1226 Christmas weekend meeting note

IPC green inventory: developed by the IPC Committee of Experts, facilitates searches for patent information relating to Environmentally Sound Technologies (ESTs), as listed by the United Nations Framework Convention on Climate Change (UNFCCC).

ESTs are currently scattered widely across the IPC in numerous technical fields. The Inventory attempts to collect them in one place.

[324159055.pdf (core.ac.uk)](https://core.ac.uk/download/pdf/324159055.pdf)

这篇列了一些关键词

Papers written using Chinese patent data that mentions this IPC green inventory:

Liu, Yue, et al. "Does energy price induce China’s green energy innovation?." *Energies* 13.15 (2020): 4034.

In this paper, page 6: According to the research objective, following Ardito et al. [44], this paper classifies green energy patents into “alternative energy production and energy conservation” patents and obtains all corresponding IPC codes. Based on obtaining the IPC codes to green energy technologies, this paper, according to the Patent Star website of the State Intellectual Property of China (Website address: <http://cprs.patentstar.com.cn/>)

确认一下有没有别的排放罚款

DID：只有一个shock，有可能有很多别的东西也在发生，所以需要一些robustness check的设计

关键词：chuxin来确保关键词的文献都有迹可循

David Popp的那篇INNOVATION AND ENTREPRENEURSHIP IN THE ENERGY SECTOR里面既提到了IPC，也提到了CPC，里面也有对应的一些分类，看来要打印出来，跟IPC对应着看看

这篇文章的一些表格也有中国的inventor（应该是在外面注册的专利），有空去看看这些数据是否包含省份地址信息，也可以给我们作为一部分的数据来源与参考。

[CPC Scheme - Y04S SYSTEMS INTEGRATING TECHNOLOGIES RELATED TO POWER NETWORK OPERATION, COMMUNICATION OR INFORMATION TECHNOLOGIES FOR IMPROVING THE ELECTRICAL POWER GENERATION, TRANSMISSION, DISTRIBUTION, MANAGEMENT OR USAGE, i.e. SMART GRIDS (uspto.gov)](https://www.uspto.gov/web/patents/classification/cpc/html/cpc-Y04S.html)

[IPC Green Inventory (wipo.int)](https://www.wipo.int/classifications/ipc/en/green_inventory/index.html)

IPC: International Patent Classification

The classification scheme contains about 70,000 entries identified by classification symbols that can be allotted to patent documents. These different classification places are arranged in a hierarchical, tree-like structure.

**What is the relation between the IPC and CPC?**

CPC is the Cooperative Patent Classification scheme used by the European Patent Office (EPO) and the United States Patent and Trademark Office (USPTO), which was jointly developed by the two Offices based in a large part on the existing European Classification System (ECLA) and on the USPC, respectively. It is based on the IPC, but it is much more detailed. CPC classification codes can be used to carry out searches on both the Espacenet and the USPTO Classification databases.

This paper takes all the A-share listed firms in China as the initial sample from 2006 to 2016. The patent application data comes from CSMAR database, and other financial indicators come from the Wind database——这篇xiaoyu看一看，用的也是六个交易所；

[Full article: Environmental regulation, innovation quality and firms’ competitivity―Quasi-natural experiment based on China’s carbon emissions trading pilot (tandfonline.com)](https://www.tandfonline.com/doi/full/10.1080/1331677X.2020.1771745)

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[Trends and determinants of energy innovations: patents, environmental policies and oil prices: Journal of Economic Policy Reform: Vol 23, No 1 (tandfonline.com)](https://www.tandfonline.com/doi/full/10.1080/17487870.2019.1565410?scroll=top&needAccess=true)

[Local demand-pull policy and energy innovation: Evidence from the solar photovoltaic market in China - ScienceDirect](https://www.sciencedirect.com/science/article/abs/pii/S0301421518308620)