Compact Fluorescent Lamps (CFL) [i]

Sector	ENERGY
Subsector	Energy efficiency
Technology name	Compact Fluorescent Lamps (CFL)
Scale	Small scale
Availability	Short term
Technology to be included in prioritization	This type of technology has been considered in energy efficiency options listed in the national mitigation study.
Background/notes	Replacing incandescent bulbs with CFLs lowers the electrical bill for lighting up to 75%. If 20 incandescent bulbs of 75-watt capacity are replaced by 23-watt CFLs, it would save 1,040 watts for every hour that the lamps are used. At five hours per day, this means saving over 2,000 kWh or about $208 back in the pocket every year (Replace them with a 20-watt CFL and save more - but slightly less light).
Implementation assumptions	A nationwide awareness raising campaign on the benefits of CFLs is required prior to the commercial mass introduction of CFLs. Incentive schemes may also be necessary to promote the use of CFLs among public (such as lower prices for CFLs in case incandescent light bulbs are brought for exchange with CFLs).
Impact Statements (how this option impacts the country development priorities)	
Country social development priorities	The project directly benefits individual households through the installation of CFLs which will result in energy savings and lower expenditures, and contribute to national objectives to reduce poverty.
Country development priorities	Renewable energy and energy efficiency development are the priority of the RGC.
Country environmental development priorities	The major benefit of energy-efficient CFLs lies in the improved energy efficiency, which has socio-economic benefits in terms of increased energy security and environmental benefits, i.e. lower GHG emissions, and lower environmental impact of electricity generation. In addition, CFL lead to cost-savings for the consumer over the life-cycle of the appliance, and improve local air quality. All these are in line with the country's environmental development priorities.
Other consideration and priorities such as market potential	This technology is proven and available in Cambodia. Itsmarket can be considerably increased if enabling environment is in place (awareness, financial incentive, policy and regulation, etc.).
Costs (US$)	
Capital costs over 10 years	The cost of CFL varies with the design features, materials used, application, etc. In the United States, a CFL has a higher purchase price than an incandescent lamp, but can save over US$40 in electricity costs over the lamp's lifetime. Average cost of a basic branded CFL in Cambodia is less than $2 for a 10W bulb.

Operational costs over 10 years	N/a
Other costs over 10 years	N/a

[i] **This fact sheet has been extracted from TNA Report – Kingdom of Cambodia - Technology needs assessment and technology action plans for climate change mitigation. You can access the complete report from the TNA project website http://tech-action.org/**