

Ref. no: 13-P	Project title	<u>Carbon Analysis with Bioethanol Production from Agricultural Residues</u>					
Name of legal entity	Country	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start/end)	Name of consortium members, if any
Sustainable Development and Cleaner Production Center (SDCPC)	Turkey	100	3	Bogazici University	Bogazici University, Scientific Research Projects	August 2010- August 2013	
Detailed description of project					Type of services provided		
<p>The main goal of the Copenhagen summit (COP15, December, 2009) is to prevent the temperature rising more than 2 °C above and stabilize the total greenhouse gas (GHG) emission level at 450 ppm. Within this scope, all countries in appendix 1 should cut carbon emissions by 25-40% below 1990 levels by 2020.</p> <p>Turkey is an appendix 1 country with a different position accepted by the committee and has the highest carbon emissions among the OECD and appendix 1 countries.</p> <p>The effect of chemical composition of the selected feedstocks on hydrolysis process will be evaluated and production of bioethanol fuel for transportation sector (lab/pilot scale) derived from the selected agricultural wastes (wheat straw and corn stover) which cannot be disposed properly will be achieved in this proposed study.</p> <p>Bioethanol will be produced from selected agricultural waste by enzymatic hydrolysis/fermentation methodology with the application of different enzymes and fuel properties compared according to EU bioethanol fuel standard “EN 15376”.</p>					<ul style="list-style-type: none"> - Evaluation of the effects of chemical composition of the selected feedstocks on hydrolysis process in bioethanol production. - Evaluation of different bioethanol production methodologies in terms of product quality and efficiency 		