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Estimates of city-level energy storage projects

Overview

How many cities have energy consumption inventories?

As an application of the method proposed in this study, we calculated the energy consumption inventories of 286 cities and details on 30 types of fossil fuel and 18 socioeconomic sectors that are consistent with the System of National Accounts and analysed the basic spatial features and evolution characteristics of these cities.

Is energy consumption at city level systematically estimated?

The energy consumption at the city level has not been systematically estimated by provincial energy balance tables and discrepancies of in multiscale statistics have rarely been noticed.

How accurate is city-level final energy consumption estimation?

It should also be noted that all coeficients fluctuate between 2% and 8%, indicating high stability in the estimation of city-level final energy consumption. Validation of estimation accuracy. A thorough investigation of existing literature confirmed that there is a dearth of data on China’s city-level final energy consumption.

Does city-level energy consumption vary between provinces and cities?

However, due to diferences in economic development level, technology level, and energy structure among provinces and their cities, there are variations in energy intensity and energy consumption per capita. Therefore, uncertainty arises when calculating city-level final energy consumption using Eqs. (4–6).

Will smart city projects affect energy consumption in resource-based cities?

This study expected the impacts of smart city projects to be larger in resource-based cities because these cities could use the energy more inefficiently than other cities before the project’s implementation, such that after the implementation of the project the decline in energy consumption per unit of

GDP would be greater.

What is the correlation between city-level final energy consumption and population?

The average Pearson correlation coefficients between city-level final energy consumption (FEC), on the one side, and gross domestic product (GDP) and resident population (POP), on the other side, from 2005 to 2021 were 0.854 and 0.833, respectively.

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City-level pathways to carbon peak and neutrality in China

May 24, 2024 · Summary Chinese cities need independent but synergetic dual-carbon abatement roadmaps to mitigate climate change and achieve carbon neutrality. Using source-level data, ...

Exploring the willingness and evolutionary process of public

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Capital Cost and Performance Characteristics for Utility ...

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technologies specifically two powered by coal, five by natural gas, ...

Evaluating emerging long-duration energy storage ...

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Jul 1, 2017 · Results from a case study involving thirteen different reservoir locations suggest that the high-level resource estimates may be biased towards over-estimation of both CO 2 ...

Battery Energy Storage Systems Report

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Community Energy Storage: A smart choice for the smart ...

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City-level energy storage scenarios

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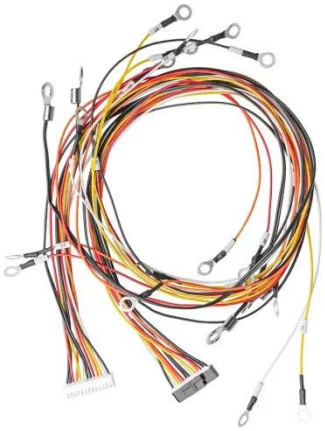

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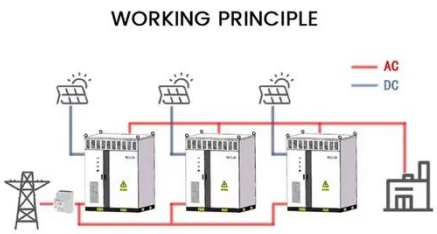

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