# We Love Low-carbon Life

By Zhang Xiao and Wu Zhi

The glaciers are melting—human choices will determine when they disappear.

Starting with small things, we can experience simple low-carbon life.

Live an eco-friendly life to protect the environment and let the minutiae of our life bring positive ecological changes.

Please remember, it's up to you to save our planet.





# We Love Low-carbon Life

1.3 Billion Chinese in Action



280293



NEW WORLD PRESS

#### First Edition 2011

Written and Compiled by Zhang Xiao and Wu Zhi Edited by Ge Wencong, Li Shujuan and Li Chenxi Cover Design by Daxiang Design

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ISBN 978-7-5104-1222-6

Published by **NEW WORLD PRESS** 

24 Baiwanzhuang Street, Beijing 100037, China

Distributed by **NEW WORLD PRESS** 24 Baiwanzhuang Street, Beijing 100037, China Tel: 86-10-68995968

Fax: 86-10-68998705

Website: www.newworld-press.com

E-mail: frank@nwp.com.cn

Printed in the People's Republic of China

#### 图书在版编目(CIP)数据

我要低碳生活 : 英文 / 张潇, 吴植编著 ; 张瑞卿,

周钢译. -- 北京: 新世界出版社, 2011.1

ISBN 978-7-5104-1222-6

I. ①我··· II. ①张··· ②吴··· ③张··· ④周··· III. ①节能一普及读物一英文 IV. ①TK01-49

中国版本图书馆CIP数据核字(2010)第258268号

# We Love Low-carbon Life 我要低碳生活

编著者:张潇吴植

翻 译:张瑞卿 周 钢

责任编辑: 葛文聪 李淑娟 李晨曦

英文改稿: May Fong Yee Krisantha Sri Bhaggiyadatta

英文审定: 许靖国

封面设计: 大象设计

装帧设计:清鑫工作室

责任印制: 李一鸣 黄厚清

出版发行:新世界出版社

社 址:北京市西城区百万庄大街24号(100037)

总编室电话: +86 10 6899 5424 68326679 (传真)

发行部电话: +86 10 6899 5968 68998705 (传真)

本社中文网址: http://www.nwp.cn版权部电子信箱: frank@nwp.com.cn

版权部电子信箱: frank@nwp.com.c

版权部电话: +86 10 6899 6306 印 刷: 北京外文印刷厂

印刷:北京外文印经销:新华书店

**经 明:** 新华书店

开 本: 850×1168 1/32

字 数: 150千字 印张: 7.5

版 次: 2011年1月第1版 2011年1月北京第1次印刷

书 号: ISBN 978-7-5104-1222-6

定 价: 38.00元

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# Looking for a Climate Guardian Angel in Our Daily Life

Media Manager Wang Xiaojun, Greenpeace China

What is climate? If agriculture, which provides us with food, may be compared to a symphony, climate will be the conductor, who, dressed in a swallowtail coat, conducts the orchestra. If we say our homeland is as beautiful as a painting, climate may be regarded as the artist using a palette to color tropical rainforests dark green, to dye plants in the temperate zone orange, to paint the sky and the sea blue, while leaving the Arctic and the Antarctic white. If our colorful civilization may be likened to a splendid parade, climate will be the director, who, in peaked cap, is very systematic in placing each nation in its proper position so that no one mixes up another's lines or gets in each other's way. It is owing to climate that people living in the desert do not go fishing in the deep sea, people near the equator do not go hunting in Arctic areas, and people used to cold weather cannot stand the burning sun and the intense heat of the tropics.

While a stable climate enables us to live and work in peace and contentment, rapid and drastic changes in climate can make it impossible for us to adapt, just like an unharmonious note at a concert or a stain on a beautiful landscape painting, like an important stage set in a play which refuses to function properly all of a sudden, or like someone unaccustomed to a new locale.

Billions of years ago, dense forests and flourishing dinosaurs were compressed into coal and petroleum, which we now dig out from under the earth and burn to generate electricity, and to power vehicles and planes. Carbon dioxide released from the chimneys of thermal power plants and the exhaust pipes of cars wraps the Earth up like a thick blanket and turns it into a big greenhouse. All the heat is prevented from going into outer space, which causes the ice at both the Arctic and Antarctic to melt and pushes stable climate into a state of chaos. Scientists have pointed that every year about three million people die due to disasters, famines, wars or diseases caused by climate change. Scientists in China have also confirmed that, if the impetus of climate change cannot be reduced in time, in no more than 20 years the country will be unable to produce enough food to feed its population.

Today, sea levels are getting higher and higher, summers are getting even hotter and hotter, with hurricanes becoming more frequent and violent, drought becoming more prolonged, more unbridled, and diseases getting out of control. What should we do? Turn on air-conditioners? Secure our houses? Move our families to higher land? Store grain to prepare for the worst? Or should we use our wisdom to slow down the pace of climate change, and gain ourselves more time and opportunities before it is too late? The best way out is to get rid of our reliance on fossil fuels like coal or petroleum. While the government needs to make some adjustments of their policies on energy and industry, we also need to pay closer attention to everyday life.

Have you changed your lights at home? Get rid of some of your incandescent bulbs, please, for energy-saving lights save 40% of the electricity you consume, that is to say, they save you 40% of



your total electricity expenses. Accompanied by more effective and longer-lasting appliances, they perform even better. Do you turn off all unnecessary appliances before leaving for work? Please note, you should cut off all connection between appliances and mains.

Try as much as possible not to use a printer in your office; or when you cannot help doing so, print on both sides of the paper. In this way, you save your paper. If possible, please take your own lunch to office. You would not only have a delicious home-cooked meal, but could also share your pleasure with coworkers. When you have to eat out, remember not to use disposable chopsticks or utensils. Before you leave the office, check if all lights and computers have been turned off. When you buy vegetables on your way home, choose organic varieties, which are healthier and at the same time save chemical fertilizers that contribute to the release of greenhouse gases into the air. As for me, I usually ride a bike to go to and from work. In cities like Beijing, I offen take pleasure in seeing cars stuck in traffic jams, while overtaking them on my bike and leaving others far behind.

Do not treat these trifles as of no importance and view them as nothing but utterly inadequate measures to cope with the changes in climate. In fact, it is the other way around. Let's take Beijing, for example: If all of us can turn off an appliance entirely for a while, we may save the energy produced by three thermal power plants. If all 1.3 billion people choose energy-saving lights, let's say just one light-bulb per person, the total electrical energy output of the Three Gorges Dam would be saved. In other words – more than three million tons of coal conserved.

Environmental protection in our lives is no longer just a matter of whether toxic chemicals like harmful glues and paints have been used in our furniture, but a matter of whether it leads to the destruction of primeval forests and loss of habitats for wildlife. Environmental protection in everyday life is no longer a matter of whether the clothes you buy are made of leather or synthetic fibers, but a matter of whether they send a great deal of harmful substances into the air and water. It is more than a matter of whether you take into consideration a company's environmental protection policy before you choose to buy some appliance, but a matter of whether you think twice before making your choice based on companies rejecting those harmful materials beforehand. When you choose organic tomatoes, what you get is not only health for you and your family, but also gratitude from the soil and water narrowly avoiding being polluted, as well as a gentle hug from the climate for increasing its chances of surviving the greenhouse gases caused by chemical fertilizers.

I believe that all those who have suffered or are suffering from climate change will show their gratitude to you for everything done to protect our environment, as would the exhausted polar bears of the Arctic seas, those islanders whose homes are being submerged, and so will our children who, full of promise, deserve a glorious future.

From today onwards, let us bear in mind the "three Rs" – Reduce, Reuse and Recycle – and begin to take the most basic actions: show concern over climate change and spread knowledge about it. You can, for example, recommend this book to your friends once you've finished!

You might not know that by present standards, the sunlight that shines on the surface of the Earth in a day is enough to meet the needs of the whole world for eight years. Just one percent of this sunlight is six times the energy needs of the whole world. So please remember to spread knowledge on climate change. Reading is always profitable, as is this book.



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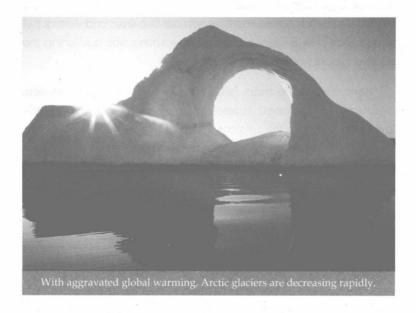
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### No Ice out There

By Chen Ziyu, Editor of Discovery Channel NetEase.



On June 21, 2009, Greenland, the "largest small country," officially declared its autonomy. Two days later, a small DHC-7 airplane landed on the airport runway in Sisimiut, the second largest city in Greenland. As one of two Chinese reporters, I was on the plane with Greenpeace to produce the first report ever on global warming there, hoping to uncover the mystic veil over this largest island of ice and snow.

Our destination was Petermann Glacier lying at 81° north latitude. This glacier is the closest of its kind to the North Pole. Satellite pictures show several huge fissures at the front of Petermann Glacier. In June 2008, one of these split open and caused the bursting apart of an "ice island" of about 30 square kilometers in area and one million tons in weight. Another fissure, even bigger, was expected to split open in the summer of 2009. When that happened, another "ice island," three times as large as the previous one, would come into being. It was our plan to witness this historic moment with our own eyes and write about it to provide new evidence that global warming was quickening the pace of glacial melting.

According to the map, Petermann Glacier lies in northwestern Greenland. It took about a week to get there by ship, through the icy waters between the western shores of Greenland and Canada. The second day, many icebergs appeared in the sea – Jakobshavn Glacier here is known as "the biggest iceberg producer in the Northern Hemisphere." The radar screen in the control room showed a lot of icebergs around us. Generally, it would be odd not to see icebergs here.

However, two days later, the strangest thing happened – when we crossed the sea near Jakobshavn Glacier, we found no trace of icebergs, let alone sea ice. Sailors noticed the sea was open and wide near the Nares Strait between Greenland and Ellesmere Island, with not a breath of cool air to be felt here. Under normal conditions, Nares Strait would be frozen over by February each year, with many "ice bridges" forming on the surface of the water. These would not topple until August in the summer. It was now the end of June, yet we could pass unimpeded. The climate expert in our team, Jason Box, did an aerial survey of the "ice bridges" from a helicopter. He made some preliminary estimates about the time they would take to melt. He said, "It is quite abnormal for the freezing line to move north on such a large scale from the Nares Strait to the coast of the Lincoln Sea. This is the first time in 32 years that Nares Strait has not frozen in winter."

The phenomenon is called "polynya." It is brought about either by the high temperatures of the sea, or by high winds, or by a confluence of the two. Studies have demonstrated that when "polynya" comes into being, the temperature of the sea is 20°C to 30°C higher than the surrounding environment. So the main purpose of our exploration was to collect data on sea temperatures, and indices such as salt content and so on. Luckily we had a sea expert in our team, Richard Bates from University of Andrews in Scotland. He plunged a survey instrument, a CTD, into the water, all the way across Nares Strait. Altogether, the CTD was thrown into the water about 250 times, sufficient to get enough data for further research. Professor Bates detected a strange ocean current measuring 12 degrees moving through here. In a way, it was this current that had given rise to a "polynya" and quickened the melting of the alaciers.

Although this was bad news for global warming, it helped to clear our path. We finished our journey in six days, although we had planned to finish it in two weeks. And the latitude of north 82°34' proved to be the farthest we could go - these figures are worth remembering not only because it is a record, but also because it symbolizes the limit of the northern seas. Theoretically, the North Pole is only 800 kilometers away. Petermann Glacier, with a 12-kilometer-wide delta, is one of the five to ten most unstable glaciers in Greenland. In order to study how its front section had melted, Jason Box adopted a brand-new research method, a revolutionary one - to install time-lapse cameras on the glaciers. In no more than two weeks, Jason installed seven cameras all together, and obtained a great deal of data on the glaciers. Through the videotape footage, he noticed the glaciers' sensitivity to heat and temperature would abruptly accelerate floating when it was too hot. This meant that, if the climate continues to grow warmer, Petermann Glacier as well as all the other Arctic glaciers would inevitably quicken their pace of floating and melting.

At present, more than 90% of all the glaciers in Greenland have