

ENERGY AND CARBON

TABLE OF CONTENTS

U. S. ENERGY OVERVIEW

ENERGY USE.....	1
Table 1: U.S. Primary Energy Consumption by Sector (2006)	1
ENERGY SOURCES.....	1
Table 2: Primary Energy Consumption by Source (2007).....	1
Diagram 1: U.S. Primary Energy Consumption by Source and Sector	2
Diagram 2: Electricity.....	3
HYDROCARBON FUELS	4
Table 3: Comparison of Carbon Emissions from Fossil Fuels	4
Table 4: Energy Return on Energy Investment.....	5
ASSESSING ENERGY SOURCES.....	5
CARBON CREDITS, CARBON TRADING, AND CARBON OFFSETS.....	6

ENERGY SOURCES

FOSSIL FUEL.....	7
Coal.....	7
Oil	9
Natural Gas	11
NUCLEAR	13
HYDRO.....	15
Hydroelectric.....	15
Ocean Hydro: Waves and Tides	16
BIOMASS.....	17
BIOFUEL.....	18
Biodiesel	19
Ethanol	18
WIND	20
SOLAR.....	22
GEOHERMAL.....	24
HYDROGEN	26
CONSERVATION.....	28

CARBON CREDITS, CARBON TRADING, AND CARBON OFFSETS

INTRODUCTION	30
CAP-AND-TRADE PROGRAMS: CARBON CREDITS AND CARBON TRADING	30
VOLUNTARY OFFSET PROGRAMS.....	32