



Clean Development Mechanism Sustainable Development co-Benefits Description Report¹

CDM project activity information	
Title	Cable Cars Metro Medellín, Colombia
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Type	Project Activity
Sectoral Scope	Transport (7)
Host Party	Colombia

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Overview of sustainable development co-Benefits

A. The extent of environmental co-Benefits:

		N/A	Partly	Slightly	Highly
Air	Reducing Sox				•
	Reducing Nox				•
	Reducing Fly ash	•			
	Reducing suspended particulate matter (SPM)				•
	Reducing Non Methane Volatile Organic Compounds (NMVOCs)				•
	Reducing Noise Pollution				•
	Reducing Odors	•			
	Reducing Dust	•			
	Other air quality improvements	•			
	Land	Preventing end of life products/equipment (solid waste)	•		
Producing/using compost		•			
Producing/using manure, mineral fertilizer or other soil nutrients		•			
Irrigation		•			
Preventing soil erosion		•			
Minimum tillage					
Other means to improve land quality		•			
Water	Improving management/control of wastewater	•			
	Saving/conserving of water	•			
	Improving reliability/accessibility of water supply	•			
	Purification/cleaner water supply	•			
	Improving ecological state of water bodies	•			
	Other means to improve water	•			
Natural Resources	Protecting mineral resources	•			
	Protecting/enhancing plant life	•			
	Protecting/enhancing species diversity	•			
	Protecting/enhancing forests	•			
	Protecting/enhancing other depletable natural resources	•			

B. The extent of social co-Benefits:

		N/A	Partly	Slightly	Highly
Jobs	New long-term jobs	•			
	New short-term jobs	•			
	New sources of income generation	•			
	Other employment opportunities	•			
Health & Safety	Disease prevention				•
	Reducing accidents	•			
	Reducing crime				•
	Preserving food	•			
	Reducing health damaging indoor air pollution	•			
	Enhancing health services				•
	Improving sanitation and waste management		•		
Other health and safety improvement	•				



Education	Job-related training	•			
	Enhanced educational services				•
	Project-related knowledge dissemination				•
	Other educational benefits	•			
Welfare	Improving working conditions	•			
	Community or rural advancement	•			
	Poverty alleviation (more people above poverty level)			•	
	Improving wealth distribution/generation of income and assets			•	
	Increased municipal revenues	•			
	Optimized women's empowerment	•			
	Reduced traffic congestion				•
	Other welfare benefits	•			

C. The extent of economic co-Benefits:

		N/A	Partly	Slightly	Highly
Growth	New investments		•		
	New industrial/commercial activities		•		
	New infrastructure		•		
	Enhancement of productivity	•			
	Reduction of production costs (services)	•			
	New business opportunities	•			
	Other economic benefits				•
Energy	Improvement in supply of energy	•			
	Access to energy	•			
	Affordability and/or reliability of energy	•			
	Other energy improvements	•			
Technology	Introducing/developing/diffusing imported technology		•		
	Introducing/developing/diffusing local technology		•		
	Adaptation of new technologies to local circumstances				•
	Know-how activities for a technology	•			
	Other technological benefits				•
Balance of payments	Reduction of foreign dependency		•		
	Other macro-economic benefits				•

D. Further information:

		N/A	Partly	Slightly	Highly
		•			



Detailed description

A. Environmental co-Benefits

No co-benefits related to land, water, natural resources are described.

	Indicator	Specification	Extent
Air	The CDM project activity improves air quality by reducing air pollutants as follows:		
	SOx	<i>The Project leads to mode switch from cars, taxis, buses and motorcyles to cable car and therefore results in reduced vehicle and fossil fuel emissions including SO2</i>	Highly
	NOx	<i>The Project leads to mode switch from cars, taxis, buses and motorcyles to cable car and therefore results in reduced vehicle and fossil fuel emissions including NOx</i>	Highly
	Fly ash emissions		N/A
	SPM	<i>The Project leads to mode switch from cars, taxis, buses and motorcyles to cable car and therefore results in reduced vehicle and fossil fuel emissions including particle matter</i>	Highly
	NMVOCs	<i>The Project leads to mode switch from cars, taxis, buses and motorcyles to cable car and therefore results in reduced vehicle and fossil fuel emissions including NMVOCs</i>	Highly
	Noise	<i>The Project leads to mode switch from cars, taxis, buses and motorcyles to cable car and therefore results in reduced vehicle and fossil fuel noise emissions</i>	Highly
	Odors		N/A
	Dust		N/A

B. Social co-Benefits

No co-benefits related to jobs are described.

	Indicator	Specification	Extent
Health & safety	The CDM results in health and safety improvements as follows:		
	Reduction of diseases, disease prevention	<i>less health problems due to air pollution which affects basically elderly people and childre.</i>	Highly
	Reduction of crime	<i>The zone of influence of the first cable car line was specifically chosen as a social Project to recude the crime rate and improve livelihood of a empoverished urban zone. The crime rate was monitored and reduced from being the zone with the highest crime rate of the city to one of the savest city areas.</i>	Highly
	Enhancement of health services	<i>The Project established in the zone various emergency medical services in its efforts to improve livelihood</i>	Highly
	Improved sanitation and waste management	<i>The Project established in the zone various sanitation services in its efforts to improve livelihood</i>	Partly
Education	The CDM project activity facilitates education, dissemination of information, research or increases awareness as follows:		
	Enhanced educational services	<i>The Project established in the zone various schools and a large library plus social servicesin its efforts to improve livelihood</i>	Highly



	Project related knowledge dissemination	<i>The Project was highly acclaimed and visited by numerous cities and Stakeholders. The concept of using a mass Transit System to improve livelihood of empoverished and high criminal zones was copied by Caracas in Venezuela and by Rio en Brazil. The Project was also copied by other Colombian cities and by La Paz, Bolivia.</i>	Highly
Welfare	The CDM project activity improves local living and working conditions as follows:		
	Poverty alleviation	<i>Improved affordability of transport as cable car tickets were included without surcost ina normal Metro ticket thus reducing transport costs of people.</i>	Slightly
	Changes in distribution and/or generation of income and assets	<i>Fostering of public transport which is more used by less wealthy people through General tax revenues.</i>	Slightly
	Reduced traffic congestion	<i>Reduction of the number of vehicles and less congestion through mode switch from buses, cars, taxis and motorcycles to cable car. Also increased attractiveness and connectivity of Metro through cable cars which have their end station on the Metro Station thus also increasing ridership in general of Metro and reducing traffic congestion.</i>	Highly

C. Economic co-Benefits

No co-benefits related to energy are described.

	Indicator	Specification	Extent
Growth	The CDM project activity supports economic development and/or stability as follows:		
	New investments	<i>In the Project influence zone lots of housing and shop investment due to improved safety and attractiveness of the area.</i>	Partly
	New industrial/comercial activities	<i>In the Project influence zone new commercial activities due to improved safety and attractiveness of the area.</i>	Partly
	New infrastructure	<i>In the Project influence zone a multi-media library and social house was built, various sports fields were constructed, schools, sanitary posts and other installations to increse the Zone attractivity..</i>	Partly
	Other economic benefits	<i>Less time for Transport. The people living in the zone save around 40 minutes per day on transport. Also one line is connected to a national park which could previously only be visited by car thus bringing people also closer to nature protection.</i>	Highly
Technology transfer	The CDM project activity results in a change in technology as follows:		
	New imported technology	<i>Cable car technology from France</i>	Partly
	New local technology	<i>First Mass Transit System with cable car integrated with Metro. At ist start highest capacity of cable cars worldwide.</i>	Partly
	Adaptation of new viable technologies		Highly
	Other technological benefits	<i>Forerunner copied by various other cities in Latin America and serving as model for usage of cable cars for mass transit and for usage of public Transport Systems to improve liveability of highly critical urban zones. The cable car was specifically designed by the city as an instrument to improve the social and economic circumstances of a high-criminality very poor urban Zone</i>	Highly



		<i>i.e. the cable car was accompanied by multiple Investments in the social field.</i>	
Balance of payments	The CDM project activity results in improving the country's balance of payments as follows:		
	Reduction of the dependency on foreign sources of energy	<i>Reduced usage of imported fossil fuels such as gasoline and diesel and replacement with electricity which is to a large extent produced with renewables such as hydro and wind.</i>	Partly
	Other macroeconomic benefits	<i>Less costs of criminality, congestion and time lost in traffic.</i>	Highly