BIOMASS INTO BIOFUELS
(HENCE INTO DIFFERENT SOURCE OF ENERGY)

- OVERVIEW :

  Renewable biomass represents an abundant source of carbon neutral domestic energy, and its use for biofuels is attracting considerable attentions worldwide as a strategy to mitigate climate change, secure a constant energy supply. there will be more than one billion dry tons of biomass sustainably available .With the continued development of biorefinery capacity and technologies, this amount of fuel may potentially displace approximately 30% of the nation's petroleum consumption by 2030 . The success of biofuel and biochemical industries depends on a reliable supply of highquality biomass, available at a cost that enables meeting the cellulosic biofuel and business profitability targets .

- **ALTERNATE FEEDSTOCK CHOICES :**

The current technical focus is on the development of cellulosic feedstocks, e.g., non-grain, non-food-based feedstocks and on economically viable technologies to convert cellulosic material into transportation fuels and other products. The cellulosic feedstock types being considered agricultural residues that anon-food based byproducts (e.g., corn stover) .

- industrial and other wastes which are from waste processing (e.g., municipal solid wastes, yard wastes, urban renewal wood waste)

- The main objective of the present study is to investigate the production of useful materials from different kinds of leather waste. -

  Three different types of tannery wastes (chromium- and vegetable-tanned shavings, and buffing dust) were pyrolyzed in a fixed bed reactor at temperatures of 450 and 600 °C under N2 atmosphere. Gas, oil, ammonium carbonate and carboneous residue were obtained by pyrolysis. The effect of temperature and type of leather waste on product distribution of pyrolysis was investigated. Buffing dust gave the highest yield of oil (ca. 23%), while other wastes recorded yields of ca. 9%. Results of elemental analysis and column chromatography showed that pyrolysis oils could be used as fuel or chemical feedstock after re-treatment. The yields of carboneous residue (chars) were between 37.5% and 48.5% and their calorific value was between 4300 and 6000 kcal kg−1, suitable for use as solid fuel. In addition, these chars were activated by CO2 to obtain the activated carbon. The activated carbon having highest surface area (799.5 m2 g−1) was obtained from chromium-tanned shavings. Activated carbons prepared from chromium-tanned leather were presented as an adsorbant for the adsorption of dyes from aqueous solution.

- AVAILABLITY & SCALE OF PRODUCTION :

  it can we available everywhere in different form as small or as a dump by the help of ragpickers we can collect this types of waste easily and In ample amount.

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- OPPORTUNITY AND BARRIER:
  we generate employement by doing so, in return we can give them the different form of energy and product .there will be a little barrier about labour cost

- The methods include:
  burning/incineration, pyrolysis/biochar and gasification. The last two create hydrocarbon fuels that can be stored and converted to almost any hydrocarbon. Fermentation is also possible but uses a lot more land and takes longer. It's also sensitive to contamination, but create clean methane and is used around the world.

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