

NAMAs in the refrigeration, air conditioning and foam sectors. A technical handbook.



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Co-benefits indicators: List of market and policy incentives

TABLE 1 Market and policy incentives	
Market incentives	Policy incentives
Technology access	Technology Innovation
Improved Functionality	Innovation and Learning
Cooling capacity under local conditions	Innovating societal technology base
Function under ambient temperature extremes (high, low in case of heat pumps)	Adapted national capacities for temperature control of supplies and buildings with changing climate
COP = Co-efficient of performance	Promote national research and knowledge capacities
Improved overall system design	Application of existing safety standards
Stable temperature control	Leverage relevant sector technology standards
Quick temperature pull down	
Operational safety	
Reliability & robustness under local condition	
Lifetime	
Operational comfort	
Less Noise	
Special features (cold water dispenser etc.)	
Defrosting capacities	
Variable speed control	
Servicing cycles	
Environmental Behaviour	Environmental Impact
Material resources	Resource efficiency
Material saving design	Increased utilisation of local resources
Reduced human toxicity of materials	Avoiding use of depletable resources
Potential need for additional future conversions following environmental agreements	Protection of local water, soil, air from pollution
	Increased recycling rate under local conditions
Waste management	Compliance w/other MEAs (other than Climate)
Reuse/recycling friendly design	Compliance with Montreal Protocol
Costs for recycling/disposal	Compliance with chemical waste agreements
Behavioural incentive to increase utilisation	Formation of persistent waste products
	External costs for recycling/disposal
	Environmental toxicity of materials

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Environmental Behaviour	Environmental Impact
Energy options	Energy Standards
Seasonal energy efficiency	Potential to lift national energy standards
Potential to utilise in non-grid areas	Potential to change power supplies to renewable energies
Potential to use existing waste heat for cooling	Contribution for rationalising the energy sector
Potential capacity to store cold (energy) storage	Power generation capacities
Improved energy controls	Smart grid management
Apply hot water co-generation when relevant	
Social incentives	Social Development/Governance
Living and working conditions	Green buildings
Improved option for building systems integration	Facility Management of Public services/ Health sector
Working place conditions	Developing green cooling concepts for building sector
Living comfort	Improved living conditions
Cold chain access	Securing quality of foods and pharmaceuticals
Options for cold chain expansion/integration	Sustain national cold chain management
Accessibility to temperature controlled goods	Broadening food supplies
Equity & access to services	Reduce poor households expenditures
Accessibility to Refrigeration or A/C	Education and qualification
Compatibility w/ international standards	Increased public awareness
Feeling social responsibility	Formalisation of informal sector activities
Acquire formal work recognition/integration (status)	Develop new employment opportunities
Improved quality of temperature controlled goods	Building institutional capacities
Participation of private sector	Establish national sector inventory in the RAC/F
Providing capita & applying for NAMA support	Building skills for NAMA implementation (MRV)
Demonstration of NAMA process to sector stakeholders	

TABLE 1 Market and policy incentives

Market incentives	Policy incentives
Economic incentives	Economic Development
Consumer economy	Consumer sector policies
Acquisition costs	Affordability of RAC services
Operational savings:	Transition to green growth for cooling supplies and buildings
Energy	Reduce needs for energy subsidies
Consumables (refrigerant, oils)	Affordability of RAC services
Maintenance costs	Transition to green growth for cooling supplies and buildings
Disposal	Reduce needs for energy subsidies
Improved commercial applicability	Promote income generation opportunities
Increased productivity for working spaces	Quality assurance schemes
Less waste from temperature controlled goods	Nationally certified quality assurance of services
Servicing/Recycling capacities	Increase formal employment in the servicing and electric waste sector
Qualified servicing intensity is increased versus consumptive material intensity	Improve local access & know how on best practice
Securing jobs in servicing and recycling	Production sector policies
Incentives to apply best practice	Securing industrial employment
Manufacturing capacities	Promote diversified national industries and production
Incentives for development	Reducing dependence on imports
Acquisition of improved product designs/knowhow	Save foreign exchange spending
Improved competitiveness of national production and products vs. imports	
Export opportunities	



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