# Machine learning to find optimal carbon tax policy to increase investment in low-carbon technologies using agent-based models

Anonymized

### **ABSTRACT**

Placeholder

# **KEYWORDS**

Energy markets, policy, carbon tax, genetic algorithm, optimization

### **ACM Reference Format:**

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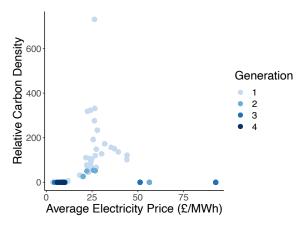


Figure 1: Development of genetic algorithm rewards of average electricity price and relative carbon density in 2035 over time for highest degrees of freedom per year.

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# 5 CONCLUSION

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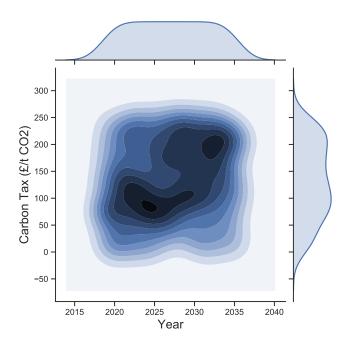


Figure 2: 2D density plot of carbon tax strategies that led to an average electricity price of below £5/MWh by 2035.

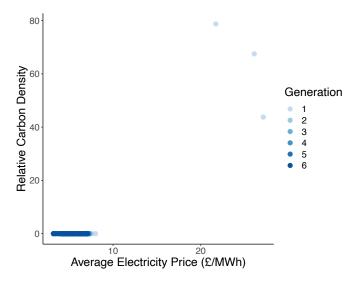


Figure 3: Development of genetic algorithm rewards of average electricity price and relative carbon density in 2035 over time for linear carbon strategy.

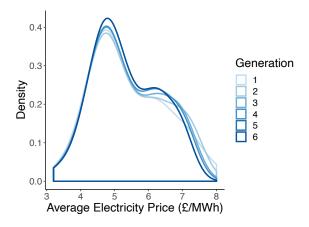


Figure 4: Density plot of average electricity price smaller than £8/MWh in 2035 over generation number of genetic algorithm.

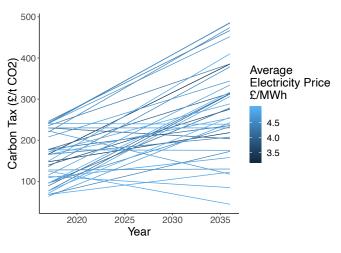


Figure 5: Linear carbon tax strategies visualised with average electricity price smaller than £5/MWh.

# **REFERENCES**