

EVENT:

July 29, 2005 - The **Energy Policy Act of 2005** (Pub.L. 109–58) is a bill passed by the United States Congress and signed into law by President George W. Bush on August 8, 2005, at Sandia National Laboratories in Albuquerque, New Mexico. The act is an attempt to combat growing energy problems, changed US energy policy by providing tax incentives and loan guarantees for energy production of various types.

2006-02 The Public Utility Holding Company Act of 1935 was repealed, effective February 2006, by the passing of The **Energy Policy Act of 2005** (Pub.L. 109–58).

2006-10 The Energy Star program was established by the Environmental Protection Agency and operates under the authority of the Clean Air Act, section 103(g), and the **2005 Energy Policy Act**, section 131 (which amended the Energy Policy and Conservation Act, section 324). **The Energy Star program** was revised to include stricter efficiency requirements for computer equipment.

2006-12 The **energy** used by the nation's servers and **data centers** is significant. It is estimated that this sector **consumed** about 61 billion kilowatt-hours (kWh) in 2006 (1.5 percent of total U.S. **electricity consumption**) for a total **electricity** cost of about \$4.5 billion.

According to the US EPA (United States Environmental Protection Agency) [EPA Report to Congress on Server and Data Center Energy Efficiency](#)

2006 White Paper- Cisco Energy Efficient Data Center Solutions and Best Practices

2007 -02 The Green Grid is a global consortium dedicated to advancing energy efficiency in data centers and business computing ecosystems. It was founded in February 2007 by several key companies in the industry – AMD, APC, Dell, HP, IBM, Intel, Microsoft, Rackable Systems, SprayCool (purchased in 2010 by Parker), Sun Microsystems and VMware. The Green Grid has since grown to hundreds of members, including end-users and government organizations, all focused on improving data center infrastructure efficiency (DCIE).

2007-06-12. Climate Savers Computing Initiative (CSCI) is an effort to reduce the electric power consumption of PCs in active and inactive states.[10] The CSCI provides a catalog of green products from its member organizations, and information for reducing PC power consumption. The Climate Savers Computing Initiative was a nonprofit group of consumers, businesses and conservation organizations dedicated to promoting smart technologies that improve power efficiency and reduce energy consumption of computers. Formed in 2007, it was based in Portland, Oregon.

2007-08 Report to Congress on Server and Data Center Energy Efficiency Public Law 109-431 U.S. Environmental Protection Agency ENERGY STAR Program August 2, 2007

2007 White paper of the uptime institute—Data center energy efficiency and productivity

2008-07 North Pole could be ice-free this summer, scientists say(CNN) -- The North Pole may be briefly ice-free by September as global warming melts away Arctic sea ice, according to scientists from the National Snow and Ice Data Center in Boulder, Colorado.

2008-07 Revolutionizing Data Center Energy Efficiency, McKinsey & Company

28 August 2008 Arctic ice 'is at tipping point' Environment correspondent, BBC News website

2008- white paper. Emerson Network Power. "Energy Logic: Reducing Data 3. Center Energy Consumption by Creating Savings That Cascade Across Systems,"

Company:

https://openlab-mu-internal.web.cern.ch/openlab-mu-internal/03_Documents/3_Technical_Documents/Technical_Reports/2008/CERN_Intel_Whitepaper_r04.pdf

(英特尔) 2008 9 9

为了在不超过其35年历史数据中心的的热量限制的情况下部署大量新计算资源，CERN正在采取全面的方法来提
高能源效率。本文概述了欧洲核子研究中心的关键战略，包括转向最新的英特尔®至强®处理器，这些处理器
正在帮助该组织将每瓦特性能提高五倍。英特尔IT部门在两个中等规模的高密度数据中心使用湿式节能器，以
实现高水平的冷却系统效率 (Reducing Data Center Energy Consumption with Wet Side Economizers)

[http://i.dell.com/sites/content/business/solutions/power/en/Documents/
Best_Practices_for_Increasing_Data_Center_Energy_Efficiency.pdf](http://i.dell.com/sites/content/business/solutions/power/en/Documents/Best_Practices_for_Increasing_Data_Center_Energy_Efficiency.pdf)

(戴尔)

提高数据中心能效不仅是一种环保战略，也是降低成本的关键途径。通过使用虚拟化和戴尔
“PowerEdge”Energy Smart服务器整合系统，企业可以淘汰传统硬件，从而显著降低电力和冷却要求，并创建
绿色数据中心。2008 2

https://www-935.ibm.com/services/multimedia/GTW03020USEN_186553.pdf

(ibm)

创建绿色数据中心有助于降低能源成本并获得竞争优势。2008 5 8

https://www-935.ibm.com/services/multimedia/DC_energy_efficiency.pdf

(ibm)

IBM数据中心和设施战略服务 - 数据中心能效评估 2005 6 25

<https://www.treehugger.com/clean-technology/google-setting-the-bar-on-data-center-efficiency.html>

(google)

谷歌设定数据中心效率环境 2008 10 7

[https://blogs.msdn.microsoft.com/the_power_of_software/2008/08/28/charging-customers-for-power-usage-
in-microsoft-data-centers/](https://blogs.msdn.microsoft.com/the_power_of_software/2008/08/28/charging-customers-for-power-usage-in-microsoft-data-centers/)

(Microsoft)

为Microsoft数据中心的电源使用收取客户费用 2008 8 28

<http://www.hpl.hp.com/news/2006/oct-dec/power.html>

(惠普) 2006 11 29

惠普研究为该公司的新型动态智能冷却技术做出了贡献，该技术可大幅降低数据中心的能源成本。

[https://app_gsagov_prod_rdcgwaajp7wr.s3.amazonaws.com/
data_center_quick_start_03_09_508_compliant.pdf](https://app_gsagov_prod_rdcgwaajp7wr.s3.amazonaws.com/data_center_quick_start_03_09_508_compliant.pdf)

(amazon aws网络服务公司) 2007 8 2

提高数据中心能效的快速入门指南

Google NEWS

<https://www.zdnet.com/article/google-makes-waves-and-may-have-solved-the-data-center-conundrum/>

(Google) 2008年9月8日 9

谷歌掀起波澜，可能已经解决了数据中心的难题

<https://www.cnet.com/news/intel-data-centers-could-use-some-fresh-air/>

(Intel) 2008 9 24 13

英特尔：数据中心可以使用一些新鲜空气

芯片制造商表示，将服务器暴露在沙漠空气中10个月的实验证明，冷却成本可以节省数百万美元。

<https://www.itpro.co.uk/606288/hsbc-data-centre-achieves-green-standard-uk-first>

(HSBC) 汇丰银行 2008 9 14 11

汇丰数据中心首先实现了英国绿色标准

<https://www.irishtimes.com/business/ibm-unveils-new-30m-data-centre-1.939295>

(IBM) 2008 9 18 12

IBM推出新的3000万欧元数据中心，数据中心设计的关键要素之一是使用IBM所谓的“绿色战略”

<https://www.pcworld.com/article/131777/article.html>

(IBM) 2007 5 12 3

IBM on Thursday unveiled a US\$1 billion-a-year service initiative aimed at building and redesigning data centers that consume less energy.

https://www.theregister.co.uk/2008/04/22/hitachi_greenest_data_center_evar/

(日立) 2008 4 22 6

日立数据系统通过宣布有史以来构建的最环保，最节能的企业级数据中心来庆祝地球日 - 也就是说，忽略了它尚未真正构建的轻微复杂性。