

APPENDIX 2

TABLE 1. COMPLETED AND ONGOING STUDIES, SOURCES, INCENTIVES, PLANS AND DEMANDS ON CLEANER (SUSTAINABLE) PRODUCTION

TABLE 2. COMPLETED AND ONGOING RESEARCH, RESOURCES, INCENTIVES, PLANS AND NEEDS IN FIELDS OF ENERGY EFFICIENCY AND RENEWABLE/CLEAN ENERGY

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

PUBLIC BODIES	
MINISTRY OF ENVIRONMENT AND FORESTRY	Studies and Projects
	<ul style="list-style-type: none"> • Environmental Education Project with Implementation (1999-2000), Implementation in more than 2000 schools about environmental pollution prevention, recycle and reuse of wastes in addition to other subjects with MoE, • Green Box Environmental Education Project (2005-2009), Giving education to more than 8.000 teachers and 800.000 students in the scope of the project on sustainability subject with MoEF and REC Turkey, • Development and Incentive of the Modern Irrigation Systems (2008-2009), To be carried out with Altinekin Governship, General Directorate of State Hydraulics, Konya Special Provincial Administration, Konya Provincial Agriculture Directorate, Altinekin District Directorate of Agriculture and WWF-Turkey in order to provide efficient water use, prevent the soil from chemical fertilizer originated pollutants and provide energy efficiency, • “Life HAWAMAN Project- Amendment Project of Management of Hazardous Waste caused by Industry in Turkey”, • Gain of Integrated Pollution Prevention and Control Directive to internal legislation; Projects for the implementation, • “Supporting the Implementation of the IPPC-2008/01/EC Directive” Project, • Studies on Legislation Draft about Giving Environmental Label, • “Building Capacity for Cleaner Production Implementation in Turkey” TUBITAK KAMAG Project Proposal, • “Determination of the Framework Conditions and R&D Demands for Generalization of the Cleaner Production Implementations in Turkey”, • Draft International Implementation Project for Stockholm Agreement in regard to Permanent Organic Pollutants in Turkey, • “Project of Internalization of the EMAS Regulation of which number is 761/2001” (2008-2009)
	Academic and R&D Studies
	<ul style="list-style-type: none"> • Research and monitoring projects on bioenergy (obtaining cleaner and more sustainable energy from wood raw material)

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PUBLIC BODIES	
MINISTRY OF ENVIRONMENT AND FORESTRY	<p>Dissemination and Information Activities</p> <ul style="list-style-type: none"> • Cleaner Production: A tool for Green Competitiveness in the Turkish Industry, Workshop and Short Course, Middle East Technical University, Department of Environmental Engineering, Workshop Series, Middle East Technical University, Ministry of Environment and Forestry, Regional Activity Centre for Cleaner Production, 31 March-2 April 2008, Middle East Technical University, Ankara. • GRECO Forum (Istanbul)
	<p>Web Site: www.eyd.cevreorman@gov.tr www.arge-cevreorman.gov.tr www.atikyonetimi.cevreorman.gov.tr</p>
MINISTRY OF INDUSTRY AND COMMERCE	<p>Studies and Projects</p> <ul style="list-style-type: none"> • Eco-efficiency (Cleaner Production) Programme, Beneficiary
	<p>Dissemination and Information Activities</p> <ul style="list-style-type: none"> • “Project of Capacity Improvement for Climate Change Control in Turkey” • “Development and Transfer of Climate Friendly Technologies” and “ Sectoral Approaches” (April 15,2009-Istanbul, May 12,2009-Istanbul, June 30, 2009-Ankara)
MINISTRY OF PUBLIC WORKS ANDSETTLEMENT	<p>Academic and R&D Studies</p> <ul style="list-style-type: none"> • In the scope of R&D researches in regard to determination of alternative usage areas after discharge of flue dust, cinder, scale and so forth wastes.

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PUBLIC BODIES	
NATIONAL PRODUCTIVITY CENTER	Studies and Projects
	<p><u>Supported Projects:</u></p> <ul style="list-style-type: none"> • TUBITAK 1001 Project: "Development of Industrial Efficiency and Environmental Performance in accordance with Small and Medium Sized Enterprises (SME-KOBİ)", Project Coordinator (July 2007- April 2009) • EU CIP-EIP Project: "Eco- Industrial Park Environmental Support System (EPESUS)", Project Partner (August 2009-July 2012) • Establishment of Eco-Management and Auditing Program (EMAS) and Technical Support Project to Turkey for implementation <p><u>Research Studies:</u></p> <ul style="list-style-type: none"> • Cleaner Production for More Effective Environmental Management in Industry: One Sectoral Application (2009) • Increasing Environmental Performance by Auditing Waste Minimization Method (2007) • Interaction between Environment and Industrial Growing (2007) • Eco-Efficiency in SMEs: An Application in Metal Coating Sector regarding to Economical and Environmental Amendment of the Enterprises (2007) • Possible Effects of Integrated Pollution Prevention and Control Directive on Food and Iron-Steel Sector (2006) • Green Efficiency (2005-2006) • Environmental Sensitive Approaches in Industry: Cleaner Production and Eco-Efficiency (2005)
	Publications
	<ul style="list-style-type: none"> • Eco-efficiency Guideline in SMEs, National Productivity Center Publications, 2009. • Possible Effects of Integrated Pollution Prevention and Control Directive on Food and Iron-Steel Sector, National Productivity Center Publications No: 704, 2008. • Green Efficiency, National Productivity Center Publications No:700, 2008. • Environmental Sensitive Approaches in Industry: Cleaner Production and Eco-Efficiency, National Productivity Center Publications No:693, 2007. • "5. Dubrovnik Conference on Sustainable Development of Energy Water and Environment Systems"; "Eco-Efficiency Improvements in Turkish SME's"(September, 2009) • "VIII. National Ecology and Environment Conference" ; " Energy and Environment in SME's" (October 2008) • "4. Iron-Steel Conference"; "IPPC Directive in Iron-Steel Sector and Source and Waste Management in the Sector" (November,2007) • "Solid Waste Management and Environmental Problems Symposium in Turkey during EU Membership Process TURKAY 2007"; " Industrial Ecology: Sub-product Synergy" (May 2007)

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PUBLIC BODIES	
NATIONAL PRODUCTIVITY CENTER	Dissemination and Information Activities
	<ul style="list-style-type: none"> • Education including world applications of which subject is “ Environmental Sensitive Production: Eco-efficiency” regarding to Industrialists • Radio programs which raise awareness on eco-efficiency • Publications about the subject in printed and visual press
	Current and Proposed Sources
	<ul style="list-style-type: none"> • Technical Support • Consultant Support • Related Specialist on the subject • Literature studies prepared related specialists
	Plans and Targets
	<ul style="list-style-type: none"> • Supporting the establishment of National Eco- efficiency Centre • Providing generalization of the environmental sensitive applications such as eco-efficiency- cleaner production in industry for the development of the efficiency and competition • Supporting the awareness studies on the eco-efficiency subject
	Education and Source Demands
<ul style="list-style-type: none"> • Collaboration with the related national and international stakeholders and education of the related specialists working on Eco-efficiency/Cleaner Production 	
Web Site: http://mpm.org.tr/ekoverimlilik/	

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PUBLIC BODIES	
TÜBİTAK – TÜBİTAK MAM	Studies and Projects
	<p><u>Projects:</u></p> <ul style="list-style-type: none"> • ZERO M- Sustainable Concept Towards A Zero Outflow Municipality, TÜBİTAK-MRC-EI, subsidizing organization: EU Sixth Framework Programme, 2003-2007. • Project of Making R&D Studies in related to the Cleaner Production Technologies which is not harmful for Ecological Balance and is used for the Production of the Textile Products in International Standards, (TTGV – No:263), TÜBİTAK MAM Textile, Improvement and Confection Cleaner Technologies Institutes <p><u>Studies:</u></p> <ul style="list-style-type: none"> • New approaches in the national innovation strategies in the World and various innovation strategies placed in OECD Innovation Portal, sustainable development proposals and following targets; • Collecting information and making presentations about programs such as Eco-cities (Japan) including R&D and innovations, Sustainable Communities (Finland), Green New Deal (South Korea), FONA(Germany), Green Vision (San José) with the increasing developments in the World • Following the outputs of Project on Sustainable Manufacturing and Eco-Innovation carrying out by the OECD CIIE and planning the participation to the workshops to be organized; • Beside national innovation strategies, following the applications including eco-innovations which are placed in the local innovation examples (For example, Stockholm Vision 2030 and Dalian, Cleaner production in China, Renewable Energy, recycling and life cycle applications).
	Academic and R&D Studies
	<ul style="list-style-type: none"> • Academic studies of Şiir Kılıç who is Science, Technology, Innovation Policies and Strategies Directorate, responsible personnel from efficiency, environmental friendly strategies
	Publications
<ul style="list-style-type: none"> • Baban, G. Avaz, A. Yediler. Wastewater Management in Textile Industry a Case on Treatability of Reusable and Remaining Streams. From Transitional Economy to Sustainable Development, NATO Science Programme, Cooperative Science & Technology Sub-Programme Advanced Research Workshop (ARW), Dniepropetrovsk, Ukraine October 22-25, 2001. • Baban, N. K. Cılız, A. Yediler, G. Avaz. CP application and cost assessment for reuse in textile industry. MEDA WATER International Conference on Sustainable Water Management Rational Water Use, Wastewater Treatment and Reuse (RUWTR 2006) for June 8-10, 2006 in Marrakech, Morocco. • Kiran, N., Baban, A., "Enhancements of Energy and Water Conservation Concept in Textile Industry", Global Competitiveness through Cleaner Production, J.A.Scott and R.J.Pagan, p. 565-573, 21-24 April, 1999, Brisbane, Australia 	

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PUBLIC BODIES	
TUBITAK- TUBIITAK MAM	Provided Incentive, Financial Supports
	<ul style="list-style-type: none"> • R&D studies regarding to cleaner technologies and various financial supports have been provided by the help of programs carried out by KAMAG and TEYDEB within the body of ARDEB of TUBITAK and especially CAYDAG. In addition, Automotive Technology Platform, which has been started by TUBITAK and continued with private sectors' leadership, has been taken support of TUBITAK-ISBAP. The aim of this Platform is "developing and applying added-value technologies regarding to global needs for globally sustainable and competitive Automotive Industry which presents innovative, environmentalist, efficient and modern national system and platform solutions".
	Plans and Targets
	<ul style="list-style-type: none"> • Being in the first place in new innovations presents special importance for Turkey's competitive force. A lot of sub-benefices of environmentally friendly, cleaner technologies described as sixth innovation wave. In order to increase our competitiveness force by catching up these innovations rapidly, various measurement shall be taken by TUBITAK.
	<p>Web Site: www.tubitak.gov.tr www.mam.gov.tr www.zer0-m.org</p>
SMALL AND MEDIUM INDUSTRY DEVELOPMENT ORGANIZATION (KOSGEB)	Studies and Projects
	<ul style="list-style-type: none"> • Taking opinion of "Non Governmental Organization" and "Manufacturer" for related studies; of which subject is transferring "Directive regarding to Reduce Sulphur Ratio of Some Liquid Fuel" to National Legislation and in which Presidency Delegate takes place; and inform Ministry of Environment and Forestry" • Project of Establishment of Information System about EU Environmental Acquis Harmonization for Turkish SMEs • Project of the Minimization of the Ozone Depleting Subjects • Project of Technical Support to Turkey about Establishment and Application of Eco-Management and Application System • Project Partner of Eco-Industrial Park Environmental Support System (EPESUS) • MATRA Project (2009-), Classification of REACH Legislation and hazardous material and compositions, labeling and packaging • MATRA Project (2009-), Project prepared in order to raise awareness of exporters about classification of REACH legislation and hazardous material and compositions, labeling and packaging and CLP and establish regional industry aid-desks.
	Publications
	<ul style="list-style-type: none"> • Announcement of REACH Legislation and Arrangements

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PUBLIC BODIES	
IZMIR DEVELOPMENT AGENCY	Current and proposed Sources
	<ul style="list-style-type: none"> Proposed source amount for the area on Agriculture and Rural Development and Tourism and Environment Infrastructure has been determined as 31.610.489 TL
	Provided Incentive and Financial Sources
	<p>Supported project subjects under the scope of SME Financial Support Programme;</p> <ul style="list-style-type: none"> Increasing usage of the environmental sensitive methods, technologies and energy types and provide passing to cleaner production processes, Making amendments in order to make production and processes as environmental sensitive, Providing clean energy production and consumption in enterprises. "Tourism and Environment Infrastructure" <p>7 projects placed in cleaner production scope have taken grant support under the scope of the 2008 Support Programme. Support Programme has been continuing.</p>
	Plans and Targets
<p>Priorities and targets in the framework of Sustainable Environment Tematical Development Axis according to regional development plan prepared as draft for 2009-2013 term:</p> <ul style="list-style-type: none"> Providing sustainable water and wastewater management in shed areas, regions having tourism value and rural areas Providing sustainable solid waste and hazardous waste management Providing air quality control and amendment Providing sensitive ecosystems and biodiversity continuity Providing energy efficiency Increasing Cleaner Production applications in SMEs <p>It has been planned that evaluation of environmental performance of the program will be made by analyzing directly and indirectly effects at the end of the SME Financial Support Programme.</p>	

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PUBLIC BODIES	
IZMIR DEVELOPMENT AGENCY	Education and Source Demands
	<ul style="list-style-type: none">• Applied educations about cleaner production, eco-efficiency, energy efficiency, sharing good application examples and preparing education programs from application example in the region (Izmir) from which pilot institutions are chosen among industrial enterprises are demands in the region. Food, textile and chemical industries are the suitable sectors for this subject.
	Web Site: www.izka.org.tr

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INDUSTRIAL ZONE, CHAMBER OF INDUSTRY	
AEGEAN REGION CHAMBER OF INDUSTRY	Studies and Projects
	<ul style="list-style-type: none"> • In the scope of the Project of Integration of the Sustainability Development to the Sectoral Policies :“Project of Creating Environmental Awareness in Industrial Institutions in the way of Sustainable Development “
	Publications
	<p>In the scope of “Project of Creating Environmental Awareness in Industrial Institutions in the way of Sustainable Development”;</p> <ul style="list-style-type: none"> • Data Collection Study to determine the effect of industry production facilities on environmental pollution, ISO 14001 application levels, technologies used by companies, analysis of them in terms of the most suitable methods, awareness level of industrialists and knowledge level of industrialists regarding environmental directives, (Results of the mentioned study have been published as report) • Project Result Report including all studies done in the scope of the project • “Environmental Strategies For Industrialist During EU Harmonization Process” for the purpose of creating Environmental Awareness among Industrialists
	Dissemination and Information Activities
<ul style="list-style-type: none"> • Within the scope of the Aegean Region Chamber of Industry SME School, regular monthly educations and availability meetings of which subjects are determined by Environmental Committee 	
GAZIANTEP CHAMBER OF INDUSTRY	Studies and Projects
	<ul style="list-style-type: none"> • Gaziantep Chamber of Industry Waste Recycling Stock Market
	Publications
	<ul style="list-style-type: none"> • Gaziantep Chamber of Industry Waste Recycling Stock Market Monthly Bulletin
	Web Site: www.gso.org.tr

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INDUSTRIAL ZONE, CHAMBER OF INDUSTRY	
ISTANBUL CHAMBER OF INDUSTRY	Studies and Projects
	<ul style="list-style-type: none"> • “Cleaner Production” presentation in “Kyoto Protocol and Industry” subjected conference. July, 12, 2007 • “Environmental Technologies: Waste Management Conference” April, 20, 2009
	Publications
	<ul style="list-style-type: none"> • Environmental Management System Guidance
	Provided Incentives and Financial Sources
	<ul style="list-style-type: none"> • There is support to the Centre for the establishment of the Bogazici University Sustainable Development and Cleaner Production Centre.
	Plans and Targets
	<ul style="list-style-type: none"> • In order to protect ecological balance; carry out studies to provide effective usage of energy and raw material, minimize the waste, recycle waste as possible as, reuse and suitable discharge of them, prefer environmental friendly production and product. • Endeavoring for development and application of environmental friendly technologies, voluntary environment management systems and environmental standards, incentive of the SMEs to use cleaner technologies and prefer environmental friendly production and product, supporting the researches and development studies carried out on these subjects.
	Web Site: www.iso.org.tr /“Our Environmental Activities”
ISTANBUL CHAMBER OF COMMERCE	Studies and Projects
	<ul style="list-style-type: none"> • Applications providing savings in Istanbul Chamber of Commerce and work processes (water saving; incentive for recycling of paper-plastics-glass, paper saving) (these savings shall be measurable and after these precautions one measurement institution will be authorized and provided savings will be determined.)

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INDUSTRIAL ZONE, CHAMBER OF INDUSTRY	
MERSIN CHAMBER OF INDUSTRY AND COMMERCE	Studies and Projects
	<ul style="list-style-type: none"> • Waste Battery Collection Campaign • Project of “Evaluation the coherence of the Sectors with EU of in terms of Environmental Legislation” (in tandem with Istanbul Chamber of Industry)
	Publications
	<ul style="list-style-type: none"> • Hazardous Waste Awareness Brochure
	Dissemination and Information Activities
	<ul style="list-style-type: none"> • “ISO 14001 Environmental Management System Basic Training” has been given to the personnel of environmental study group by Turkish Standards Institute (TSE) February, 14, 2008 • In these scope of waste battery collection campaign, informative activities are done by distributing waste battery can, box and brochures to group member companies, Mersin-Tarsus Industrial Zone, Mersin Free Zone Operator Inc. (MESBAS) and primary schools flowing the campaign from local press • REACH training. November, 7, 2008 • Published by Ministry of Environment and Forestry: <ul style="list-style-type: none"> ○ Regulation on the regarding market supply and usage constraints of some hazardous materials, preparations and production of the objects, ○ Regulation on the regarding chemicals’ inventory and control, ○ Regulation regarding on preparations and distribution of safety information forms for hazardous materials and preparations, ○ Regulation regarding on classification, labeling and packaging of hazardous materials and preparations, ○ Regarding Trainings, May, 7-8, 2009
OSTİM	Studies and Projects
	<ul style="list-style-type: none"> • Green Building (OSTİM Administration Building) Project
	Publications
	<ul style="list-style-type: none"> • Green Building Project Brochure
	Web Site: http://www.ostim.org.tr/

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INDUSTRIAL ZONE, CHAMBER OF INDUSTRY	
BURSA CHAMBER OF INDUSTRY AND COMMERCE	Publications
	<u>By Bursa Chamber of Industry and Commerce</u>
	<ul style="list-style-type: none"> ○ “Global Principles Agreement Manual”
	<u>By Bursa Environmental Centre</u>
	<ul style="list-style-type: none"> ○ “Efficient Usage of Energy in Enterprises” ○ “Environmental Pollution Prevention in Enterprises”
	Dissemination and Information Activities
	<ul style="list-style-type: none"> ● Giving trainings regarding to environmental pollution and ISO regulations in Bursa Surrounding Center Enterprises
ESKISEHIR CHAMBER OF INDUSTRY	Plans and Targets
	Targets between years of 2009-2013 of Bursa Chamber of Commerce and Industry:
	<ul style="list-style-type: none"> ● Recycling: Water from Wastewater Treatment Plant (Therefore it is aimed that 2nd quality water can be obtained and given to the energy plants)
	Web Site: www.bcm.org.tr
INDUSTRY	Studies and Projects
	<ul style="list-style-type: none"> ● ESİNKAP Project of “Creating Capacity for Eskisehir Province Innovation Strategies”, 2008-2009 (Partner Coordinator with TTGV)
	Dissemination and Information Activities
	<ul style="list-style-type: none"> ● In the scope of the ESİNKAP Project, “Competition Oriented Environmental Training Programme” for industrialist (Subject titles: Eco-innovation, environmental management, harmonization to EU regulation, cleaner production, eco-efficiency), 2008
	Web Site: www.eso.org.tr

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INDUSTRIAL ZONE, CHAMBER OF INDUSTRY	
ADANA CHAMBER OF INDUSTRY	<p>Studies and Projects</p> <ul style="list-style-type: none"> • ACI Water Recycling Stock Market • Turn Environmental Threats to Environmental Opportunities : Sectoral Solid Waste Management for SMEs • Industrial Common Life Project in Iskenderun Bay, BTC-UNDP Project. • Thousand Year Development Targets TOBB-UNDP Fund: “Source from Negative to Positive Project”
	<p>Dissemination and Information Activities</p> <ul style="list-style-type: none"> • Turn Environmental Threats to Environmental Opportunities/ Solid Waste Management Trainings • San-Tez Introduction Meeting • Development of the Harmonization Capacity of Turkey to Climate Change UN Common Programme, Cleaner Production and Eco-Efficiency in Industry Programme Information Meeting • New Chemical Strategy of European Union (REACH) Meeting • ISO 14001 conferences
ADANA CHAMBER OF COMMERCE	<p>Studies and Projects</p> <ul style="list-style-type: none"> • Green Touch Web Site Studies
	<p>Studies and Projects</p> <ul style="list-style-type: none"> • Konya Chamber of Industry TOBB Waste Market Office
KONYA CHAMBER OF INDUSTRY	<p>Dissemination and Information Activities</p> <ul style="list-style-type: none"> • In the scope of Grant Programme of Integration of Sustainable Development to Sectoral Policies “Solid Waste Management Training”. 50 companies have been taken training, current environmental legislations have been presented, CD has been prepared and they have been given to all member companies (2007). • Companies which are common with Konya Provincial Directorate of Environment and Forestry: <ul style="list-style-type: none"> ○ Hazardous waste legislation, ○ Package waste legislation, ○ Emission permission, ○ Conferences about EIA Reports (2009)
	<p>Web Site: http://www.kso.org.tr/atik/index.htm</p>

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SECTORS	
TUKDER	Academic / R&D Studies
	<ul style="list-style-type: none"> • In the subject of determination of R&D demand, study proposal on systems which are free from dust (TUKDER: Association of Brick and Tile Manufacturers)
PAGEV	Publications
	<ul style="list-style-type: none"> • Environmental articles in Plastic Journal published bimonthly
	Dissemination and Information Activities <ul style="list-style-type: none"> • EPRO (European Association of Plastics Recycling and Recovery Organizations) “Best Product Containing Recycled Plastics Competition” • PAGEV – Plastic Industry Conference– 2009 “Energy Saving, Environment and Plastic” • PAGEV, Informing the sector with “ Waste Management” and “ Recycling” in the scope of Business Development Programme supported by EU grants. (PAGEV: Research, Development and Training Foundation of Turkish Plastic Manufacturers)
CERAMIC RESEARCH CENTRE	Studies and Projects
	<ul style="list-style-type: none"> • Projects about efficient usage of raw material in coating material and more generalized usage of dry grinding in coating materials according to obey environmental management system, decrease frit used in glazing, improvement of polishing process during technical ceramic production, development of the glazing having high corrosion strength <ul style="list-style-type: none"> ○ Project 1: glazing without frit or with minimum frit ○ Project 2: Production of Environmentally friendly ceramic tile with Geopolimerazation Method (International Cornet Project)
	Web Site: www.seramikarastirma.com.tr

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SECTORS	
FEDERATION OF FOOD & DRINK INDUSTRY ASSOCIATIONS OF TURKEY	<p>Studies and Projects</p> <ul style="list-style-type: none"> • Project of “Business Support Programme” carried out by CIAA (Confederation of Food and Drink Industries of the EU) and TGDF (Association of Supporting Turkey’s Food and Drink Manufacturers Foundation) and supported by European Union. • Active participation of the TGDF agencies to 10 sub-commissions established by the Ministry of Environment and Forestry under the scope of the “Waste Packaging Regulation” • Following all studies about sustainable environment studies of CIAA (Confederation of Food and Drink Industries of the EU) in which TGDF is a participant and development in EU.
	<p>Publications</p> <ul style="list-style-type: none"> • Sustainable Environment Report (2009) (Content: Food Industry raw materials, Raw material source efficiency and waste management, Energy and climate change, Water, Package, Transportation and Distribution and point of sales)
	<p>Dissemination and Information Activities</p> <ul style="list-style-type: none"> • Environment Conference, September, 30-31, 2009, Istanbul: “ Food Safety and Environmental subjects (Environmental Legislation, environment/energy subjects, problematic environmental subjects for candidate countries, IPPC directive framework, energy efficiency) in the scope of the project of “Business Support Programme” • European Union Environmental Policies and Turkish Food and Drink Industry Conference, May 26 2009 Ankara: Sharing Sustainable Environment Report prepared by TGDF with public opinion with collaboration of TGDF, Ministry of Environment and Forestry and CIAA. • FOOD LINE (GIDA HATTI) journal which is media organ of TGDF
	<p>Plans and Targets</p> <ul style="list-style-type: none"> • Sustainable environment is placed in strategically priorities of TGDF • Effect on development of the environmental policies such as sustainable consumption and production, energy, climate changes, water, waste and source management • Improvement and dissemination of the R&D studies of the industry on the subject of environment • Inciting the development of the product evaluation methodology which takes life cycle as base and will be become strength and compatible • Encourage in point of being informative by not only with product packaging and also with informative ways in order to be made conscious preferences by consumers • Incentive of the applications in which sources are used efficiently during food chain processes such as agriculture, production, retailing and consumption. • Being coordination with national and international stakeholders which are in business, science and non-governmental areas.
	<p>International connection: Member of Confederation of Food and Drink Industries of the EU (CIAA)</p>
	<p>Web Site: www.tgdf.org.tr</p>

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SECTORS	
TURKISH CEMENT MANUFACTURERS' ASSOCIATION	Studies and Projects
	<ul style="list-style-type: none"> • Increasing Alternative Oil Consumption (Waste oil, tire, plastic, paint slush, contaminated waste, biosolid, etc.) • Increasing Alternative Material Usage (Cinder, volatile ash of thermal plant, trass, limestone, chemical additives increasing cement strength and cement production) • Emission and Air Quality of Cement Factory • Making Cement Examination and CE Certification • Studies on incentive of cement way usage
	Publications
	<ul style="list-style-type: none"> • Sustainable Cement Production (CEMBUREAU) (Translation and publication by TCMB) • Trasses and Cement with trass • Usage of the Solid Waste originated Oils in Cement and Concrete Kiln • Cinder and Cement with cinder • Sustainable Cement Production- Processing Alternative Oil and Raw material in European Cement Industry • TÇMB 3rd International Sustainability in Cement and Concrete Volume 1, Volume 2
	Dissemination and Information Activities
	<ul style="list-style-type: none"> • Environmental Permanent Committee Meetings • Climate Change Permanent Committee Meetings • II. Cement Industry Environment Declaration between TÇMB and Ministry of Environment and Forestry • Cooperation Protocol regarding to Usage of Waste as Alternative Oil in Cement Industry between Ministry of Environment and Forestry and Turkish Cement Manufacturers' Association • Trainings, scientific meetings, symposiums and conferences related to sectors

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SECTORS	
TURKISH CEMENT MANUFACTURERS' ASSOCIATION	Current and Proposed Sources
	<ul style="list-style-type: none"> • Performing international relationships in behalf of sector • Membership of CEMBUREAU (The European Cement Association) Workshop Groups and taking a part in related studies • Research and Development Institute • Accredited Laboratory Experiment according to TS EN ISO/IEC 17025 for Environmental Measurements • Measurement and consultancy services on the subject of environmental effects • Examination and certification in order to give Compatibility Certificate according to CE labeling • A Class Examination Institution according to TS EN ISO 17020, Product Certification Institution according to TS EN 45011, System Certification according to TS EN ISO/IEC 17021 (including TS EN ISO 14001 Environmental Management System Certification)
	Provided Incentives and Financial Sources
	<ul style="list-style-type: none"> • University- Supporting the research projects related with the sector in the framework of industry collaboration, encouraging master and doctorate studies with various scholarships. • Infrastructure investment support in various activities (especially in Ministry of Environment and Forestry studies)
	Web Site: www.tcma.org.tr
TOBB TURKISH FERROUS AND NONFERROUS IRON METALS	Studies and Projects
	<p>Application studies in the sector:</p> <ul style="list-style-type: none"> • On-going and planned investments in Facilities with Electric Arc Furnace <ul style="list-style-type: none"> ○ Make necessary maintenance, impairment and isolation studies in order to prevent dust emission distributing from materials stored in closed, ○ Development of project related to recycling of flue dust, scale and slag and making investment, ○ Pelletizing the flue dust or closing the transportation bands in order to prevent dusting during their transportation, ○ Improvement of the wastewater and process water systems, ○ Application of noise and emission reducer techniques. • On-going and planning investments in integrated facilities <ul style="list-style-type: none"> ○ Preventing emission by improving the coke batteries, ○ Reducing the natural resource usage by improving the water systems, ○ Establishment of the systems providing usage of recycled materials, ○ In order to reduce dust emission, using closed vehicles by buying.
	Web Site: www.dcu.org.tr

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SECTORS	
THE FOOD PROCESSING INDUSTRY EMPLOYERS' ASSOCIATION OF TURKEY	Plans and Targets nlar ve Hedefler
	<ul style="list-style-type: none"> • To improve competitiveveness of food industry, food quality and safety, customer benefit, to take part in formulization of legislations/regulations in environmental and industrial fields that are related to food sector.
	<p>Web Site: www.tugis.org</p>

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	<p>Studies and Projects</p> <ul style="list-style-type: none"> ● TUBITAK Project, “Production and Characterization of Agricultural Waste and Nano Structured, Semi-conductive, Antimicrobial, Biodegradable”, METU, Project Coordinator: Prof.Dr. Ufuk Bakır, 2008-2010. ● TUBITAK Project, “Transformation of Combustion Sourced CO2 to High Added-value Chemicals by Synthetic Photosynthesis Method”, METU, Project Coordinator : Prof.Dr. Deniz Üner, 2006-2009. ● TUBITAK Project, “Harmonization Studies with European Union IPPC Directives in Textile Sector: BAT Applications”, METU , Süleyman Demirel Üniversitesi, MoEF, Project Coordinator: Prof.Dr. Ülkü Yetiş (METU), 2005-2008. ● TUBITAK Project, “Sludge Minimization”, METU, Project Coordinator: Prof.Dr. F. Dilek Sanin, 2006-2008. ● In the scope of EU 7. FP Action Town Project, “Actions regarding to Incentive of Developing Sustainable Consumption and Production Policies among Related Stakeholders in Turkey”: “Life Cycle Analysis for a Sustainable Building” (SCPTurkey) Project, 2009-2010 Project Coordinator: TTGV, Project Partner METU Environmental Engineering Department. ● METU Environmental Engineering Department Carbon Footprint Study, 2007- ● AB FP 7 IRSES Project, “Nutrient Removal and Value Added Product Formation from Wastes Via Struvite Precipitation”, METU, Stuttgart University, Villanova University, Project Coordinator: Prof.Dr. Göksel N. Demirer 2009-2011. ● TUBITAK-BMBF IntenC Project, Agricultural Reuse of Water and Nutrients from Wastewater Treatment in Turkey, METU, Braunschweig University , Proje Coordinator: Prof.Dr. Göksel N. Demirer 2008-2011. ● TUBITAK-BMBF IntenC Project, Investigations on Nutrient Recovery from Anaerobic Digestion Residues with Different Compositions, METU, Stuttgart University, Proje Coordinator: Prof.Dr. Göksel N. Demirer 2007-2010. ● AB Leonardo da Vinci Multilateral Projects - Transfer of Innovation Project “Microtraining for effective knowledge transfer”, Delft University, METU, Aachen University, Sweden Royal Technology Institute, Katalonya Technical University, Project Partner: Prof.Dr. Göksel N. Demirer 2007-2011. ● State Planning Organizing Project, “Production of Renewable Energy and Biobased Industrial Chemical Products from Organic Wastes”, METU, Çankaya University, Project Coordinator: Prof.Dr. Göksel N. Demirer 2004-2008. ● TUBITAK Project, “Organic Acid Obtaining from Domestic and Agro-Industrial Wastes”, METU, Çankaya University , Project Coordinator: Prof.Dr. Göksel N. Demirer, 2004-2008. ● TUBITAK Project, “Nitrogen and Phosphorous Removal and Recycling from Domestic and Agro-Industrial Wastes by the Method Struvit Settling “, Çankaya University , METU, Project Partner: Prof.Dr. Göksel N. Demirer 2004-2008. ● Project Supported by Switzerland Development and Cooperation Agency, “Integrated Preventive Environmental Management Project for Local Administration”, Coordinator Institute: MoEF, Project Coordinator: Prof.Dr. Göksel N. Demirer (METU), 1999-2003.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • Project supported by Development and Cooperation Agency, Application of the cleaner production/pollution prevention approach at a level of SMEs, DELTA Programme, Switzerland Coordinator Institutions : Sustainable Work Organization (Switzerland) ve The Union of Chambers of Turkish Engineers and Architects, Chamber of Environmental Engineers, Project Coordinator: Prof.Dr. Göksel N. Demirer (METU), 2000-2003.
	Academic and R&D Studies
	<p><u>Academic:</u></p> <ul style="list-style-type: none"> • Projects given in “Studies and Projects” column are all academic projects. It has not been written again to make repetition. <p><u>R&D Studies:</u></p> <ul style="list-style-type: none"> • Projects given in “Studies and Projects” column and thesis given blow are R&D Studies. <p><u>Directed Thesis:</u></p> <ul style="list-style-type: none"> • Komesli O.T., Use of Membrane Bioreactors in treatment and reuse of domestic wastewaters, M.Sc. Thesis, Supervisor: Prof.Dr. Celal F. Gökçay, METU, Dept. of Environmental Engineering, 2006. • Ebru Harmancı, Utilization of Waste Materials from iron-steel and zinc industries for sorption of hydrogen sulfide at high concentrations, M.Sc. Thesis, Supervisor: Prof.Dr. Aysel Atımtay, METU, Dept. of Environmental Engineering, 2004. • Gözde Tuğba Köksoy, Investigation of Digester F/M ratio as a parameter to affect sludge minimization and gas production of ultrasonically treated sludge, M.Sc. Thesis, Supervisor: Prof.Dr. Dilek Sanin, METU, Dept. of Environmental Engineering, 2009. • Şencan Haydaroğlu, Selection and utilization of criteria for process development in green production of organic chemicals, M.Sc. Thesis, Supervisor: Prof.Dr. Türker Gürkan, Ankara, METU, Dept. of Chemical Engineering, 2008. • Uzal, N., "Recovery and Reuse of Indigo Dyeing Wastewater Using Membrane Technology", Ph.D. Thesis, Supervisor Prof.Dr. Ülkü Yetiş, Co-Supervised by Dr. Levent Yılmaz, METU, Dept. of Environmental Engineering, 2007. • Onur Güven Apul, Municipal Sludge Minimization: Evaluation of ultrasonic and acidic pretreatment methods and their subsequent effects on anaerobic digestion, Supervisor Prof.Dr. F. Dilek Sanin, Ankara, METU, Dept. of Environmental Engineering, 2009. • Ayşem Berrin Çakmaklı, Life Cycle Assessment of building materials in hotel refurbishment projects: A case study in Ankara, Supervisor Assoc. Prof.Dr. Soofia Elias Özkan, Ankara, METU, 2007, Dept. Of Architecture, A Ph.D. Thesis. • Başak Öner, Promoting Energy Efficiency in Turkey in the Light of Best Practices at the Level of European Union and Selected Member States: Denmark and Germany. Msc Thesis. Supervisor Assoc.Prof.D.r Aylin Ege, dept. Of Erupoean Studies, (2005)

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • Varol, C., "Caustic Recovery From Highly Alkaline Denim Mercerizing Wastewaters Using Membrane Technology", M.S. Thesis, METU, Supervisor: Prof. Dr. Ülkü Yetiş, Dept. of Environmental Engineering, 2008. • Dogan, B., "Selection of The Best Available Water And Wastewater Management Techniques For A Textile Mill: Cost-Benefit Analysis", M.S. Thesis, METU, Supervisor: Prof. Dr. Ülkü Yetiş, Dept. of Environmental Engineering, 2008. • Kocabas, M., "Improvements in Energy and Water Consumption Performances of a Textile Mill After BAT Applications", M.S. Thesis, Co-Supervised by Dr. F.B. Dilek, M.S. Thesis, METU, Supervisor : Prof. Dr. Ülkü Yetiş, Dept. of Environmental Engineering, 2008. • Avsar E. "Cleaner Production Opportunity Assessment Study in SEKA Balikesir Pulp and Paper Mill", A Master of Science Thesis, METU, Supervisor : Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 1999-2001. • Özeler D. "Life Cycle Assessment of Municipal Solid Waste Treatment Methods: Ankara Case Study", A Master of Science Thesis, Supervisor : Prof. Dr. Göksel N. Demirer, Co-advised by Prof. Dr. Ülkü Yetiş, Dept. of Environmental Engineering, METU, Ankara, 2000-2001. • Özbay A., "Cleaner Production Opportunity Assessment for Market Milk Production in AOC Facility", A Master of Science Thesis, METU, Supervisor : Prof. Dr. Göksel N. Demirer, Co-advised by Prof. Dr. Ülkü Yetiş, Dept. of Environmental Engineering, Ankara, 2001-2003. • Türkmenoğlu S., "Organic Acids Production from Cheese Whey", A Master of Science Thesis, METU, Supervisor : Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2004-2006. • Doğan E., "Organic Acid Production from Organic Fraction of Municipal Solid Waste in Leaching Bed Reactors", A Master of Science Thesis, METU, Supervisor: Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2005-2006. • Öztürk E., "A Chemical Substitution Study for a Wet Processing Textile Mill in Turkey", A Master of Science Thesis, METU, Supervisor: Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2006-2007. • Alkaya E., "Anaerobic Acidification of Sugar-Beet Processing Wastes to Enhance Treatment Efficiency and Bio-Product Formation", A Master of Science Thesis, METU, Supervisor: Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2006-2008. • Özkan L., "Biological Hydrogen Production from Sugar Industry Wastes" A Master of Science Thesis, METU, Supervisor : Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2007-2009. • Akyol, S., 2008. "Increasing Environmental Performance with Waste Reducing Auditing Management", National Productivity Centre, Expert Thesis, Supervisor : Prof. Dr. Göksel N. Demirer (METU). • Alkaya, E., 2009. Integration of Cleaner Production Measures into Manufacturing Industry of Turkey, A Doctor of Philosophy Thesis, METU, Supervisor : Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2009-. • Böğürücü M., 2009. "Determination of Industrial Sectoral Priorities for Cleaner Production Application in Turkey", A Master of Science Thesis, METU, Supervisor : Prof. Dr. Göksel N. Demirer, Dept. of Environmental Engineering, Ankara, 2009-.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	<p>Publications</p> <ul style="list-style-type: none"> ● Doğan I and Sanin F.D., 2009. "Alkaline solubilization and microwave irradiation as a combined sludge disintegration and minimization method", Water Research, 43, 2139-2148. ● Uyar B., Eroglu I., Meral Y., and Gunduz U., 2009."Photofermentative hydrogen production from volatile fatty acids present in dark fermentation effluents", <i>International Journal of Hydrogen Energy</i> 34 , 4517 – 4523. ● Dogan E. and Demirer G.N., 2009. Volatile fatty acid production from organic fraction of municipal solid waste through anaerobic acidogenic digestion", <i>Environmental Engineering Science</i>, 26, 9, 1443-1450. ● Alkaya E., Kaptan S., Ozkan L., Uludag-Demirer S. and Demirer G.N., 2009. "Recovery of Acids from Anaerobic Acidification Broth by Liquid-Liquid Extraction", <i>Chemosphere</i>, 77, 8, 1137-1142. ● Ozturk E., Yetis U., Dilek F.B., Demirer G.N., 2009. "A chemical substitution study for a wet processing textile mill in Turkey", <i>Journal of Cleaner Production</i>, 17, 2, 239-247. ● Dogan E., Dunaev T., Erguder T.H., Demirer G.N., 2008. "Performance of leaching bed reactor converting the organic fraction of municipal solid waste to organic acids and alcohols", <i>Chemosphere</i>, 74, 6, 797–803. ● Avsar E. and Demirer G.N. 2008. "Cleaner production opportunity assessment study in SEKA Balikesir pulp and paper mill", <i>Journal of Cleaner Production</i>, 16, 4, 422-431. ● Ozbay A. and Demirer G.N., 2007. "Cleaner production opportunity assessment for a milk processing facility", <i>Journal of Environmental Management</i>, 84, 4, 484-493. ● Özeler D., Yetiş Ü. and Demirer G.N., 2006. "Life cycle assessment of municipal solid waste management methods: Ankara case study", <i>Environment International</i>, 32, 3, 405-411. ● Demirer G.N., Uludag-Demirer S., and Arikan Y., 2003. "Integrated-preventive environmental management training for municipalities: A case study from Turkey", <i>Environmental Quality Management</i>, 13, 2, 67-75. ● Demirer G.N., 2002. "Education: A critical component in the promotion of cleaner production", <i>RAC/CP Annual Technical Publication</i>, 11, 98-105. ● Esemen T., Dockhorn T. and Demirer G.N., 2009. Agricultural reuse of water and nutrients from wastewater treatment in Turkey, 2. International Symposium on Wastewater Recycling, SE-BE ENERGY Gruppe, TU Braunschweig, Braunschweig, Germany, 4-6 November 2009.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	<p>Publications</p> <ul style="list-style-type: none"> ● Ozturk E., Yetis U., Dilek F.B., Demirer G.N., 2008. "A chemical substitution study for a wet processing textile mill in Turkey", 5th BMBF-Forum for Sustainability and 12th European Roundtable on Sustainable Consumption and Production (erscp2008), BMBF and FONA, Berlin, Germany, 23 - 25 September 2008. ● Demirer G.N., 2008. "Enhanced industrial water use efficiency through pollution prevention: Case studies from Turkey", COMMON FUTURE, Netherlands Institute for Higher Education, 14-16 January 2008. ● Uzal N., Yukseler H., Unlu M., Yilmaz O., Varol C., Demirer G.N., Dilek F.B., Yetis U., 2006. "Water reuse and recycling opportunities in dyeing process of a denim producing factory", 7th International Symposium on Waste Management Problems in Agro-Industries, IWA, Amsterdam, Hollanda, 27-29 September 2006. ● Yukseler H., Uzal N., Ünlü M., Yılmaz, O., Varol, C., Demirer, G.N., Dilek, F.B., Yetiş, Ü., "Adoption Of EU's IPPC Directive:Determining BAT In a Turkish Denim Manufacturing Plant", 7th International Symposium on Waste Management Problems in Agro-Industries, 27 – 29 September 2006, Amsterdam RAI, The Netherlands. ● Ozturk E., Alanya S., Morova F., Yetis U., Dilek F.B., Demirer G.N., 2006. "A chemical substitution study for a wet processing textile mill in Turkey", Environmental Management Accounting and Cleaner Production, Graz University of Technology, Institute of Resource Efficient and Sustainable Systems and Institute for Ecological Economics Vienna, 25-27 April 2006, Graz, Austria, 51-55. ● Alanya S., Ozturk E., Morova F., Yetis U., Dilek F.B., Demirer G.N., 2006. "Environmental performance evaluation of textile wet processing sector in Turkey", Environmental Management Accounting and Cleaner Production, Graz University of Technology, Institute of Resource Efficient and Sustainable Systems and Institute for Ecological Economics Vienna, 25-27 Nisan 2006, Graz, Austria, 264-268. ● Avşar E. and Demirer G.N., 2005. Cleaner production opportunity assessment study in SEKA Balikesir pulp and paper mill, 11th Annual International Sustainable Development Research Conference, ERP Environment and University of Tampere, June 6-8, 2005, Helsinki, Finland. ● Özbay A. and Demirer G.N., 2005. Cleaner Production Opportunity Assessment for Market Milk Production in Atatürk Forestry Farm (AOÇ) Facility, 11th Annual International Sustainable Development Research Conference, ERP Environment and University of Tampere, June 6-8, 2005, Helsinki, Finland. ● Uysal A., Yilmazel Y. D., Demirer, G.N., 2009. Nutrient Removal and Recycling from Anaerobic Stabilizer Effluent by using the Method of Struvit Settling, 8. National Environmental Engineering Conference, Chamber of Environmental Engineers, 12-14 November 2009, Antalya, Turkey, 363-373. ● Demirer G.N., 2008. "Today and Future of Cleaner Production Approach", City Management, "Human and Environment Problems" 08 Conference, İTÜ-İSTAÇ, 02-06 November 2008, İstanbul.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	<p>Publications</p> <ul style="list-style-type: none"> • Alkaya E. and Demirer G.N., 2008. "Acid Obtaining from Sugar Industry Wastes by the Method of Anaerobic Acidification": Kocaeli 2008, 14-17 May 2008, Kocaeli. • Özkan L. and Demirer G.N., 2008. "Effect of Culture Type on Biohydrogen Obtaining from Sugar Industry Wastes", Environmental Problems Symposium: Kocaeli 2008, 14-17 May 2008, Kocaeli. • Doğan E., Gedik K., Kaya D., Kocabaş A.M., Özkan-Yücel U.G., Yılmaz Ö., Yılmazel Y.D. and Demirer G.N., 2008. "Laboratory Waste Management Application in METU Environmental Engineering Department, Environmental Problems Symposium: Kocaeli 2008, 14-17 May 2008, Kocaeli. • Demirer G.N., 2008. "Cleaner Production/Pollution Prevention Course at METU", Cleaner Production: A tool for Green Competitiveness in the Turkish Industry, Workshop and Short Course, Middle East Technical University, Department of Environmental Engineering, Workshop Series, Middle East Technical University, Ministry of Environment and Forestry, Regional Activity Centre for Cleaner Production, 31 March-2 April 2008, Middle East Technical University, Ankara. • Demirer G.N.: 2008. "Cleaner Production Research and Implementation Activities carried out at Middle East Technical University", Cleaner Production: A tool for Green Competitiveness in the Turkish Industry, Workshop and Short Course, Middle East Technical University, Department of Environmental Engineering, Workshop Series, Middle East Technical University, Ministry of Environment and Forestry, Regional Activity Centre for Cleaner Production, 31 March-2 April 2008, Middle East Technical University, Turkey. • Alkaya E., Ergüder T.H., Demirer G.N., 2006. "Cleaner Production Possibilities in Sugar Industry", Wastewater Problems, Solutions, Wastewater Treatment Alternatives in Sugar Factories, Efficient Water Usage Conference, General Directorate of Turkish Sugar Factories, MoEF, 12 December 2006, Ankara. • Demirer G.N., 2006. "Sustainable Production and Consumption: Where is Turkey on the road?", Sustainable Production and Consumption Approaches for Turkey during EU Participation Process, REC, UNEP, CSCP, SEDEFED 08.11.2006 Istanbul. • Özbay A. and Demirer G.N., 2005. "Researching Cleaner Production Opportunities for a Milk Production Factory", 6. National Environmental Engineering Conference, TMMOB ÇMO, 169-180, 24-26 November 2005, İstanbul. • Aşar E. and Demirer G.N., 2005. Studying Evaluation of Cleaner Production Possibilities in SEKA Balıkesir Pulp and Paper Factory, 6. National Environmental Engineering Conference, TMMOB ÇMO, 181-194, 24-26 November 2005, İstanbul. • Özeler D., Yetiş Ü., and Demirer, 2005. Application of Whole Life Recycling Method for Domestic Solid Waste Management: Ankara Case Study, 6. National Environmental Engineering Conference, TMMOB ÇMO, 323-335, 24-26 November 2005, İstanbul. • Yıldız C., Arıkan Y., Uğurlu Ö., and Demirer G.N., 2003. "Integrated/Preventive Environmental Management for Local Administrations", 5. National Environmental Engineering Conference, TMMOB ÇMO, 1-4 October 2003, Ankara, 63-76.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	<p>Publications</p> <ul style="list-style-type: none"> ● Demirer G.N., 2001. "Cleaner Production/Pollution Prevention approach and Environmental Engineering Training", 4. National Environmental Engineering Conference, TMMOB ÇMO, 212-221, 7-10 November 2001, İçel. ● Demirer G.N., 2001. "Pollution Prevention Approach in Environmental Management", Health and Safety of Workplace, Turkish Medical Association, 11-19 July 2001. ● Ozeler D. and Demirer G.N., 2001. "A New Method for Product and Process Optimization in Preventive Environment Management: Whole Life Recycling", Industry and Automation, No: 41, August 2000, 66-69. ● Güngör K. and Demirer G.N., 2000. "A Success Story in Pollution prevention and Industry", Industry and Automation, No: 39, July 2000, 66-69. ● Uludag-Demirer S. and Demirer G.N., 1999. Cleaner Production Applications (CP) in Industry, Industry and Automation, No: 33, December 1999, 88-90. ● Demirer G.N. and Mirata M., 1999. "Industrial Pollution Prevention or Cleaner Production-II, Industry and Automation, No: 32, December 1999, 90-93. ● Demirer G.N. and Mirata M., 1999. "Industrial Pollution Prevention or Cleaner Production-I", Industry and Automation, No: 31, October 1999, 110-113. ● Demirer G.N. and Torunoglu E. "Integrated/Preventive Environmental Management Manual for Local Administration", TMMOB Chamber of Environmental Engineers and Switzerland Development and Cooperation Agency, December 2000, Ankara.
	<p>Dissemination and Information Studies</p> <ul style="list-style-type: none"> ● Cleaner Production (Pollution Prevention) and Environmental Management Courses have been giving in Department of Environmental Engineering ● Cleaner Production: A tool for Green Competitiveness in the Turkish Industry, Workshop and Short Course, Middle East Technical University, Department of Environmental Engineering, Workshop Series, Middle East Technical University, Ministry of Environment and Forestry, Regional Activity Centre for Cleaner Production, 31 March-2 April 2008, Middle East Technical University, Ankara. ● Web site on the subject of Cleaner Production: http://www.enve.metu.edu.tr/people/gndemirer/links/temizuretim/Consultancies/ Prof.Dr. Göksel N. Demirer ● Eco-Efficiency (Cleaner Production) Program, Enhancing the Capacity of Turkey to Adapt to Climate Change (MDG-F 1680), United Nations Industrial Development Organization, Turkey, 2008- ● TÜBİTAK Project, "Development of the Industrial Efficiency and Environmental Performance at the level of SMEs" Coordinator Institution: National Productivity Centre, 2007-2008.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	Dissemination and Information Studies
	<p><u>Given Conferences:</u> Prof.Dr. Göksel N. Demirer</p> <ul style="list-style-type: none"> • “Cleaner Production, Eco-Efficiency and Environmentally Friendly Products: Main Approach, Techniques, Methods and Information Sources”, Capacity Formation Project for Automotive Site regarding to Bursa Automotive Sub-industry (OKÜMKAP): Competition for Automotive Sector oriented Energy and Environment Training, Technology Development Foundation of Turkey, Bursa Office of TMMOB Chamber of Mechanical Engineers, 25-26 November 2008, Bursa. • “Cleaner Production, Eco-Efficiency and Environmentally Friendly Products: General Application Cases”, Capacity Formation Project for Automotive Site regarding to Bursa Automotive Sub-industry (OKÜMKAP): Competition for Automotive Sector oriented Energy and Environment Training, Technology Development Foundation of Turkey, Bursa Office of TMMOB Chamber of Mechanical Engineers, 25-26 November 2008, Bursa. • “Cleaner Production, Eco-Efficiency and Environmentally Friendly Products: Main Approach, Techniques, Methods and Information Sources, Capacity Formation Project with Eskişehir Regional Innovation Strategies” • Competitiveness oriented Environment Training for Manufacturers, Eco-efficiency and Competitiveness in Industry, Technology Development Foundation of Turkey, 19 August 2008, Eskişehir. • “Cleaner Production, Eco-Efficiency and Environmentally Friendly Products : Application Cases”, Capacity Formation Project with Eskişehir Regional Innovation Strategies • “The first step for Eco-Efficiency: Environmental Management Conference regarding to Increase Operation Efficiency”, TMMOB ÇMO, Sustainable Business Associates (SBA), 22-23 October 2001-Ankara and 12-13 February 2002-Bursa. • "The Eco-Management Week", Organized by the Sustainable Business Associates (SBA, Switzerland), Centre per a l'Empera i el Medi Ambient (CEMASA, Spain), TUBITAK-Marmara Research Center (Turkey) and the Chamber of Environmental Engineers (Turkey), Gebze, Kocaeli, 07-11 May, 2001. • “Integrated/Preventive Environmental Management for Local Administrations- Project Training Conference”, TMMOB ÇMO, Switzerland Development and Coordination Agency, İçel, Denizli, Van (2000) and Eskisehir, Diyarbakır (2001).

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	Dissemination and Information Activities
	<p><u>Invited Speaker</u> Prof.Dr. Göksel N. Demirer</p> <ul style="list-style-type: none"> ● Basic Eco-Efficiency (Cleaner Production) Training for International Specialists, Technology Development Foundation of Turkey, United Nations Development of Industry Organization, MDG Achievement Fund, 28-29 January 2010 ● “Eco-efficiency and Cleaner Production: Conceptual Framework”, Ministry of Industry and Commerce, 13 November 2008, Ankara. ● “Eco-efficiency and Cleaner Production: Case Studies from the World and Turkey”, Ministry of Industry and Commerce, 13 November 2008, Ankara. ● “Industrial Efficiency and Cleaner Production”, Efficiency Week, “Efficiency Panel regarding to Energy, Environment, Protection of the Consumer and Competitiveness”, Natural Productivity Centre, 29 April 2008, MPM Conference Room, Ankara ● “Cleaner Production for Sustainable Development”, the Day of Innovator, Technology Development Foundation of Turkey, 7 February 2008 Istanbul and 14 February 2008, Ankara. ● “Cleaner Production Tools and Industrial Application Cases from Turkey”, Turkey is Discussing Sustainable Development! Integration of Sustainable Development to Sectoral Policies, UNDP, DPT, EBSO, 15-16 November 2007, İzmir ● “Cleaner Production Opportunities in Sugar Industry”, Wastewater Problems in Sugar Factories, Solutions, Wastewater Treatment Alternatives, Efficient Water Usage Conference, 12 December 2006, Ankara ● “Sustainable Consumption and Production: Where is Turkey on the Road ?”, Sustainable Consumption and Production Approaches for Turkey in the EU Accession Period, Regional Environmental Center Turkey, UNEP, UNEP/Wuppertal Center for Sustainable Consumption and Production, SEDEFED, 11 August 2006, Istanbul. ● “Preventive Environmental Management- Cleaner Production” Trainings of Young Environmental Leaders, Regional Environmental Centre Turkey (REC), August and September 2005, Ankara. ● “Life Cycle Assessment of Municipal Solid Waste Treatment Methods: Ankara Case Study”, Binational Seminar on Pollution Prevention and Hazardous Waste Management, Aegean Initiative Program, Fulbright Commission, July 9-12, 2002, Rhodes, Greece. ● “Fundamentals of Cleaner Production/Pollution Prevention”, Binational Seminar on Pollution Prevention and Hazardous Waste Management, Aegean Initiative Program, Fulbright Commission, July 9-12, 2002, Rhodes, Greece.
	Provided Incentive and Financial Supports
	<ul style="list-style-type: none"> ● Giving Courses, Organized Workshops and Trainings. ● Made publications

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
MIDDLE EAST TECHNICAL UNIVERSITY	Current and Proposed Sources
	<ul style="list-style-type: none"> • Qualified human-source. • National and international R&D experience. • Membership to national and international networks. • Accredited Laboratories. • R&D, consultancy and analytical support.
	Plans and Targets
	<ul style="list-style-type: none"> • Continuity of the activities which continues from 1998 and their subject is Clean Production and its generalization in our country • Put into practice Environmental Management Programme of which preparation has been completed in 2004
	Web Site : http://www.enve.metu.edu.tr/
ISTANBUL UNIVERSITY	Studies and Projects
	<p><u>Projects</u></p> <ul style="list-style-type: none"> • İ.Ü. Scientific Research Project, “Research of Industrial Wastewater Recycling with Nanofiltration”, 2006-2009, Project Coordinator: Assoc.Prof. Dr. Y. Kaya. <p><u>Thesis</u></p> <ul style="list-style-type: none"> • Asst. Prof. Dr. Yasemin Kaya: Research of Organic Materials Recycling with Nanofiltration from Process Water <p><u>Publications</u></p> <ul style="list-style-type: none"> • C. Aydiner, Y. Kaya, Z.B. Gönder, İ. Vergili, 2009, Usage of Different Membrane Processes during Recycling of Water and Salt from Textile Dyeing Wastewater, Membrane Technologies and Applications Symposium, İstanbul, 35-38. • Kaya, Y., Barlas, H., Arayici, S., 2009, Recycling of Washing Water of Detergent Process with Nanofiltration, Membrane Technologies and Applications Symposium, İstanbul, 73-75. <p><u>Given Course:</u></p> <ul style="list-style-type: none"> • Integrated Pollution Prevention and Control (Graduate, Fall) - Asst. Prof. Dr. İlda Vergili

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UNIVERSITIES	
SULEYMAN DEMIREL	<p>Publications</p> <ul style="list-style-type: none"> • Sayilgan E., Kukrer T., Civelekoglu G., Ferella F., Akcil A., Veglio F., Kitis M. (2009) A review of technologies for the recovery of metals from spent alkaline and zinc-carbon batteries, <i>Hyrometallurgy</i>, 97, 158-166
BOGAZICI UNIVERSITY	<p>Academic/ R&D Studies</p> <p><u>Projects:</u></p> <ul style="list-style-type: none"> • Life Cycle Assessment for Selected Laundry products of Unilever, Turkey”, Sustainable Development and Cleaner Production Center, sponsored by Unilever, Turkey, Project Coordinator, July 2009- • “An Integrated Environmental Life Cycle Assessment and Life Cycle Costing Analysis of Agricultural Waste And Residue Based Bioethanol as an Alternative Transportation Fuel”, Bogazici University, Sustainable Development and Cleaner Production Center and Institute of Environmental Sciences, sponsored by Bogazici University, Scientific Research Projects Coordination, Project Coordinator, May 2009- . • “Strategic Planning for Cleaner Energy Production in the City of Istanbul via Utilization of Biomass for Energy and Transportation Issues”, Bogazici University, Institute of Environmental Sciences, sponsored by Bogazici University, Scientific Research Projects Coordination, Project Coordinator, August 2004-Jan2009. <p><u>Thesis:</u></p> <ul style="list-style-type: none"> • Erses Suna A. "Sustainable Solid Waste Management and in-situ Attenuation Mechanisms in Landfills under Aerobic and Anaerobic Conditions", Doctorate Thesis, Supervisor Prof.Dr.Turgut T Onay, 2008. • Zeybek Mehmet, "Waste Minimization by Single Cell Protein Production From Cheese Whey", Master Thesis, Supervisor: Prof.Dr. Orhan Yenigün and Assoc. Prof.Dr.Miray Bekbölet, 1993. • Sezer Raketel, "Implementation of Environmental Management System Based on ISO 14000 EMS Standard in Small-Medium Sized Enterprises", Master Thesis, Supervisor: Prof.Dr.Orhan Yenigün, 1997. • Ercümen Yonca, "A Study on the Characterization of Waste Automotive Lubricants in Turkey with an Emphasis on Reclaimability", Master Thesis, Supervisor: Prof.Dr.Nilsun Ince, 1998. • Özer Ömer Faruk, "Reusing the Rinse Water Effluent in the Application of Zinc-Phosphate Coating for Steel Surfaces Prior to Painting", Master Thesis, Supervisor: Prof.Dr.Orhan Yenigün, 1998.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
BOGAZICI UNIVERSITY	Academic/ R&D Studies
	• Adaotu Alper, "Water Minimization Strategies for Best Environmental Management Practices in Textile Dyeing and Finishing Industries" Master Thesis, Supervisor: Prof.Dr.Nilsun Ince, 1999.
	• Polat Arda, "An Evaluation of the Application of ISO 9000 and ISO 14000 Standards from an Economical Point of View" Master Thesis, Supervisor: Prof.Dr.Günay Kocasoy, 1999.
	• Başkaya Neşem, "Investigation and Implementation of Waste Minimization Techniques in a Detergent Factory", Master Thesis, Supervisor: Prof.Dr.Günay Kocasoy, 2000.
	• Tunca Tuba, "Implementation of An Environmental Management System in a Pharmaceutical Industry", Master Thesis, Supervisor: Prof.Dr.Günay Kocasoy, 2000.
	• Ulu Ayça, "ISO 14000 Applications in a Cable Industry", Master Thesis, Supervisor: Prof.Dr.Günay Kocasoy, 2000.
	• Saygın Alper, "Water Minimization at an Automotive Industry", Master Thesis, Supervisor: Prof.Dr.Orhan Yenigün, 2000.
	• Kural Cem, "Optimization of Glass Collection for its Recovery: A Case Study", Master Thesis, Supervisor: Assoc. Prof.Dr.Turgut Onay, 2002.
	• Gürbüz Selen, "Application of Cleaner Production Methodology in Olive Oil Industry", Master Thesis, Supervisors: Assoc. Prof. Dr. Nilgün Kiran Ciliz and Prof.Dr.Orhan Yenigün, 2002.
	• Morina Elif, "Application of Cleaner Production Methodology in Dairy Industry", Master Thesis, Supervisor: Assoc. Prof.Dr. Nilgün Kiran Ciliz, 2004.
	• Sisman Figen, "Cleaner Production Implementation for the Integrated Tannery in Turkey", Master Thesis, Supervisor: Assoc. Prof.Dr. Nilgün Kiran Ciliz, 2004.
	• Alkan Asli, "Life Cycle Assessment of Glassware Products", Master Thesis, Supervisor: Assoc. Prof.Dr. Nilgün Kiran Ciliz, 2004.
	• Büyükbay Basak, "Pollution Prevention and Resource Conservation for Electronics Industry: A Case Study in Istanbul", Master Thesis, Supervisor: Asst. Prof. Dr. Nilgün Kiran Ciliz, 2007.
	• Önal, Nilüfer Selen, "Local Agenda 21 for Bozcaada, Turkey with Target 100% Renewable Energy and Eco-labelling Perspective", Master Thesis, Supervisor: Assoc. Prof.Dr. Nilgün Kiran Ciliz, 2007.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
BOGAZICI UNIVERSITY	<p>Yayınlar</p> <ul style="list-style-type: none"> • Büyükbay, B., Ciliz N., Gören G.,E., “Pollution Prevention and Resource Conservation Applications for a Turkish Electroplating Industry: A Case Study in Istanbul”, 12th erScp, Berlin, Germany, , 2008. (Poster) • Gurbuz S, Ciliz N, Yenigun O, "Cleaner production implementation through process modifications for selected SMEs in Turkish olive oil production", Journal of Cleaner Production, 12, No: 6, 613-621, 2004 • Saysel AK, Barlas Y, Yenigun O, "Environmental sustainability in an agricultural development project: a system dynamics approach", Journal of Environmental Management, 64, No: 3, 247-260, 2002 • Büyükbay, B., Ciliz, N., Goren G.E., Mammadov, A., Cleaner Production Application as a Sustainable Production Strategy, Resource, Conservation and Recycling, 2009 (to be published). • Mehmetli, E., Dogan, O., Tiris, M., Ciliz Kiran, N., Matuschek, G., “Thermolysis Product Distribution of Solid Waste Obtained From Olive Oil Production”, Clean, 2008, 36(39), 315-319. • Morina, E., Ciliz, N., Ekinci E., Buyukbay, E., Energy Savings in Production Industry, RENET, International Renewable Energy Conference, (IREC), Bogazici University, Istanbul, Turkey, November 2009, • Ozata, I., Ciliz, N., Mammadov, A., Buyukbay, B., Ekinci, E., “Comparative LCA Approach for sustainable transport fuel production from waste cooking oil and rapeseed”, 13th erScp, in CD, Aalborg, Denmark, 6-8 June, 2009. • Keskin, B., Tuncer, B., Kiran-Ciliz, N., Cevik, O., Erol, P., GRI-Sustainability Reporting Guidelines in Turkish, CSR Consulting, sponsored by TURKCELL, peer reviewer, October 2009. • Nilgün CILIZ, Yeşim AKPINAR, Gülden BAYDAR, Aydın MAMMADOV, 1) Introduction to Sustainable Life Cycle Assessment and Brief Review on Carbon Footprint Reduction Benefits of the New Compact Laundry Detergents – Report I, 2) Carbon Footprint Reduction Benefits and Water Savings Associated with the New Compact Laundry Detergents – Report II, UNILEVER SANAYİ VE TİCARET TÜRK A.Ş., October 2008. • Ciliz N., Kumbaroğlu G., Büyükbay, B., Mamadov A., Güran B., Onal S., Gören G.E., Ozata, I., “Strategic Planning for Cleaner Energy Production in the City of Istanbul via Utilisation of Biomass for Energy and Transportation Issues”, Bogazici University, Institute of Environmental Sciences, sponsored by Bogazici University, Scientific Research Projects Coordination, Jan2009.
	<p>Dissemination and Information Activities</p> <ul style="list-style-type: none"> • Sustainable development Certificate Programme for Business World in European Union Participation Process, with REC-Turkey , 29 March 2008- 28 May 2009 • Dissemination Sustainable Reporting Applications in Turkey, 19 October 2009, Boğaziçi University, Istanbul • Presentations related with the subject in the activities organized by TÜSİAD, SEDEFED, Boğaziçi University, and so forth institutions.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
BOGAZICI UNIVERSITY	Dissemination and Information Activities
	<ul style="list-style-type: none"> • Ciliz, N., Definitions and Approaches, EU Policies and Practices for Sustainable Supply Chains in the Retail Sector Conference, Organized by Regional Environmental Center (REC), Capacity Building in the Field of Environment Project, November 2009 • Ciliz, N., Best Available Techniques and Integrated Pollution Prevention and Control, Mechanisms to Enhance the Green Competitiveness in Turkey, National Forum, Organized by TUSIAD, Mediterranean Action Plan, Centre for Cleaner Production, Greco Initiative, Istanbul, October 2009. • Ciliz, N., “Internal and External Drivers of Industrialists for Sustainable Development Applications”, TUSIAD, Istanbul, April, 27, 2009
	Plans and Targets
	<ul style="list-style-type: none"> • Preparation of 15th EU Roundtable on Sustainable Production and Consumption (15th euSpc), Istanbul, 2012 <p>Sustainable Development and Cleaner Production Application and Research Centre:</p> <ul style="list-style-type: none"> • Supporting and inciting the applied researches which are in the scope of sustainable development, • Providing technological support for cleaner production; increase efficiency in production and service sector, decreasing source inputs and chemical consumption, less waste production, and the most important one is reduction of environmental risks, • Inciting sustainable production and consumption subjects and making new connections, networks and cooperation among decision-making mechanisms, known specialists in industry and related sectors and academic and research institutes, • In order to reduce environmental effects reasoned from products, process and services of an institute, decreasing the wastes and emissions during source and chemical usage and/or all life cycle by using more efficiency technology and production systems
	Web Site: http://www.esc.boun.edu.tr/main/index.aspx , http://www.arastirma.boun.edu.tr/surdurulebilir-kalkinma-uygar.php
<ul style="list-style-type: none"> • Note: Feedback to the survey from Boğaziçi University has only been from Sustainable Development and Cleaner Production Application and Research Centre which is within the body of university. Other informations have been gathered from http://www.esc.boun.edu.tr/main/Research.aspx, http://www.esc.boun.edu.tr/main/index.aspx http://www.esc.boun.edu.tr/main/Publications.aspx, and these cannot represent all existing studies. 	

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
GEBZE INSTITUTE OF TECHNOLOGY	Studies and Projects
	<ul style="list-style-type: none"> • Membrane technologies applications on the subject of reusing wastewater by Prof.Dr. Bülent Keskinler
GEBZE INSTITUTE OF TECHNOLOGY	Dissemination and Information Activities
	<ul style="list-style-type: none"> • Waste Minimization and Recycling Course
ZONGULDAK KARAELMAS	Publications
	<ul style="list-style-type: none"> • Sütçü H. Toroglu İ.Solid oil recovery from fine structural coal wastes, IV. National Ecology and Environment Conference Manual, Eds. Gündüz C., Burhan E., Şenol T., 5-8 October 2001, 285-290, Bodrum-Muğla.
HARRAN UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • Green Marketing Subject and Importance of the communication in Marketing

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
ISTANBUL TECHNICAL UNIVERSITIES	Studies and Projects
	<ul style="list-style-type: none"> • TUBITAK 199Y114 Recycling and Reusing in Last Processes of Woolen Cloth in Textile Industry (Deadline: 2002) • Formation of Road Map in terms of Technology for the application of SPO (State Planning Organization) Integrated Pollution Prevention Control Directive (IPPC) in Turkey: Textile Industry Deadline: 2008
	Current and Proposed Sources
	<ul style="list-style-type: none"> • ITU Department of Environmental Engineering, Getting support for the subject of SPO (State Planning Organization) Environmental Biotechnology and Cleaner Technologies Centre of Excellence to be established
	Plans and Targets
	<ul style="list-style-type: none"> • Making researches in the scope of cleaner production technologies which has been determined as priority areas in Turkey, increasing cooperation with industry and organizing sectoral education trainings are taking place among the Strategic Plan of the ITU Environmental Engineering Department. • In this framework the aim of the establishment of the Environmental Biotechnology and Cleaner Technologies Centre of Excellence is gathering the scientific potential based on studies of environmental biotechnology and cleaner technologies areas, supporting selected researchers providing scientific contribution by making unique studies at an international level and placing Turkey into such a position that can have pioneering role in this area by increasing scientific production in Turkey.
	Education and Source Demands
<ul style="list-style-type: none"> • There is need for source to establish Environmental Biotechnology and Cleaner Technologies Centre of Excellence in order to be continued researches of ITU Environmental Engineering Department. Approximate cost of the source has been determined as 17.500.000 TL. 	
Web Site: http://www.ins.itu.edu.tr/cevre/	

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
BALIKESİR UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • “Dissemination Drip Irrigation Methods”：“Thousand Drip Thousand Efficiency” • “Manyas Wants Its Clear Water Back”
AKSARAY UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • Turkish Personal Ecological Footprint Calculator, Global Footprint Network, Project Partner, 2009-2010.
	Publications <ul style="list-style-type: none"> • Keleş Ö., Uzun N., Özsoy S., 2009. “Ecological Footprint Measurement and Evaluation of Teacher Candidates”, 18. Educational Sciences Congress, 1-3 October 2009, Ege University. • Keleş Ö., Aydoğdu M., “Application and Evaluation of Ecological Footprint as an Environmental Education Tool Towards Sustainable Life”, FISER’09, Eastern Mediterranean University, 22-24 March 2009. • Uzun N., Sağlam N., Varnacı Uzun F., 2008. “The role of the applied environmental education on environmental awareness for a sustainable development”, 13. IOSTE Symposium, September 21-26 2008, İzmir. • Alaş A., Tunç T., Kışoğlu M., Gürbüz H., 2008. “Analyzing conscious water consumption behaviors of Teachers Candidates” Water, Energy and Health, SES’08 Symposium, 20-23 October 2008, Aksaray.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
HACETTEPE UNIVERSITY	Academic and R&D Studies
	<ul style="list-style-type: none"> • “Determination and Application Cases of the Best Available Techniques (BAT) in Kraft Pulp and Paper Production”, Doctoral Thesis, Supervisor Prof. Dr. A. Cemal Saydam (on-going).
	Publications
	<ul style="list-style-type: none"> • “Biogas Obtaining from Agricultural Wastes”, Master Thesis, Elvin Ağayev. Supervisor Prof. Dr. Ayşenur Uğurlu
ATATURK UNIVERSITY	Academic and R&D Studies
	<ul style="list-style-type: none"> • There is R&D study proposal on the subject of “Preparation of Production Plans regarding to Organic Production”.
	Publications
	<ul style="list-style-type: none"> • “Erzurum Case Report for Cleaner Production and Pollution Prevention” 2009
DOKUZ EYLUL UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • Hydrogen gas production from agricultural wastes by fermentation with and without light • Ethanol production from food industrial wastes by fermentation
	Publications
	<ul style="list-style-type: none"> • Ün, Y., (2009): “Life Cycle Assessment of Wastewater Treatment Plants”, DEÜ Institute of Science and technology, Master Thesis, Supervisor Assoc. Prof. Dr. Sevgi TOKGÖZ GÜNEŞ, İzmir. • Ünal, A., and Yıldız, Ç., (2006): “Lifelong Evaluation”, DEÜ Dept. Env. Eng. Undergraduate Thesis, İzmir.

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
ULUDAĞ UNIVERSITY	Studies and Projects
	<p><u>Dissertation:</u></p> <ul style="list-style-type: none"> • Sarıca İ., Ecological efficiency studies in SMEs and Application in Automotive Sub-industry, 2002. • Saraçoğlu S., Cleaner Production Studies in Industrial Institutions, 2003. • Çalışkan D., Analysing Recoveries in terms of Cleaner Production and Environmental Management in Pireli Cable Systems, 2004. • Açıktur D., Application of ISO 14001 Environmental Management Systems in Automotive Sub-industry and Cleaner Production Evaluation, 2006. • Erdoğan E., ISO 14001 Environmental Management Systems Application in ÇOŞKUNÖZ A.Ş. and their Acquisition, 2007. • Aladağ M., ISO 14001 Environmental Management Systems Application and their Acquisition, PİSA Textile and Dye works Case, 2007. • Karabulut A., ISO 14001 Environmental Management Systems Application and their Acquisition, SILA Techniques Automotive Sub-industry CO. Case, 2008.
	Academic and R&D Studies
	<ul style="list-style-type: none"> • Recovery of Wastes Studies from in Textile Sector • Usage of Vegetable Oils in Biodiesel Production
	Publications
	<ul style="list-style-type: none"> • Karaer F., Azak H., 2002. "The need for clean production and technological change", Proc. Appropriate Environmental and Solid Waste Management and Technologies for Developing Countries Congress", Poster Presentation, 4, 2361-2368, Boğaziçi University, İstanbul. • Karaer F., Küçükballı A., 200. "Cleaner Production Applications in Automotive Sub-Industry Operation", VI. National Clean Energy Symposium-UTES, 25-27 May 2006, Foundation of Water, Foundation of Clean Energy and SDU, Isparta, 483-492. • Alibaş K., Vardar A., Ulusoy Y., Alibaş İ. 2008. "Ecological/Organic Agriculture and Environment", Ecological Life Association, Bursa.
	Generalization and Informative Activities
<ul style="list-style-type: none"> • Generalization and informative studies on the subject of recycling of wastes and waste sludges coming from Leather Organized Industrial Zone 	

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

UNIVERSITIES	
ULUDAĞ UNIVERSITY	Studies and Projects
	<ul style="list-style-type: none"> • UNDP-GEF/SGP United Nations Development Programme-Global Environmental Facility Small Grant Programme, Sustainable Pearl Mullet Fishery and Consumption Second Phase: Preparation of the Sustainable Source of Income Infrastructure and Presentation of Sustainable Consumption Practice (UNDP-GEF/SGP-TR-05-07) • ASHOKA Innovator for Public, A new Approach Project based on Social Entrepreneurship for Sustainable Van Lake Pearl Mullet Fishery
	Publications
	<ul style="list-style-type: none"> • SARI M., Estimation of Stock amount of Van Lake Pearl Mullet and Determination of Fishery Management Fundamentals, ÇEKÜL Foundation, Scientific Series, 150 s, ISBN-975-6825-01-04, Istanbul. 2001

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

NON-GOVERNMENTAL ORGANIZATIONS	
TECHNOLOGY DEVELOPMENT FOUNDATION OF TURKEY (TTGV)	Studies and Projects
	<p><u>Projects:</u></p> <ul style="list-style-type: none"> • Montreal Protocol – World Bank Project: Project of Phaseout of Ozone-Depleting Substances in Turkey, 1994 - 2007 (TTGV : Project Coordinator and Financial Intermediary Institution) • In the scope of UN Joint Programme, UNIDO Eco Efficiency (Cleaner Production) Programme of which subject is “Enhancing the Capacity of Turkey to Adapt to Climate Change”, 2009 – 2011 (TTGV : Program Coordinator) • In the scope of EU 7. FP, “Partnering to Enhance Civil Society Organisations’ Contribution to Research in Sustainable Consumption & Production” (Action Town Project), 2009-2010 (TTGV : Project Partner and National Focus Point) • In the scope of EU 7. FP Action Town Project, “Actions towards the encouragement of the development of SCP Policies in Turkey among relevant stakeholders: An LCA approach for sustainable housing” (SCPTurKEY) Project, 2009-2010 (TTGV : Project Leader) • ESINKAP “Capacity Building for Innovation Strategies in Eskişehir” Project, 2008-2009 (TTGV : Partner Coordinator with Eskişehir Chamber of Industry) • OKÜMKAP “Capacity Formation regarding to Bursa Automotive Sub-industry Groups Project”, 2008-2009 (TTGV : Project Coordinator) • AB Leonardo da Vinci Multilateral Projects - Transfer of Innovation Project “Microtraining for effective knowledge transfer”, 2007-2011 (TTGV : Local Applicator and Instructor in the scope of Eco-innovation) <p><u>Other Studies:</u></p> <ul style="list-style-type: none"> • Science-Technology-Industry Platform/ Cleaner Production- Coordination of Clean Products Environmental Friendly Technologies Study Group and Preparation of Report, 1999 (TTGV : Partner Coordinator with TÜBİTAK) • Coordination of the activities regarding to the preparation of the Climate Change Section of the Sustainable Development National Report, 2002. • NGO Capacity Development in Struggle against Climate Change Focus Area of Small Grant Programme (SGP), Cooperation Project for Project Guidance, Project Auditing and Evaluation, 2004-2005. • In the Scope of ESİNKAP Project, research studies regarding to “determination of cleaner production opportunities” in two facilities, 2009 • Method development regarding to Determination of Environmental Competence and Capacity in Industrial Enterprises and application in the scope of ESİNKAP Project, 2008 • UNIDO Eco-efficiency Programme– determination studies to find water savings opportunities in food, metal and chemistry sectors in the scope of demonstration projects, 2009

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

NON-GOVERNMENTAL ORGANIZATIONS	
TECHNOLOGY DEVELOPMENT FOUNDATION OF TURKEY (TTGV)	Studies and Projects
	<ul style="list-style-type: none"> • Membership of Enterprise Europe Network carried out in the scope of EU Competitiveness and Innovation Framework Programme (CIP) - Entrepreneurship and Innovations Sub-Programme. BSN Anatolia (TTGV , KOSGEB, METU-Technocity, KSO, KTO, ETSO) 2009 – 2011. • Transformation of By-products/Wastes of Fiber Cotton Production (Ginning) into Added-value Products: Current Implementations and Technological Developments, 2009
	Publications
	<ul style="list-style-type: none"> • Science-Technology-Industry Discussion Platform/ Cleaner Production-Cleaner Products Environmentally Friendly Technologies Study Group Report • Climate Change and Sustainable Development Report, 2002.
	Dissemination /Informative Activities
	<ul style="list-style-type: none"> • In the scope of Phaseout of Ozone-depleting Substances (ODS) in Turkey Project, trainings, informative and awareness raising activities regarding to usage of alternative technologies and substances to ODS, 1994-2007 • In the scope of UNIDO Eco-Efficiency (Cleaner Production) Programme, Informative Meetings for “Eco-Efficiency (Cleaner Production) Programme in Adana Chamber of Industry, Çukurova Development Agency, Kayseri Organized Industry Zone, Niğde Chamber of Industry and Commerce and Ankara Cyberpark, 2009 • In the scope of ESİNKAP Project, Competitiveness oriented Environment Training for Manufacturers (Subject titles: Eco-innovation, Environmental Management, Harmonization to EU legislation, Cleaner Production, Eco-efficiency), 2008 • In the scope of ESİNKAP Project, Application of “ Micro-training related to Eco-innovation” in two pilot facility, 2009 • In the scope of OKÜMKAP Project, Competitiveness oriented Environment Training for Manufacturers ((Subject titles: Eco-innovation, Environmental Management, Harmonization to EU legislation, Cleaner Production, Eco-efficiency), 2008 • Sustainable Consumption- Production Subject and TTGV Activities, Eco Design Meeting -İTÜ Faculty of Architecture, 16 May 2009 • Economical Environmental Technologies for Industrial Facilities, ISO 8. Industrial Conference, 15-16 December 2009 • Basic Eco-Efficiency (Cleaner Production) Training for National Experts, Technology Development Foundation of Turkey, United Nations Industrial Development Organisation, MDG Achievement Fund, 28-29 January 2010 • Material Flow Analysis and Eco-efficiency (Cleaner Production) Training for National Experts, Technology Development Foundation of Turkey, United Nations Industrial Development Organisation, MDG Achievement Fund, 09-11 February 2010
	Current and Proposed Sources
<ul style="list-style-type: none"> • Soft-loans for R&D and Implementation Projects • Program, project management and financial infrastructure • Technical and administrative human source 	

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

NON-GOVERNMENTAL ORGANIZATIONS	
TECHNOLOGY DEVELOPMENT FOUNDATION OF TURKEY (TTGV)	Current and Proposed Sources
	<ul style="list-style-type: none"> • National and international project application experience • Network connections with national, international, public, university and private sectors • Free Consultancy services for companies in the framework of European Enterprises Network carried out in the scope of EU Competitiveness and Innovations Framework Programme (CIP)- Entrepreneurship and Innovations Sub-Programme (EIP)
	Provided Incentive and Financial Supports
	<ul style="list-style-type: none"> • TTGV Support Programme of Technology Development (R&D) Projects – It is a general support program and provides returnable financial source for environmental friendly product and process development project • TTGV Environmental Supports Programme– Returnable financial support for “implementation and investment projects” regarding to cleaner production and eco-efficiency principles • TTGV Commercialization Support – It is a general support program and provides returnable financial source for environmental friendly product and process development project • TTGV Technological Entrepreneurship Support - It is a general support program and it can be provided in areas related to cleaner production.
	Plans and Targets
	<ul style="list-style-type: none"> • Carrying out coordination activities and home ownership regarding to National Eco-efficiency Centre planned to be establish in the scope of UNIDO Eco-efficiency Programme; development national and international networks • Continuing demonstration and dissemination activities in the scope of UNIDO Eco-efficiency Programme
Web Site:	http://www.tgv.org.tr/ http://www.ekoverimlilik.org/ http://www.bsn.tgv.org.tr/ http://www.stu-turkiye.org http://www.scp-turkey.org www.esinkap.net

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

NON-GOVERNMENTAL ORGANIZATIONS	
BUSINESS WORLD AND SUSTAINABLE DEVELOPMENT	Publications
	<ul style="list-style-type: none"> • World Business Conference of Sustainable Development (WBCSD) Report: Clean Development Mechanism, Exploring for solutions through learning by doing
	Plans and Targets
	<ul style="list-style-type: none"> • Knowing and true perceiving of sustainable development, • Increasing case implementations of sustainable development, • Policy making, • Role and cooperation of business world participation
	Web Site: www.tbcsd.org
UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)	Provided Incentive and Financial Supports
	<ul style="list-style-type: none"> • BTC Small Grant Funds (Bio-diversity) • GEF-SGP: Global Environment Fon - Small Grant Fon • Climate Change Enabling Activity
	Plans and Targets
	<ul style="list-style-type: none"> • Provining sustainable environment
	Web site: http://www.undp.org.tr/undp/undp_tur/EnerjiVeCevre.asp
	* Note: Since there is no feedback to survey, informations gathered from below site have been used http://www.undp.org.tr/undp/undp_tur/EnerjiVeCevre.asp

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

NON-GOVERNMENTAL ORGANIZATIONS	
REC - TURKEY	Dissemination and Information Activities
	<ul style="list-style-type: none"> • Sustainable Consumption and Production Approaches for Turkey in the EU Accession Period, Regional Environmental Center Turkey, UNEP, UNEP/Wuppertal Center for Sustainable Consumption and Production, SEDEFED, 11 August 2006, Istanbul. • Green Box Environmental Education Project (2005-2009), Giving education to more than 8.000 teachers and 800.000 students in the scope of the project on sustainability subject with MoE and MoEF, • Sustainable Development Certificate Programme for Business World in the way of European Union Participation Process, with Boğaziçi University, 29 March 2008- 28 May 2009 • Sustainable Public Policies and Work Applications in Blacksea - İstanbul Bilgi University Santral Istanbul Campus (06.15. 2008- 06.25.2008) • Sustainable Public Policies and Work Applications in Blacksea – Venice International University San Servolo Island- (09.28.2008 – 10.08. 2008)
	<p>* Note: Since there is no feedback to survey, information gathered from below site have been used http://www.rec.org.tr/</p>
WWF- TURKEY	Projects and Studies
	<ul style="list-style-type: none"> • Future of Turkey Project
	Plans and Targets
	<ul style="list-style-type: none"> • Support and Cooperation to generalize cleaner production studies

Table1. Completed and On-going Studies, Sources, Incentives, Plans and Demands on Cleaner (Sustainable) Production

BANKS	
INDUSTRIAL DEVELOPMENT BANK OF TURKEY	Studies and Projects
	<ul style="list-style-type: none"> • As a social responsibility project “Our priority is Environment with TSKB” • United Nations Environment Program Finance Initiative (UNEP FI) membership
	Publications
	<ul style="list-style-type: none"> • First “sustainability report” in the banking sector in Turkey
	Dissemination and Information Activities
	<ul style="list-style-type: none"> • Taking environmental risks into account when assessing institutions and projects • First Turkish Bank certified with ISO 14001 Environmental Management System standard. • In 2008 and 2009, “Sustainable Banking of the Year” award granted in the scope of “ Financial Times Sustainable Banking Awards” (East Europe)
	Provided Incentive and Financial Supports
	<ul style="list-style-type: none"> • As of February 2010, 18 projects were financially supported out of which 8 projects were cleaner production applications. • Support programs are currently available in this field.
Web site: http://www.tskb.com.tr/	