



宣传册

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气候与能源项目 CLIMATE AND ENERGY PROGRAMME

中国的低碳转型将决定整个地球的未来

EARTH'S FUTURE DEPENDS HEAVILY ON CHINA'S
LOW-CARBON TRANSITION

气候——联系你我 关乎一切

CLIMATE CHANGE MATTERS

气候变化使人类面临前所未有的挑战。化石能源燃烧与毁林造成的温室气体排放，是全球变暖的最主要原因。气候变化正在威胁人类、动植物和整个地球的生态系统……迅速采取行动，减缓气候变化，是我们的责任。

目前，中国已是世界上最大的二氧化碳排放国，每年的排放规模大于美国和欧盟的总和，且人均二氧化碳排放量于 2013 年首次超过欧盟。中国的低碳发展和转型将决定整个地球未来。

世界自然基金会（WWF）联合公众、政府、企业和民间组织力量，积极探索和推广低碳转型方案，倡导低碳生活方式，提倡自然资源的可持续利用。**遏制气候变化，加速中国低碳转型，WWF在行动。**

Humanity is faced with an unprecedented challenge--climate change, which is mainly caused by greenhouse gas emissions from the burning of fossil fuels and deforestation. With human, animals, plants and the entire ecosystem under threat, it is our responsibility to respond immediately to climate change.

China is already the largest carbon dioxide (CO₂) emitter globally. Every year the amount of CO₂ emitted by China is larger than that of the amount generated by the U.S. and 28 European Union countries combined. In 2013, China's CO₂ emission per capita surpassed that of EU for the first time. It is imperative for China's transformation to a low-carbon development, as our earth's future depends on it.

World Wildlife Fund for Nature (WWF) brings the public, governments, corporations and civil societies together by actively promoting low-carbon transformation planning, calling for a low-carbon lifestyle and the sustainable use of natural resources. **WWF is taking actions to fight climate change and facilitate China's low-carbon transition.**

以科学为依据——2摄氏度临界

SCIENCE-BASED TARGET : THE 2°C THRESHOLD

政府间气候变化专门委员会 (IPCC) 第五次气候变化评估综合报告 (Fifth Assessment Report, AR5) 进一步证实：人类活动是全球气候变化的主要原因；若不加以遏止，气候变化将更可能对人类和生态系统造成严重、普遍和不可逆转影响。

目前各国政府和科学家们公认：为避免更为极端的旱涝灾害、高温热浪、极端风暴等气候灾难，全球温度相对于工业化前温度的升幅须控制在2摄氏度以内。而IPCC报告确认，1850年到2012年，全球平均气温已升高0.85摄氏度。

采取快速行动在全球范围内减少化石能源利用带来的排放，是避免气候灾难的根本出路。为了实现2度控制目标，避免透支预算余额，全球已知的化石燃料储量中将有80%都不得开发利用。

The Fifth Assessment Report (AR5) by the Intergovernmental Panel on Climate Change (IPCC) further confirmed the fact that climate change is a global phenomenon mainly caused by human activities. Its growing impact on human and the ecosystem would become prevalent, severe and irreversible if no action is being taken.

Among governments and scientists, the consensus is that the increase in global temperature increase must be capped at no more than 2 degrees Celsius above the pre-industrial level in order to prevent climate catastrophes, such as droughts and floods, heat waves and extreme storms. The IPCC's report has already confirmed a 0.85°C increase in the average global temperature between 1850 and 2012.

The fundamental way to prevent climate catastrophes is to reduce the use of fossil fuel globally. In fact, 80% of known fossil fuel reserves have to refrain from being utilized and developed in order to stay under the 2°C scenario and the global carbon budget.

IPCC报告不仅在气候变化可能带来的灾难性影响上提供了确切信息，也同时阐明了一条通往更加清洁和安全未来的道路。世界各国需要马上行动，淘汰化石能源，转向100%可再生能源。

The IPCC report not only offered detailed information about the possible catastrophic consequences of climate change, but also showed a path to a cleaner and safer future. Countries must take immediate action to eliminate fossil fuel and convert to 100% renewable energy.

萨曼莎·史密斯，WWF全球气候和能源项目负责人

Samantha Smith, Leader of WWF's Global Climate & Energy Initiative



与我们一起探寻 气候解决方案

JOIN US TO FIND THE SOLUTION



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我们的目标 OUR GOAL

WWF致力于通过积极开展的政策研究、国际合作、国内实践和公众教育项目，协助中国加速低碳转型。与此同时，协助中国完善气候适应行动、加强气候与能源领域的南南合作。

WWF China is committed to accelerate China's low-carbon transition as well as help China playing an important role in global climate change by policy and research, best practice dissemination and corporate and public engagements. In the meantime, we also assist China to complete the climate adaptation action and to strengthen south-south cooperation on climate and energy issues.

“中国作为排放大国，正在采取切实行动尽力兑现减排目标上限，不断加大自身及发展中国家的减排行动贡献。同时，应对气候变化亟须全球各国联合行动。在引领全球气候公正和推动各国提升雄心方面，我们期待中国发挥更大力量。”

"As the largest emitter in the world, China is making its voluntary emission reduction targets and taking concrete actions to achieve those commitments. Those actions have huge impacts on the world. What China can do is not limited to its boundary, but also to help other developing countries in both climate change mitigation and adaptation. We are looking forward to China playing a role in leading global climate equality and boosting international confidence."

卢思骋

世界自然基金会（中国）总干事

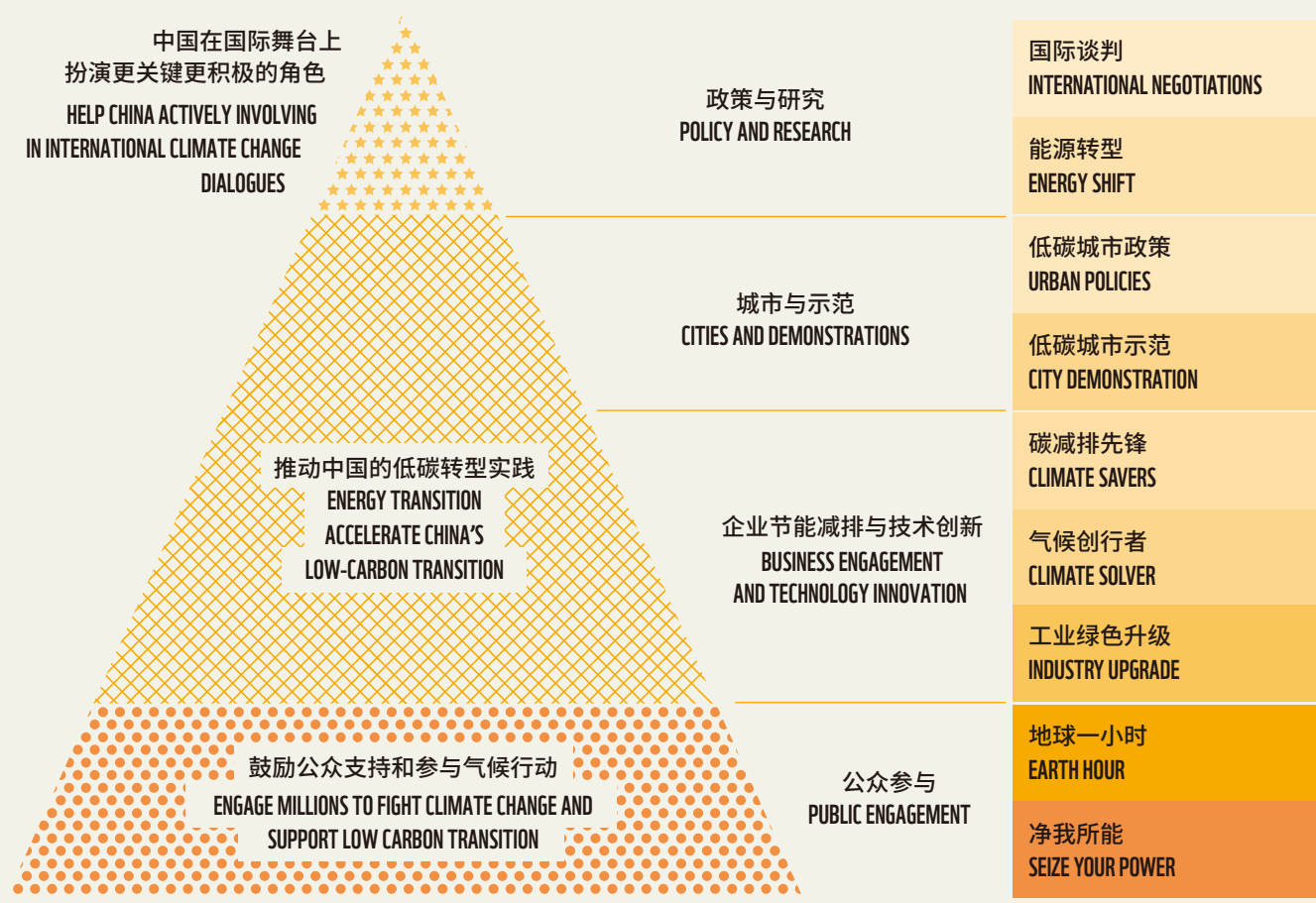
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CEO of WWF China

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我们的项目 OUR PROGRAMS



政策倡导 低碳与发展并重 POLICIES SHAPE THE FUTURE

WWF积极与政府部门、研究机构、工商企业及其他民间组织建立合作伙伴关系，在气候谈判、能源转型和气候适应等领域开展政策研究和国际交流，为气候与能源政策制定提供参考和依据。

Partnering with government sectors, think tanks, corporates, and other NGOs, WWF provides references for policy making on climate and energy issues, through covering national-level policy researches on climate negotiation, energy transition, and climate adaptation and promoting international information exchange.



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国际气候谈判追踪 INTERNATIONAL CLIMATE NEGOTIATIONS

国际气候制度是全球携手应对气候变化问题的必要保障，各国气候行动是全球共同实现2度温升目标的有力支撑。WWF一直保持对国际气候制度构建的高度关注和多层次参与，并建立了国际化和多元化的交流平台，以促进谈判进程中政府、智库与民间组织的沟通与交流，帮助公众更好地理解气候协议。WWF追踪气候谈判会议，期望全球能够达成一个公平、有雄心、适用于全球各国、且能够有效践行的气候协议，并不断呼吁全社会积极参与到应对气候变化的行动中来。WWF支持中国积极推动全球气候制度构建，客观传播中国应对气候变化的政策与行动，努力成为民间谏言与交流的渠道。

International climate system is the basis of the global effort to stay under the 2°C cap. WWF has tracked the international climate change negotiation, setting up diversified platforms for governments, think tanks and NGOs to exchange ideas, and interpreting the international agreements to the public. WWF is working for a fair, ambitious agreement, which is applicable to all. WWF also supports China in becoming a more active player in building a global climate system, by facilitating the communications between China and the rest of the world in climate change policies and initiatives to the world.



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可再生能源研究

STUDY ON RENEWABLE ENERGY

中国目前所面临的环境挑战是复杂的。空气污染与霾与温室气体排放都主要是由化石能源的过度使用引起的。在提高能效的前提下，可再生能源大规模替代化石能源是解决空气污染与减少温室气体排放的根本解决方案。WWF认为，到2050年，中国80%以上的电力可以来自可再生能源。高比例可再生能源是经济可行的，也符合中国生态文明发展的方向。在中国，WWF致力于推动可再生能源得到更主流化的应用。

China's air pollution is caused by excessive fossil fuel consumption; especially coal, which is also the reason for large amount of GHG. The ultimate solution for a safe and clean future is scalable deployment of clean renewable energies with the prerequisite of energy efficiency improvement. WWF's report shows that by 2050, it is possible for at least 80% of electricity being generated from renewable energy sources. Having a high ratio of renewable energy consumption is economically viable, and accordant with China's ecological civilization strategy. Here in China, WWF is promoting the mainstreamed application for renewable energies.



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气候变化适应研究

CLIMATE CHANGE ADAPTATION

气候变化对中国自然生态系统和社会发展带来了现实的威胁。气候适应致力于预防和减小由气候变化引起的负面影响。WWF从长期的自然保育工作中积累了丰富的气候适应实践经验。通过总结和分享适应气候变化的案例与研究，WWF在推动中国各行各业制定更有效的气候适应战略与行动计划。

Climate change is a real threat to China's ecosystem and development. Studies on climate change adaptation aims to counter the negative impacts of climate change. During the past 35 years working in China, WWF has been accumulating the experiences through multiple researches and practices. By sharing its experience and strategies, WWF is pushing for more effective and efficient climate change adaptation strategies and action plans across all sectors in China.

煤炭消费总量控制研究

NATIONAL COAL CONSUMPTION CONTROL

中国是世界煤炭生产和消费第一大国，每年消费的煤炭占全球煤炭消费的一半以上。过度的煤炭消费不仅使中国成为全球最大的温室气体排放国，也为本国带来了严重的空气污染和公众健康隐患。为了应对气候变化、减少空气污染，WWF与合作伙伴联合多家智库机构，开展煤炭消费总量控制的研究及政策倡导。此研究致力于为设定全国煤炭消费总量控制目标、实施路线图和行动计划提供政策建议和实践措施，促使中国煤炭消费总量在2020年前达到峰值，并协助实现2030年前碳排放峰值的目标。

China is both the largest coal producer and consumer in the world. Excessive coal consumption has not only made China the world's largest greenhouse gas emitter, but also brought about severe air pollution and detrimental effects on the public health locally. WWF has been working with NGO partners and think tanks on the research and policy of China's national coal consumption control. The research provides different cost-benefit scenarios for China's coal consumption control, which also helps China to realize its carbon emission peak by 2030. The series of insightful reports have been released, such as China's Energy and Coal Flowchart and Energy System Efficiency Research 2012, Contribution of Coal to Air Pollution in China, Public Health Cobenefit of Coal Consumption Control.

高碳雾都， 或绿色家园？ HAZE CITY, OR GREEN HOME?



从1978到2014年的短短36年间，中国城镇常住人口从1.7亿人增加到7.5亿人，城市数量也从193个激增到660个。快速的城镇化过程推动了产业的发展，也带来了日益增长的城市建设和能源消耗，为城市环境和生态系统带来了更多的挑战。自2007年开始，WWF通过开展区域政策研究、城市温室气体测算工具推广与普及、试点示范、能力建设、宣传倡导和国际经验交流，积极探寻处于不同发展阶段的中国城市如何在保持经济发展的同时，实现有效的低碳转型。

In only 36 years, from 1978 to 2014, China's urban population expanded dramatically from 170 million to 750 million, with the number of cities surging from 193 to 660. Rapid urbanization has boosted industrialization and economic growth, but at the cost of massive energy consumption in order to meet the increasing demands of urban development. As a result of such high demands, it is also becoming a threat to cities and the ecosystem. Since 2007, through policy research, pilot projects, promotion and international exchanges, WWF has been exploring a path for cities at different development stages to make effective low carbon transition while maintaining their economic growth.

750,000,000 PEOPLE (2014)



660 CITIES (2014)



低碳城市政策

LOW CARBON URBAN POLICY

WWF通过开展低碳发展机制与方法的研究，引导城市的低碳实践，先后发布了《低碳城市发展策略与方法》、《低碳建筑和社区导则》、《低碳交通导则》、以及《城市废弃物低碳管理导则》等成果。同时，WWF还与合作伙伴联合开发了适用于中国城市的温室气体核算工具和城市低碳发展评价体系。在此基础上，WWF协助部分城市和区域制定中长期低碳发展规划，从政策与机制层面推动更多城市进行低碳转型。

Based on studies on low carbon development mechanism and methods, WWF published Strategies and Methods of Building Low Carbon Cities, Low Carbon Buildings and Communities Code, Low Carbon Transportation Code and Low Carbon Management of Urban Waste. Moreover, WWF with partners also developed and promoted greenhouse gases calculation tools and a rating system for low carbon development. It helps more cities to engage in low carbon initiatives.



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低碳城市示范

LOW CARBON CITY DEMONSTRATION

WWF 自 2008 年起，与保定和上海正式开展低碳发展试点合作。在上海，WWF 从需求侧入手，聚焦于交通和建筑部门的节能和能效提升，致力于探索通过减少城市运营中的能源消耗来降低城市碳排放。WWF 与合作伙伴共同发布了上海市低碳发展路线图，参与推动了上海公共建筑能效监测体系和上海低碳教育和绿色校园建设。在保定，WWF 从供应侧着手，着眼于可再生能源产业发展契机，打造“太阳能示范城”和新能源制造基地，和城市一同探索以提供低碳解决方案为特点的低碳发展模式。

2014 年，WWF 开始在湖南省开展试点。结合中部地区经济发展和产业转型的特点，WWF 与湖南省共同探索十三五低碳发展战略规划、低碳示范园区合作、以及低碳发展综合管理平台建设，从低碳规划、发展机制和园区示范等维度，实践和推广综合性的低碳转型解决方案。

In 2008, WWF kicked off its Low Carbon Pilot scheme to work with Baoding and Shanghai municipalities. WWF worked with Shanghai from energy consumption side by focusing on energy efficiency improvement in transportation and construction. WWF supported Shanghai to design the low carbon road map, to develop the public building energy monitoring system, and to build up Shanghai low carbon education and green schools.

The pilot in Baoding mainly targeted energy supply side by focusing on taking the opportunity to develop "Solar City" and new energy production base.

In 2014, WWF started a new pilot in Hunan Province. Taking into account of Hunan province's economic and industrial features, WWF cooperates with the provincial government in various fields including 13th Five-Year Low Carbon Strategy, low carbon industrial parks, and a low carbon management platform. Through providing support for low-carbon planning, policy making and demonstrations, WWF aims to practice and promote a comprehensive low carbon transition solution.



企业减碳增益 开创低碳商机



CARBON DOWN AND PROFIT UP, LOW CARBON BUSINESS OPPORTUNITIES

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在国家经济活动中，企业既是温室气体主要排放者，也是气候变化解决方案提供者。WWF认为，应对气候变化，企业参与至关重要。企业在低碳经济转型中扮演关键角色。在中国，WWF协助企业将气候挑战和低碳转型机遇一同纳入到企业长期发展战略，推动国内外先进的节能减排经验的交流，挖掘环境友好型产品和创新技术解决方案，帮助企业成为行业中节能减排的先锋和低碳创新技术的先行者，率先迈向低碳经济。

Corporations are both greenhouse gas emitters and climate change solution providers. WWF regards corporations as key partners in addressing climate change and shifting to low carbon economy. In China, WWF helps enterprises make long-term strategies taking into account both challenges and opportunities brought about by climate change. By drawing on global leading expertise and encouraging environmental-friendly products as well as innovative solutions, WWF is devoted to making corporations pioneers in emission reduction and low carbon innovation to lead China's shift to a low carbon economy.



碳减排先锋 CLIMATE SAVERS

碳减排先锋是WWF发起的全球企业合作旗舰项目，旨在与行业领军企业建立全球范围的战略合作关系，推动工商界力量参与气候能源事务的国际平台。碳减排先锋企业通过两个方面的承诺体现其在气候变化方面的领导力：一是成为行业中温室气体减排的领跑者；二是通过积极推广宣传其可持续发展的商业模式和气候问题的解决方案来影响市场、行业及政策走向。截至2014年，该项目拥有30家全球知名企业成员，包括惠普、强生、沃尔沃集团、可口可乐、英利、万科等。

Climate Saver is a global program that positions companies as leaders of the low-carbon economy. Member companies take on two commitments: to become the best in class in reducing greenhouse gas emissions; and to influence market or policy developments by promoting their vision, solutions and achievements. Up till 2014, there are 30 globally well-known corporations have joined the program, such as HP, Johnson & Johnson, Volvo group, Coca-Cola, Yingli and Vanke.

气候创行者 CLIMATE SOLVER

低碳技术的创新、推广和规模化应用是帮助全球逐渐减少、并最终摆脱对化石能源依赖的主要途径之一。中小企业一直是低碳创新技术研发和推广的重要载体，却面临着市场推广不畅、融资难等诸多挑战。由WWF瑞典分会于2008年发起的气候创行者，旨在发掘最具创新性的低碳技术，并帮助拥有此类技术的中小型企业与投资方以及市场进行系统化的对接，从而推动低碳技术的发展和大规模应用。气候创行者同时在瑞典、中国、印度和南非四个国家开展工作，通过搭建多方参与的全球技术转移与合作平台，最大化地实现减排效应。截止至2014年底，共有14项中国低碳创新技术获得气候创行者称号。

The most effective way for the world to reduce and finally get rid of its dependence on fossil fuel is the innovation, promotion and application of low carbon technology. As the most important vehicle for low carbon R&D and promotion, small to medium enterprises face many financial and marketing challenges. In 2008, WWF Sweden initiated Climate Solver Program with the goal of discovering the most innovative low carbon technologies and helping them on fundraising and market entry. Currently, Climate Solver Program is operating in Sweden, China, India and South Africa. It serves as a platform for technology sharing and global cooperation to maximize the effect of carbon reduction. 14 Chinese low carbon innovations have been awarded as Climate Solvers by the end of 2014.

工业绿色升级 INDUSTRY UPGRADE

在中国，工业能耗占全社会总能耗近70%。工业面临着能源总量、环境容量和碳排放总量控制的三大约束。WWF相信，在特定区域内，探索行业适应机制、宣传并大规模推广最佳实践，能够帮助工业加速绿色升级和转型。WWF携手工业和信息化部、地方政府部门、以及其他合作伙伴，为工业部门和企业引入先进的理念和技术解决方案，提供能力建设和创新的融资模式，推动企业行动和政策转变，共同探索中国工业绿色转型的可行路径。

China's industrial sector, accounting for nearly 70% of the country's total energy consumption, will face three constraints of control on total energy consumption, environment capacity and carbon emission. Exploring and promoting successful models which can be deployed at large scale in relevant regions and sectors will help accelerate the industry green upgrade and transformation. WWF, along with the Ministry of Industry and Information Technology, local government departments, and other partners, aims to explore a feasible way and successful model for China's industry green upgrade by bringing advanced concepts and technological solutions for the industrial sector and enterprises, providing capacity building and innovative financing options, and catalysing enterprises' actions and policy support.

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超越一小时 公众在行动

WWF相信，凝聚并发挥每一个人力量，就能遏制气候变化，迈向低碳未来。通过开展公众倡导项目，WWF联合媒体、意见领袖、企业和政府等社会各界力量，为中国公众提供气候与能源议题的专业信息和见解，打造全民表达环保热情和参与气候行动的平台，推动公众了解和实践低碳生活。

WWF believes that by uniting people to protect the planet, we can change climate change and move to a low-carbon future. Through operating public campaigns, WWF works with media, key opinion leader, business, and government to provide professional and insightful information to general public, to build up public engagement platforms, and to promotes low-carbon lifestyles.

BEYOND ONE HOUR, THE PUBLIC IS TAKING ACTIONS

地球一小时 EARTH HOUR

地球一小时由WWF于2007年在澳大利亚悉尼发起，倡导公众、政府、企业等社会各界在每年3月最后一个周六晚上8点半到9点半，关掉不必要的灯，以表达对气候变化的关注。仅用了数年时间，地球一小时就成为了全球参与规模最大的开源性环境保护行动。

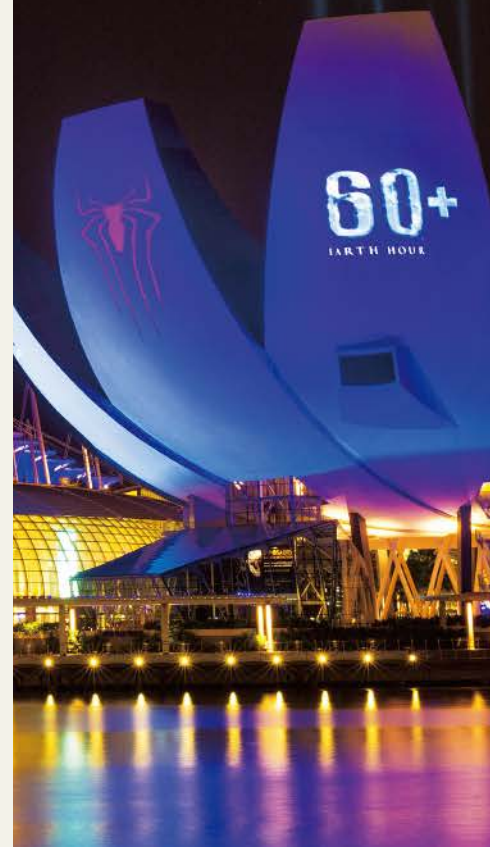
2009年，WWF将地球一小时正式引入中国，努力为中国公众一个全民参与凝聚环保力量的绿色节日。每年，地球一小时通过线上线下宣传活动，让数以百万计的公众将走到一起，以承诺和行动扭转气候变化。同时，WWF也持续通过地球一小时平台与各地环保人士携手努力，为地球的可持续发展积极寻求解决方案。

2015年3月，地球一小时席卷了超过172个国家和地区，吸引了数亿名支持者；而在中国，超过143个城市庆祝地球一小时，数百万公众参与WWF线上主题互动。

WWF's Earth Hour was famously started as a lights-off event in Sydney, Australia in 2007. Every year, Earth Hour is celebrated by switching off non-essential lights on the last Saturday of March from 8:30 to 9:30 p. m. local time of each place. Since its origin, Earth Hour has grown into the world's largest grassroots open-source movement for the environment issues.

In 2009, Earth Hour was introduced into China, and then becomes a green festival igniting public awareness and action on climate across this country. Every year, millions of people participated in Earth Hour through online and offline platforms of Earth Hour, and shared their commitment and action for environment. In the meantime, WWF also strives to go beyond hour to achieve far-reaching environmental and social impact by seeking sustainable solutions for local critical environmental issues.

In March 2015, Earth Hour swept around 172 countries and territories and supported by billions of supporters. In China, more than 143 cities celebrated this campaign, and millions of individuals participated in our digital interactive platforms.



净我所能 SEIZE YOUR POWER

2013年，WWF启动了“净我所能”的倡导项目，促进可再生能源发展，推动全球能源转型。净我所能，汇聚公众声音，推动政府和金融机构承诺减少投资化石能源，并在2017年之前向可再生能源新增400亿美元投资，以扭转气候变化以及环境污染对人类当前生活及后代的影响。在中国，“净我所能”立足于向公众阐明可再生能源是解决空气污染的最终解决方案，并推动国内金融机构加大对可再生能源应用的投资。

In 2013, WWF launched Seize Your Power campaign, aiming at facilitating sustainable development and global energy shift. Seize Your Power united public voices and demand less investment from governments and financial institutions into fossil fuels with a goal of attracting 40 billion dollars more investment in renewable energy by 2017 in order to mitigate the impact on future generations caused by climate change and pollution. In China, it positioned renewable energies as the ultimate solutions for air pollution and asked for scalable renewable energy investments.



扭转气候变化，
您愿意与我们
同行吗？

CHANGE CLIMATE
CHANGE,
WOULD YOU
FIGHT
WITH US?



© Adam Osweil / WWF-Canton

“气候变化问题是一个人为问题，由人类活动造成，也给人类社会带来灾难。WWF地球一小时告诉我们，只要国际社会能够团结一心，一切都有可能的。”

“Climate change is a people problem. People cause climate change and people suffer from climate change. People can also solve climate change. With lights being switched off around the world, WWF's Earth Hour shows what is possible when we unite in support of a cause.”

联合国秘书长
潘基文
Ban Ki-moon
Secretary-General of
the United Nations

143

2015年3月28日，共有143个中国城市在熄灯中庆祝地球一小时

On March 28, 2015, a total of 143 cities in China turned off lights to celebrate Earth Hour

2°C

WWF与各国政府共同努力将全球气温上升控制在2°C以内

WWF is working with world's governments to keep global temperature increase to less than 2°C

100%
再造纸



80%

到2050年，中国可再生电力有望增至80%

China can transition to an 80% renewable electric power system by 2050

100 MILLION

1999年到2011年，碳减排先锋成员企业累计实现约1亿吨二氧化碳减排量

From 1999 to 2011, Climate Savers partners have reduced GHG emissions by over 100 million tons



我们致力于

遏止地球自然环境的恶化，创造人类与自然和谐相处的美好未来。

Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.wwfchina.org

