# Why data centres face growing opposition

LEVEL B1


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## I. WARM-UP

1. What do you use the internet for most each day?
2. What problems can big industrial buildings cause nearby?
3. Should towns limit projects that use lots of power? Why?

## II. KEY VOCABULARY

**backlash**
a strong public reaction against something

**expand**
to grow in size, number or activity

**capacity**
the total amount something can hold or produce

**turbine**
a machine with blades that turns to make power

**pollution**
harmful substances in the air, water or land

**emission**
gas or smoke sent out into the air

**regulator**
an official body that checks rules and safety

**shortage**
a situation when there is not enough of something

## III. READING

Data centres power web searches, emails and AI tools, but a growing backlash says they use too much electricity and water. A few years ago, people had not heard the term. Now they are a political issue in the US before the 3 November midterm elections.

President Donald Trump has dismissed the pushback, while both Republicans and Democrats have opposed new sites. Data centres have expanded rapidly: Data Center Map counts about 12,250 worldwide, up from about 8,000 in 2021. The US has 4,767 sites and leads on capacity.

New mega-sites aim to serve AI: one project, Colossus 2, will use 41 methane gas turbines, which activists say may worsen air pollution, though local regulators say standards will be met. Experts warn of water shortages, pressure on local grids and higher emissions.

Data centres worldwide are thought to consume more electricity than France, and some fear energy prices could rise. With worries about noise and land use, a backlash is gathering pace. Some 16 US states have proposed pauses or bans. Outside the US, opposition has appeared in Mexico, France, Indonesia and the UK.

*Reading text adapted from reporting by* **BBC News***: "Big, noisy and coming to a town near you - why...". Original article linked at theenglishwire.com.*

## IV. COMPREHENSION QUESTIONS

1. What online services do data centres support?
2. How many data centres are there worldwide now, and in 2021?
3. Which country has 4,767 sites and leads on capacity?
4. Why are activists worried about the Colossus 2 project?
5. How many US states have proposed pauses or bans?

## V. DISCUSSION

1. Should local leaders approve or block new data centres? Why?
2. What limits would you set for energy and water use?
3. How could centres reduce noise, emissions and visual impact?
4. Do job benefits outweigh environmental costs in your view?

## VI. GRAMMAR FOCUS

**Past perfect**

Use had + past participle to show an earlier past action before another past time/event. Common signals: before, by the time, when.

*"By 2021, about 8,000 data centres* **had opened** *worldwide."*

*"Before regulators replied, activists* **had warned** *about air pollution."*

## VII. GRAMMAR EXERCISE

**Complete each sentence with the past perfect form.**

1. By then, residents (collect) ___ signatures. _____
2. Before approval, planners (ask) ___ for studies. _____
3. When the vote began, experts (prepare) ___ a report. _____
4. By then, many locals (oppose) ___ new sites. _____
5. Before the site was built, neighbours (worry) ___ about noise. _____

# Teacher's Notes

TEACHERS ONLY

These notes are designed to help you get the most out of this lesson. Please do not share this page with students.


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## I. LESSON GUIDE

- Timing: 8–10 minutes warm-up, 8–10 minutes vocabulary, 12–15 minutes reading, 8–10 minutes comprehension, 10 minutes discussion. Fold grammar into reading/comprehension if needed.
- Pre-teach key terms and numbers (backlash, capacity, turbine, emissions; 12,250 sites; 4,767 in the US; 41 turbines). Drill data centre and regulator.
- Run the reading in two passes: skim for the main idea, then scan for figures and places. The topic involves politics and local impacts, so start discussion in pairs and say students may speak about the news rather than personal experience.
- Differentiation: stronger students write a 60-word summary of pros and cons; others highlight three facts that show scale (a number, a place, and one impact).

## II. DISCUSSION FACILITATION TIPS

1. Take a quick show of hands, then pair supporters with opponents to exchange two reasons each.
2. Elicit concrete limits (e.g., a percentage cap). Ask for one benefit and one risk of each limit.
3. Board three ideas for reducing impact, then form small groups to add one practical step to each.
4. Set up a mini pros–cons chart in pairs; push students to give one local example from the text.

## III. EXTENSION ACTIVITIES

**Debate:** In teams, prepare 2-minute opening statements for or against a new data centre in your town, using at least three facts from the text.

**Writing:** Write a 90-word public notice that explains why 16 states proposed pauses or bans, using figures from the article.

## IV. ANSWER KEY OVERVIEW

**Comprehension questions:** short factual answers from the text.

**Grammar exercise:** Past perfect

**Discussion:** open-ended. Accept any reasonable ideas supported by examples and reasoning.

# Answer Key

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## IV. COMPREHENSION QUESTIONS

1. What online services do data centres support?
   Web searches, emails and AI tools.
2. How many data centres are there worldwide now, and in 2021?
   About 12,250 now; about 8,000 in 2021.
3. Which country has 4,767 sites and leads on capacity?
   The United States.
4. Why are activists worried about the Colossus 2 project?
   It will use 41 methane gas turbines that may worsen air pollution.
5. How many US states have proposed pauses or bans?
   Sixteen states.

## V. DISCUSSION

**Open answers.** Accept any reasonable ideas supported by examples and reasoning.

## VI. GRAMMAR FOCUS

**Key point:** Use had + past participle to show an earlier past action before another past time/event. Common signals: before, by the time, when. (Examples constructed.)

> *"By 2021, about 8,000 data centres* **had opened** *worldwide."*
>
> *"Before regulators replied, activists* **had warned** *about air pollution."*

## VII. GRAMMAR EXERCISE

Complete each sentence with the past perfect form.

1. By then, residents ___ signatures. **had collected**
2. Before approval, planners ___ for studies. **had asked**
3. When the vote began, experts ___ a report. **had prepared**
4. By then, many locals ___ new sites. **had opposed**
5. Before the site was built, neighbours ___ about noise. **had worried**