

1. Record Nr.	UNINA9910458803903321
Titolo	Methane and climate change / / edited by Dave Reay, Pete Smith, and Andre van Amstel
Pubbl/distr/stampa	London ; ; Washington, D.C. : , : Earthscan, , 2010
ISBN	1-136-54153-5 1-282-72646-3 9786612726460 1-84977-509-5
Descrizione fisica	1 online resource (273 p.)
Altri autori (Persone)	AmstelAndre van ReayDave <1972-> SmithPeter <1965 Apr. 16->
Disciplina	551.6
Soggetti	Atmospheric methane - Environmental aspects Methane - Environmental aspects Climatic changes Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Methane and Climate Change; Copyright; Contents; 1 Methane Sources and the Global Methane Budget; 2 The Microbiology of Methanogenesis; 3 Wetlands; 4 Geological Methane; 5 Termites; 6 Vegetation; 7 Biomass Burning; 8 Rice Cultivation; 9 Ruminants; 10 Wastewater and Manure; 11 Landfills; 12 Fossil Energy and Ventilation Air Methane; 13 Options for Methane Control; 14 Summary; Contributors; Acronyms and Abbreviations; Index
Sommario/riassunto	"Methane is a powerful greenhouse gas and is estimated to be responsible for approximately one-fifth of man-made global warming. Per kilogram, it is 25 times more powerful than carbon dioxide over a 100-year time horizon -- and global warming is likely to enhance methane release from a number of sources. Current natural and man-made sources include many where methane-producing micro-organisms can thrive in anaerobic conditions, particularly ruminant

livestock, rice cultivation, landfill, wastewater, wetlands and marine sediments. This timely and authoritative book provides the only comprehensive and balanced overview of our current knowledge of sources of methane and how these might be controlled to limit future climate change. It describes how methane is derived from the anaerobic metabolism of micro-organisms, whether in wetlands or rice fields, manure, landfill or wastewater, or the digestive systems of cattle and other ruminant animals. It highlights how sources of methane might themselves be affected by climate change. It is shown how numerous point sources of methane have the potential to be more easily addressed than sources of carbon dioxide and therefore contribute significantly to climate change mitigation in the 21st century."--
Publisher's description.
