**Introduction**

**Methodology**

**Classification of land-use and PV types**

**Industrial complex**

**…..**

**water**

**Impact of Setback regulation Derivation of Supply Curve of PV.**

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**Abstract**

This is an abstract.

**Keywords:** Keword1, Keword-2, Keyword-3

1. Introduction

전세계 속에서 우리나라 특성 온실가스, (신재생)에너지 등

우리나라에서 경기도 특성: 온실가스, (신재생)에너지

신재생 도입을 방해하는 요소: 1.2.3….Setback

Setback에 대한 전세계 현황

Setback에 대한 우리나라 현황: Setback 규제가 생겨난 이유, Setback의 종류 등등

Objective:

1) explore suitable sites for PV installation. (GIS-based approach)

2) scenario analysis (No Setback vs. Setback)

3) Supply curve

Comparison of PV energy potential

4) Compare supply curve of PV(LCOE assumption)

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텍스트, 전자제품, 스크린샷, 웹사이트이(가) 표시된 사진

자동 생성된 설명

Fig. 1. Study Design

1. Methodology
   1. Classification of land-use and PV types

To facilitate policy design, land-use types are categorized into nine :

* + 1. Industrial complex
    2. Logistics complex
    3. Residential complex
    4. Public buildings
    5. Mountainous area
    6. Farmland
    7. Parking lot
    8. Roadside land
    9. Water

|  |  |  |
| --- | --- | --- |
| Land-use type | Description | Data source |
| Industrial complex |  |  |
| Logistics complex |  |  |
| Residential complex |  |  |
| Public buildings |  |  |
| Mountainous area |  |  |
| Farmland |  |  |
| Parking lot |  |  |
| Roadside land |  |  |
| Water |  |  |

* 1. Exploration of PV-available sites
     1. GIS-based approach
     2. Geographical constraint

농업보호구역, 농업진흥지역, 보전산지

* 1. Calculation of PV potential

Coefficient

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* 1. LCOE of PV

LCOE assumption from KEEI. Draw a graph.

* 1. Scenario

|  |  |
| --- | --- |
| Scenario | Description |
| No Setback |  |
| Setback |  |

Coefficient를 LCR 이라고 하는구나 (Land Coverage Ratio)

Sources: Vyas et al. (2022): Solar Photovoltaic Tree ~, Yushchenko et al. (2018): GIS-based

Ratio는?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Land-use type | Area (m2) | Number of sites | PV type | Ratio (%) | Coefficient (m2/kW) | Capacity factor |
| Industrial complex | 25,293,157 | 25,128 | Roof-top PV | 59.7 | 7.23 | It is applied differently depending on the city & county to which the individual site belongs. |
| Logistics complex | 5,450,717 | 1,848 |
| Residential complex | 44,657,356 | 132,000 |
| Public buildings | 5,618,738 | 12,810 |
| Mountainous area |  |  | Ground-mounted PV |  | 11.50 |
| Farmland |  |  |  |
| Parking lot |  |  | 18.9 |
| Roadside land |  |  | 28.4 |
| Water | 56,372,992 | 446 | Floating PV |  |  |

1. Results
   1. Electricity sector

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자동 생성된 설명

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* 1. Implications for T&D networks

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1. Conclusion

Electrification ssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssss

**CRediT authorship contribution statement**

**Seungho Jeon:** ABC. **Gildong Hong:** ABC. **Gyeonggi Do:** ABC

**Declaration of competing interest**

The authors declare that they have no know competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

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