

An introduction to Zero West

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Quick intro:

- Established in 2011 by a number of community energy volunteers.
- “Investing in renewables, cutting carbon, building community.”
- £11million of solar / battery assets and 2.5 FTE staff.
- Funded from crowd-funding (£4 million), commercial loans, and loans from social funders.
- 9MW solar portfolio - two solar farms and PV on 11 community buildings.
- Projects under development include hydro, battery storage, energy efficiency, and solar.
- Has facilitated over £200,000 of community benefit payments to the local community.
- Leading on the development of Zero West.

Zero West

A collaboration to accelerate the transition to a low carbon society in the West of England area.

The challenge

How can the West of England
region go zero carbon fast?

Here are some of the solution providers

4 West of
England local
authorities

- Low carbon targets to meet
- Public expectations
- Financial / resource constraints
- Have useful assets

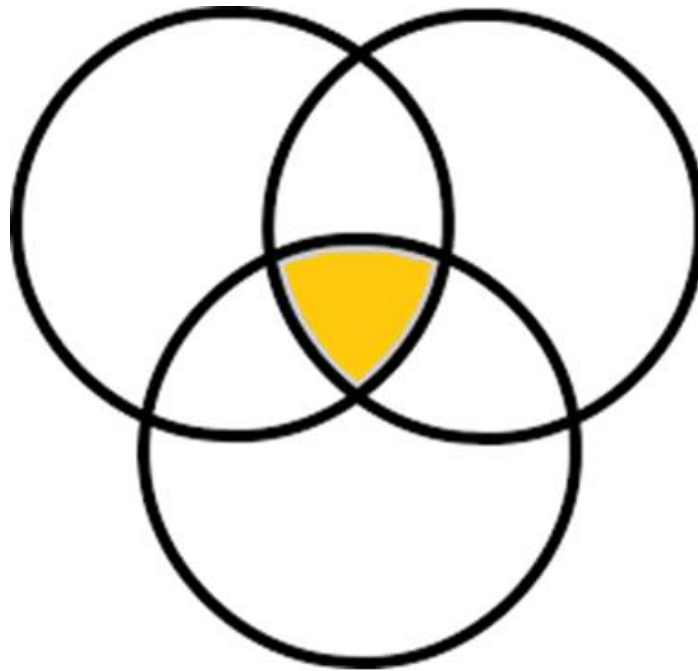
The
private
sector

- Has access to finance
- Shareholder focussed
- Tends to have competitive mindset

The
community

- High enthusiasm
- Time poor
- Lacks quick access to funds

Zero West is bringing them together



along with some “glue” people:



finance, legal, IT, entrepreneurs,
engineers, academia, marketing,
project managers, media stars,
etc...



When it started



In late 2016 Bristol Energy Cooperative, Foot Anstey LLP and SLR Consulting brought together about 100 people /organisations: renewables developers, community groups, the four West of England local authorities, transport providers, food growers, education, arts, financiers, lawyers, IT specialists, PR companies, and other interested parties.



They argued that if the West of England region is to go zero carbon in the necessary timescales we have to:

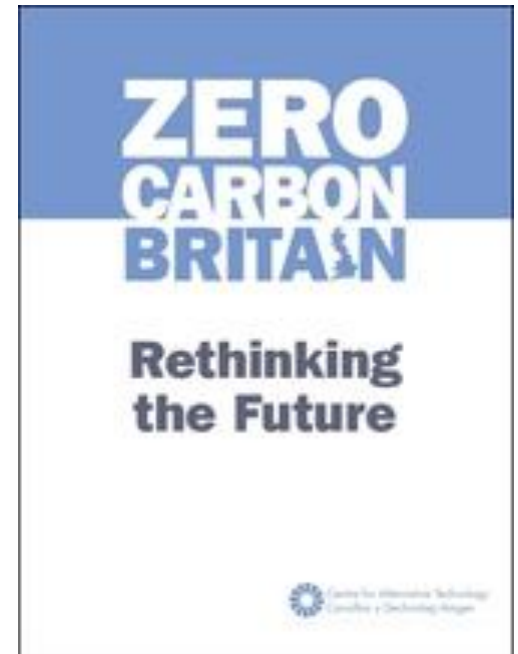
- Work faster, in a more joined-up way, and complete low-carbon projects of a far greater scale than at present.
- Engage the wider public in the journey, sell them the health, wealth and jobs benefits, and enthuse them to get involved.

And they pitched the idea of a **collaboration** to make this happen.

- The reaction in the room was positive.
- Many suggestions and offers of help were made.
- A steering group was formed to take the idea to others and get more feedback.
- Other working groups formed to get going on practical activity:
 - Data
 - Infrastructure Projects and Finance
 - Public Engagement

Since then...

- A lot of good stuff has happened, and in April 2018 **Zero West** was incorporated as a Community Interest Company .
- It's broadly following the Zero Carbon Britain model in supporting actions around energy, transport, food, the built environment, and arts.
- It's membership based, with 2 categories: organisations and individuals. Each category has 50% voting rights.
- We're looking for 5 or 6 strategic partners to provide a greater initial financial contribution.
- Coming soon: www.zerowest.org

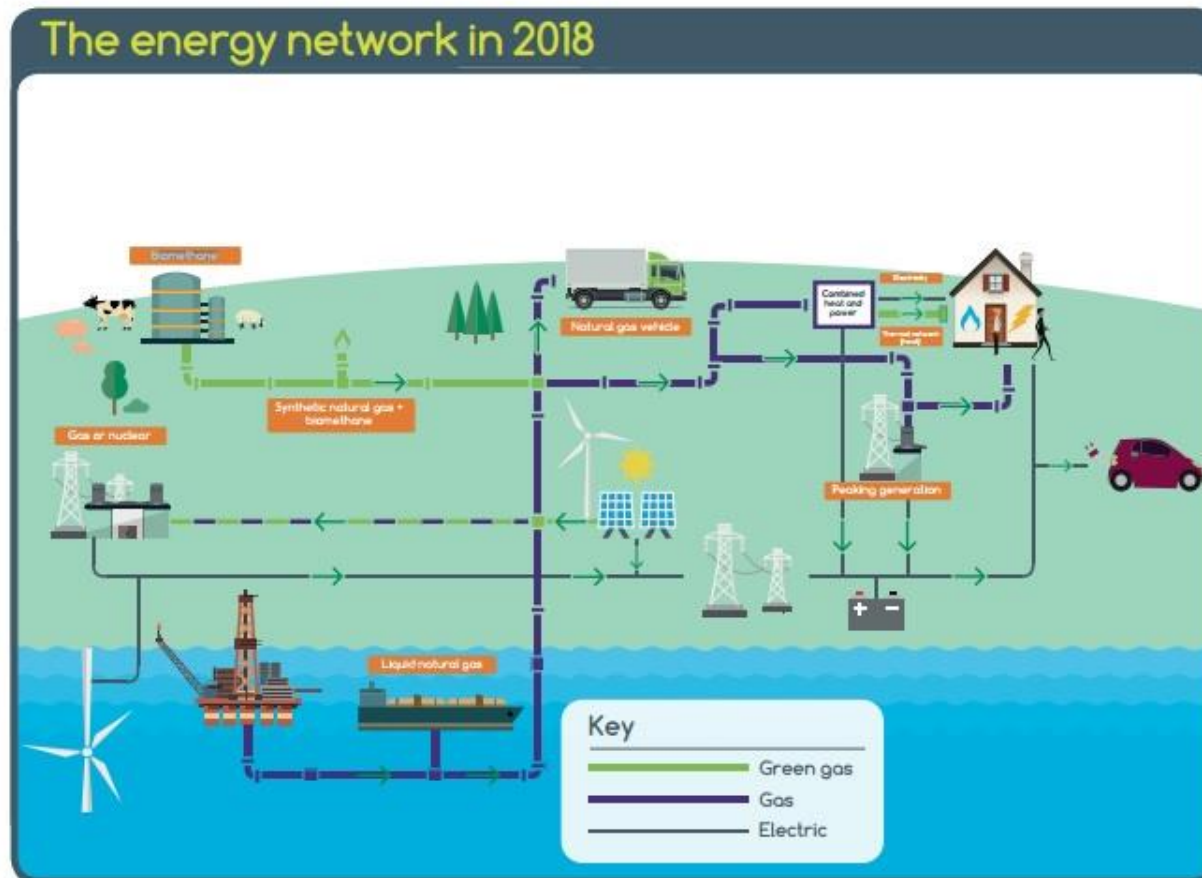


Update on the working groups

- Data
- Infrastructure Projects and Finance
- Public Engagement

Current focus of the data working group

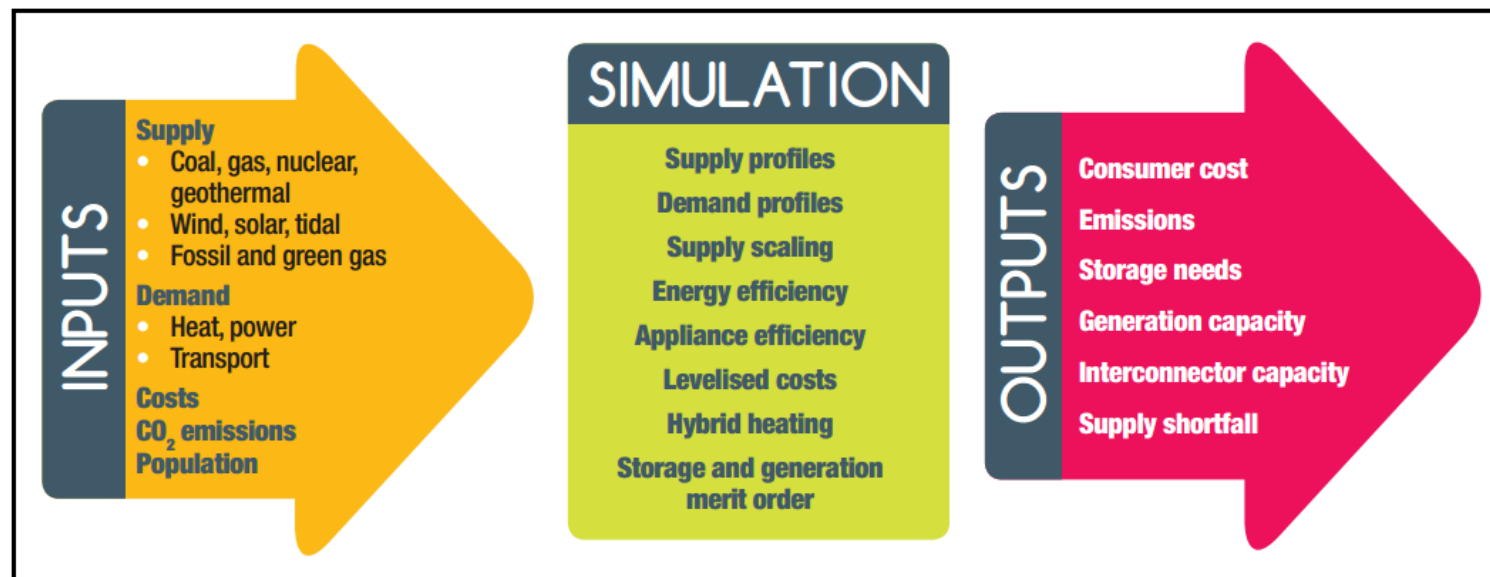
In recent years the UK energy system has undergone a transformation. It's becoming greener and more integrated, with a shift change in the interaction between the electricity and gas networks, including powering transport.



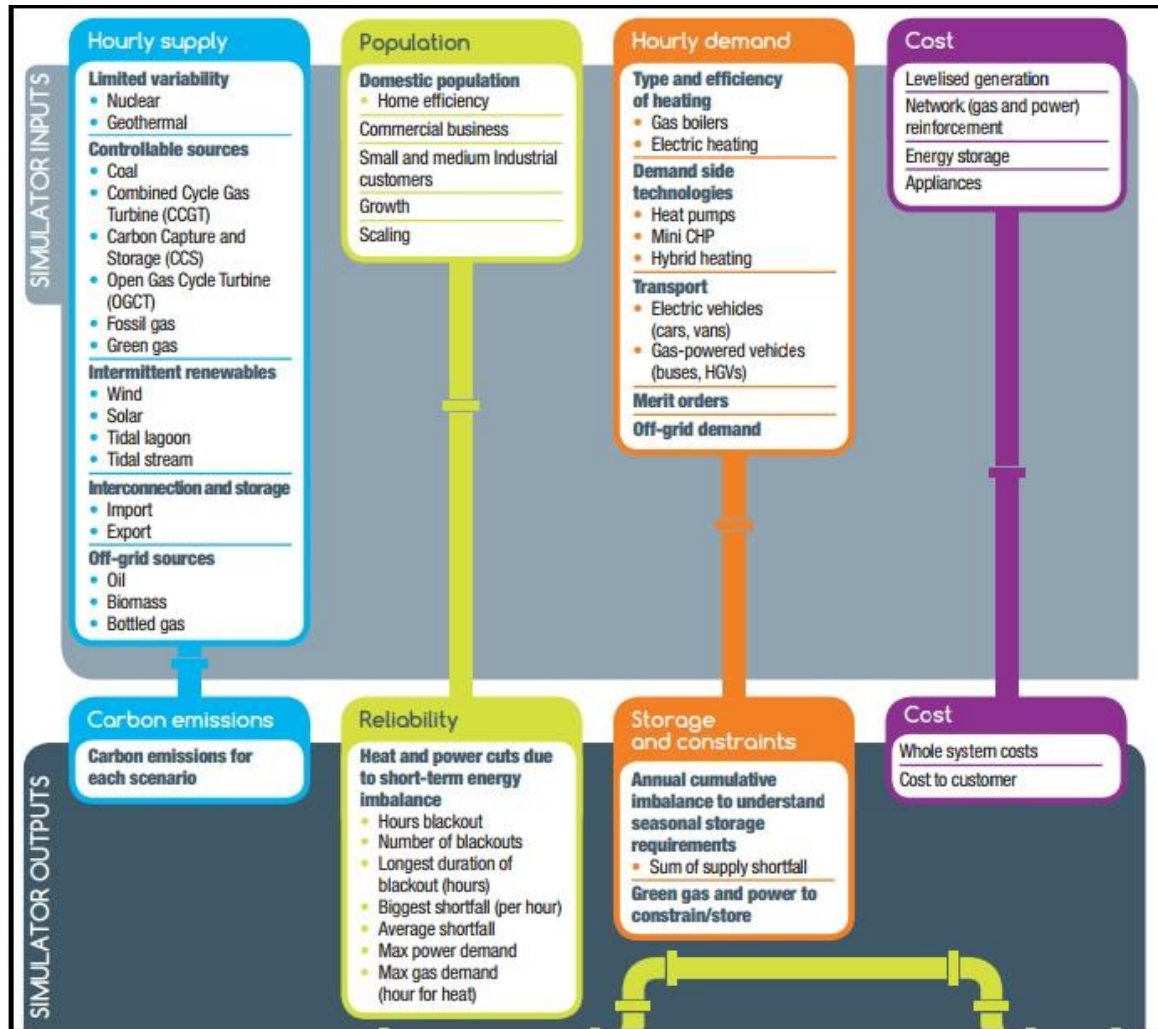
Over 50% of UK energy consumption is fuelled by gas – with over 80% at peak times.

Wales and West Utilities (WWU) is the gas distribution system operator in the West of England region. It has been developing an integrated energy system simulator – a **2050 Energy Pathfinder**. This will shortly be made available to the public.

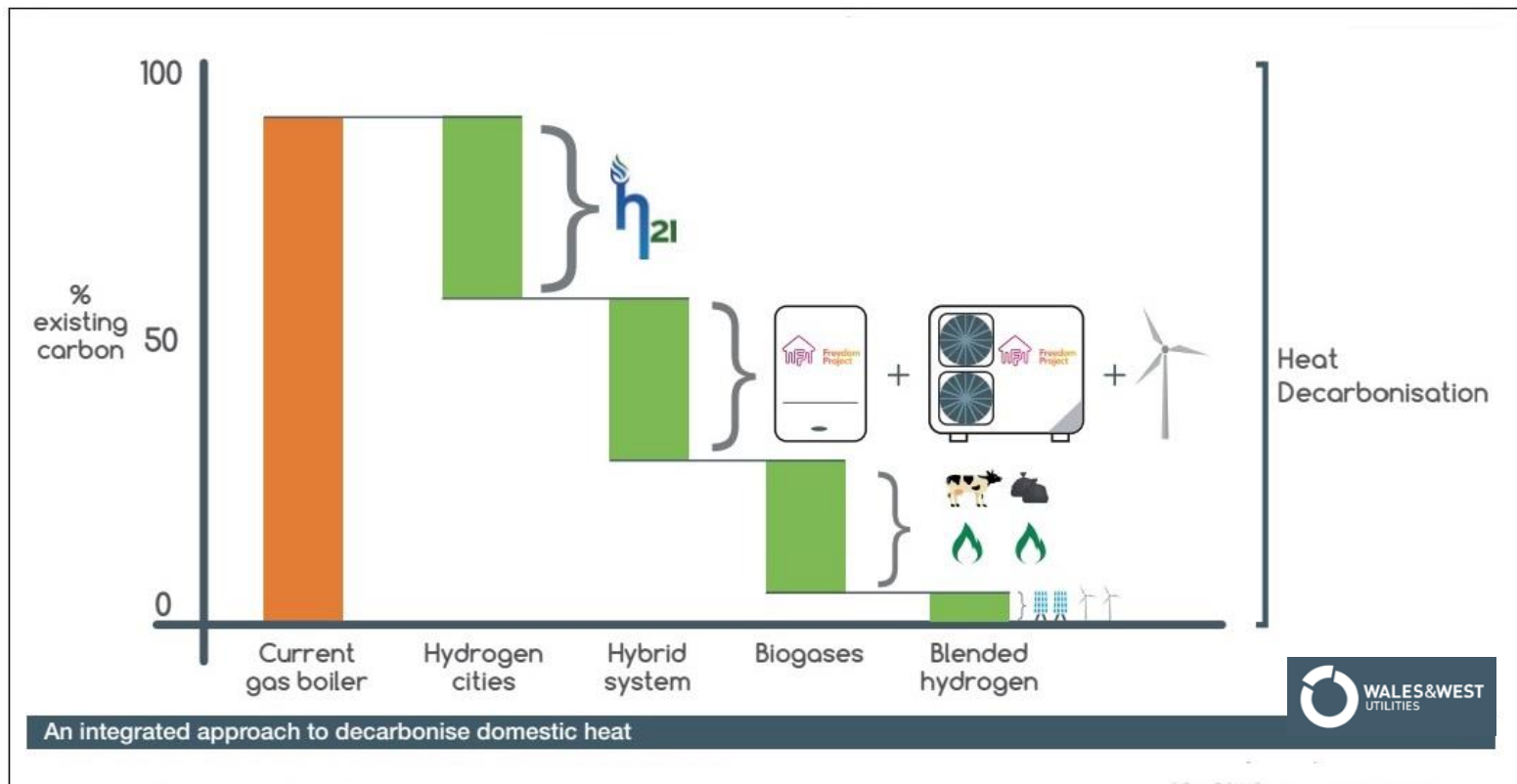
This “combined heat and electric model” takes data for the current heat and power demand of homes and businesses, and adds projected new demand such as that for electric vehicles. It then compares this total demand with a simulated range of low-carbon supply options:



The Pathfinder enables any energy scenario, current or future, to be modelled for a town, city, county or country. The results show the costs, carbon impact and any shortfall/surplus in heat and power supply:



WWU has made its Pathfinder model available to the ZW data team and provided introductory seminars. The ZW team is now adding West of England-specific data to the model and generating potential future low-carbon scenarios. These will then be shared with the West of England local authorities, the West of England Combined Authority and the wider energy community.



Current schemes being worked on in the Infrastructure Projects and Finance workgroup

1. **New offshore wind schemes** – covering the former Atlantic Array area and a wider area stretching to Wales and potentially Ireland. ZW is pulling together a coalition of interested parties in England and Wales, and is engaging with the Crown Estate in its upcoming round of new UK site licencing.



Current Projects & Finance workgroup schemes

2. **Energiesprong** – a revolutionary approach to whole-house, deep retrofit done at scale using a model developed in the Netherlands. It's also available for new-build. Its schemes are done to the very best energy standards, and the money saved on future energy bills and maintenance is used to pay for the works. The retrofits are quick to install: a complete house makeover is usually done in a week and residents don't need to move out.

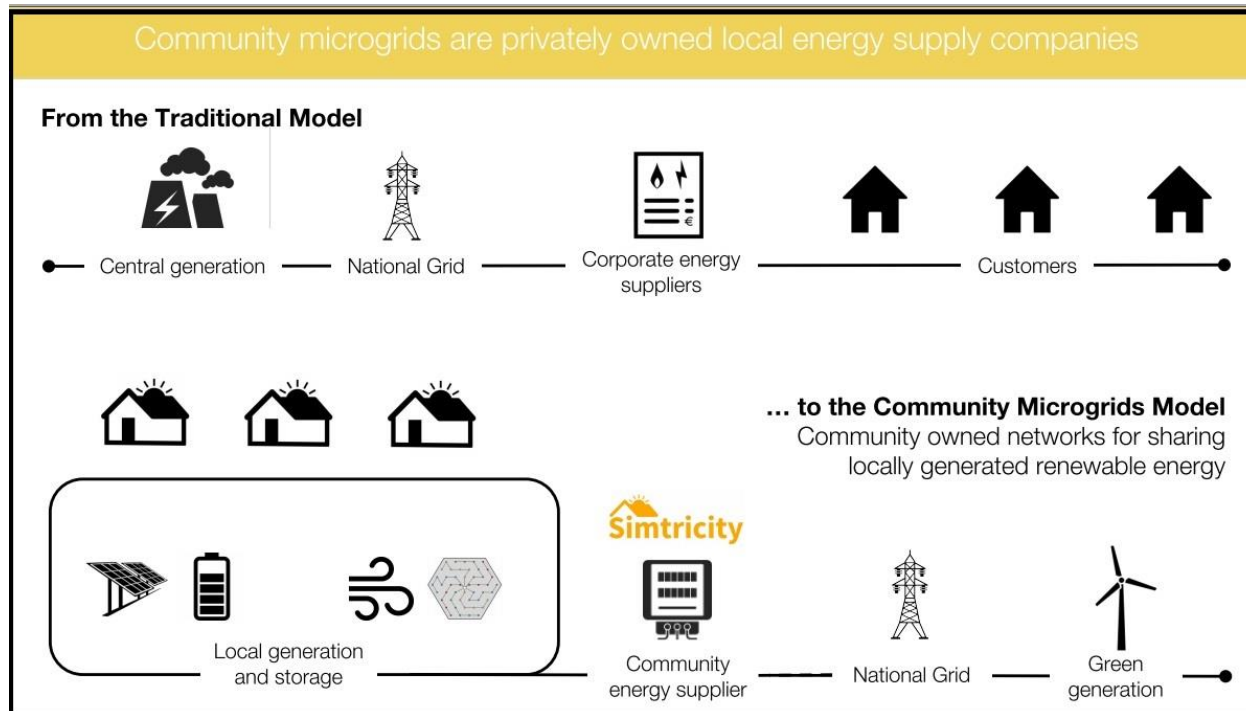
Energiesprong now has a UK office, and a 10-house pilot in Nottingham was recently completed. ES is using the social housing sector in the UK as its launch market, and is looking for new sites, ideally in clusters of 300-500 properties.



Zero West is facilitating a regional bid of this size.

Current Projects & Finance workgroup schemes

3. Electric heat microgrids - Bristol start-up Clean Energy Prospector (CEPRO) has been developing innovative community microgrids for a number of years. Zero West is helping it develop an investment model that would enable community microgrids to be rolled out nationally, and is introducing the company to angel investors.



Current schemes being worked on in the Public Engagement workgroup

“...The shift to zero carbon could be one of the most exciting opportunities in human history. It offers many benefits including better housing, affordable, accessible transport, reduced obesity, improved health, cleaner air and more jobs. We can transform isolated, stressful, consumer-focused lifestyles and find better physical and psychological wellbeing by increasing our sense of connection with community and nature.” **“Zero Carbon Britain – Making it Happen” report**

Our Public Engagement workgroup organised a “Zero West” day conference in January 2018. This brought together people involved in many of the fantastic low-carbon initiatives already underway in the region on food, energy, transport, and housing. It was a day of visioning, info-sharing and planning.



The group is now preparing Zero West’s first public information materials, initiatives and campaigns.

Next steps:

Get involved and help
make our region's
zero carbon future a
reality!

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