydrocracking	100,000	
		13. Gasification	225,000	
		<i>Renewable</i>		
		14. Power supply by photovoltaic systems to remote villages	3,500	
15. Exploration for geothermal energy in Jordan	1,400			
16. SALT-Gradient solar pond pilot plant	633			



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
JORDAN	Energy	17. Reverse osmosis water desalination (ROWD) with renewable energy hybrid systems in remote areas	2,400
		18. Regional training centre in the field of renewable energy	700
KAZAKHSTAN	Energy	<i>Efficiency</i>	
		1. Pilot project on heat and hot water supply	814
		2. Modernization and rehabilitation of power plants	1,061
		3. Utilization of associated gas/increase in natural gas share in the energy balance	-
		4. Energy saving and district heating system improvement	814
		<i>Renewable</i>	
		5. Small hydro	578,000
6. Wind	482		
7. Solar	-		
KIRIBATI	Energy	1. Assessment of emissions from kerosene stoves	-
		2. Evaluation of the electricity generation system	-
		3. Alternative energy sources	-
LEBANON	Energy	<i>Renewable</i>	
		1. Electricity supply sector: removing barriers for implementing renewable energy (Solar and wind)	-
		<i>Efficiency</i>	
		2. Energy efficiency: Building sector	-
		3. Enhancing thermal performance of building envelopes: Capacity-building project	-
4. Enhancing thermal performance of building envelopes: Market-based programme	-		
5. Industrial sector: Motor-driven system improvement and replacement	-		



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
LEBANON	Waste	6. Industrial sector: Boilers and furnaces improvements in efficiency by replacement and fuel switching options	-
		7. Cement industry: Conservation and preheating in pyroprocessing and improvements in the grinding process	-
		8. Landfilling with gas recovery and flaring	-
		9. Landfilling with gas utilisation	-
		10. Composting and landfilling with gas recovery and flaring	-
		11. Composting and landfilling with gas recovery and utilisation	-
MAURITIUS	Energy	1. Lower energy consumption through demand-side energy efficiency and conservation programmes and incentives	-
	Transport	2. Rapid public transport system utilising electric-powered vehicles	-
		3. Initiate a "Clean Air Act"	-
		4. Gradual introduction of unleaded gasoline	-
	Waste Management	5. Investigate the possibility of a gas-to-energy power plant	-
MEXICO	Energy	<i>Efficiency</i> 1. Use of aeolian energy	-
	Land-Use Change and Forestry	2. Carbon sequestration projects in Bahia Kino, in Sonora and in forested areas of Ciapas	-
		3. Three carbon sequestration projects in Oaxaca, Campeche and Monarc Butterfly biosphere reserves	-
MICRONESIA, FEDERATED STATES OF	Energy	<i>Efficiency</i> 1. Energy conservation project	-



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
MICRONESIA, FEDERATED STATES OF	Energy	<i>Renewable</i> 2. Solar pilot project 3. Subsidy programme for solar energy 4. Feasibility study on other renewable energy resources	- - -
	Land-Use Change and Forestry	5. Quantitative evaluation of the carbon sink potential of the Federated States of Micronesia ecosystems	-
SENEGAL	Energy	<i>Efficiency</i> 1. Improvement of energy efficiency of buildings in Western Africa (Senegal and Côte d'Ivoire) 2. Economic evaluation of GHG abatement strategies 3. Demand management and promotion of substitution energy sources	3,500 - -
TUVALU	Energy	<i>Renewable</i> 1. Encourage the use of photovoltaic (PV) energy	
UZBEKISTAN	Energy	1. Electric power supply: 11 projects for upgrading and more efficient new gas turbines and boilers (a) Upgrading 2 power units of 300 MW each at the Syrdarya Power Plant (b) Upgrading the Tashkent power plant through installation of a 370 MW steam-to-gas unit (c) Upgrading of Navoi power plant through installation of a 200 MW steam-to-gas unit (d) Upgrading Mubarekski district heating plant through installation of a 240 MW steam-to-gas unit (e) Installation of a 240 MW steam-to-gas unit in Novoangren power plant	27,800 221,000 120,000 60,000 150,000



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
UZBEKISTAN	Energy	(f) Installation of gas-turbine unit at Fergana thermal power plant (2x60MW)	48,000
		(g) Installation of gas-turbine unit at Tashkent heating plant (2x16MW)	12,800
		(h) Installation of gas-turbine unit at Kokand heating plant (2x16 MW)	6,400
		(i) Installation of gas-turbine unit at Fergana heating plant (16 MW)	3,200
		(j) Installation of gas-turbine unit at Urgench heating plant (2x16 MW)	6,400
		(k) Construction of a 240 MW steam-to-gas unit in Bukharenergomarkaz	131,900
		2. Oil, gas and coal industry: 6 projects for upgrading and more efficient new technologies	
		(a) Organizational and technical measures to improve technical conditions of power generation equipment and enhance technology of production in enterprises of the sector	2,800
		(b) Upgrading of active enterprises of “Uzneftegazdobycha”	131,600
		(c) Upgrading of the active facilities of “Uztransgaz”	611,500
		(d) Upgrading of energy efficiency and heating systems at oil refineries	4,100
		(e) Installation of equipment of energy consumption systems with metering and control devices at the “Uzbekneftegas”	100
		(f) Technological upgrade of the “Angren block”	219,000
		3. Ferrous and non-ferrous metallurgy: 7 projects for power equipment	
		(a) Organizational and technical measures to improve technical conditions of power equipment and enhance technology of construction work at the enterprises of the sector	800



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)	
UZBEKISTAN	Energy	(b) Installation of equipment of energy consumption systems with metering and control devices	600	
		(c) Upgrading of the active fleet of technological aggregates, machinery and equipment of the enterprises of construction sector	1,700	
		(d) Upgrading and technical re-equipment of the active enterprises of construction sector	12,900	
		(e) Reconstruction and upgrading of the Kalmakyr refinery	132,000	
		(f) Completing technology upgrade of bronze ore at the Almalyk integrated works	116,000	
		(g) Reconstruction of metallurgy department at the Almalyk integrated works	11,300	
		4. Chemical industry: 3 projects for upgrading energy systems		
		(a) Upgrading of the energy system at Navoyi fertilizer production company	140,600	
		(b) Upgrading of the energy system at Cherchik production company named "Elektrokhimprom"	4,200	
		(c) Reconstruction of furnaces for granulator-driers at Samerkand chemical factory and Almalyk production company named "Ammophos"	27,000	
		5. Building and industrial building sectors: 6 projects		
		(a) Upgrading and modernization of equipment at the Uzstroimaterial company	600,000	
		(b) Modernization of equipment throughout the industrial building materials sector	28,800	
		(c) Installation of equipment to measure energy use in the industrial building materials sector	3,600	



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
UZBEKISTAN	Energy	(d) Modernization of technological units, machines and equipment of construction sector factories	57,100
		(e) Reconstruction and upgrading of the industrial building materials sector	21,400
		(f) Development of non-traditional and renewable energy sources in the enterprises of the sector	2,100
		6. Other industries: 3 projects (cotton, butter-oil) to improve power generation	
		(a) Organizational and technical measures aimed at improvement of technical conditions of power generation machinery and enhancement of production technologies in the enterprises of the sector (Cotton ginning industry)	100
		(b) Organizational and technical measures aimed at improvement of technical conditions of power generation machinery and enhancement of production technologies in the enterprises of the sector (Butter-oil production)	100
	Transport	(c) Upgrading and replacement of technological equipment in the enterprises of the sector (Butter-oil production)	11,000
		<i>Renewable</i>	
		7. Small capacity hydro-power plants	300,000
	Industrial Processes	8. Pskent hydro-power plant	420,000
		9. Road transport	2,000,000
		10. Railroad transport	1,464,000
11. Air transport		1,000,000	
	12. Reduction of CO ₂ emissions: Complete construction of the units for production of weak nitric acid and ammonia saltpetre (ammonium nitrate) at Fergana PO "Azot"	8,800	



COUNTRY	SECTOR	NAME OF PROJECT	ESTIMATED COST (thousand US\$)
UZBEKISTAN	Industrial Processes	13. Reduction of CO ₂ emissions: Upgrading of nitrate producing shop in Chirchik PO "Eletrohimprom"	20,000
		14. Reduction of CO ₂ emissions: Updating technology of nitrate producing units at the Fergana PO "Azot"	30,000
		15. Reduction of CO ₂ emissions: Transfer of the first shift of ammonia production of PO Navoiyazot for production of methanol	2,500
	Agriculture	16. Replacement of diesel pumping plants by electric drive	120,200
		17. Rationalization of energy-saving of irrigation systems and reduction of irrigation water losses	2,500
		18. Replacement of out-of-date machinery by qualitatively new machinery	1,000,000
		19. Introduction of metering and control systems of consumption of energy resources and water	72,300
	Waste	20. Municipal and household sector: upgrading of small capacity boilers	331,100
		21. Installation of gas meters for consumers	261,000
		22. Municipal and household sector: Waste incinerating plant for Tashkent	45,000
ZIMBABWE	Energy	1. Investing in demand side management in the electricity sector	-
		<i>Renewable</i>	
		2. Investment in small-scale hydroelectricity power stations to supply rural and peri-urban consumers	-
		3. Install solar mini-grid utilities to serve rural centres not connected to the grid	-
		4. Accelerated promotion of biogas technology in rural low income households	-