# Article information:

Competition between biogeochemical drivers and land-cover changes determines urban greening or browning - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0034425723000329?via%3Dihub>

# Article summary:

1. The urban-rural gradient in vegetation greenness trends and their responses to biogeochemical drivers and land-cover changes were analyzed.

2. Biogeochemical drivers and land-cover changes jointly regulate the ‘V-shape’ of the urban-rural gradient in greenness trends.

3. Urban biogeochemical drivers lead to significant greening in urban cores, while urban expansion or densification dominates the browning in urban fringes.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides a comprehensive overview of the effects of biogeochemical drivers and land-cover changes on the urban-rural gradient in vegetation greenness trends. The article is well researched, with data from satellite imagery used to analyze 1500+ cities in China for 2000–2019. The authors also provide a conceptual framework to differentiate between the contributions of four key drivers to the greenness trends: two biogeochemical drivers (BBD and UBD) and two drivers of land-cover changes (UED and UGR).

The article does not appear to be biased or one-sided, as it presents both sides equally by providing evidence for both positive (greening) and negative (browning) effects on vegetation growth due to biogeochemical drivers and land-cover changes. It also does not appear to contain any promotional content or partiality towards either side.

The article does not appear to have any missing points of consideration or unsupported claims, as all claims are backed up by evidence from satellite imagery. However, there are some unexplored counterarguments that could be further explored, such as how other factors such as air pollution may affect vegetation growth in cities. Additionally, possible risks associated with these findings should be noted, such as how increased vegetation growth may lead to increased water consumption which could have negative impacts on local ecosystems if not managed properly.

# Topics for further research:

* Air pollution effects on vegetation growth
* Water consumption impacts on local ecosystems
* Urban-rural gradient in vegetation greenness
* Biogeochemical drivers of vegetation greenness
* Land-cover changes and vegetation greenness
* Conceptual framework for vegetation greenness trends

# Report location:

<https://www.fullpicture.app/item/9914c21d73a29a5011ca337f754d1b24>