

What is energy **DeMand**?

Some people say energy demand is...

■ The same as energy consumption

But does consumption equal demand? Are there some energy demands that are not being met?
Is all consumption 'demanded'?

■ Not energy supply

Because there are different technologies involved –
not power supply, but boilers, refrigerators, buildings, cars, bicycles etc.

■ The energy required to deliver pre-defined services (heating, mobility etc.)

Demand is the 'need' which systems of supply (energy and transport infrastructures and technologies) are sized for and designed to meet. Innovations that increase efficiency reduce the amount of energy involved .

Some people say energy demand is...

A resource that can be managed and manipulated

For utilities – managing demand response to balance supply and demand: demand is a need to be met *and* something that can be turned up and down.

The energy required to participate effectively in society

Demand depends on the energy people need to get to work and school, to meet friends and family, to be warm and clean and to maintain an acceptable standard of living. Demand is a matter of normative judgement: what constitutes an acceptable standard of living and what are the energy requirements that follow?

An outcome of the social, infrastructural and institutional ordering of what people do.

Energy is used in accomplishing social practices at home, at work and in moving around (e.g. heating, commuting, laundering, cooling etc.). Social practices are not pre-given: they change at different rates and in different ways.

Social practices and related systems and infrastructures of provision constitute each other. Energy demand is consequence of these arrangements.

What does **DeMand** say?

DeManda says

“Energy is not used for its own sake but as part of accomplishing social practices at home, at work and in moving around.”

“Energy demand is an outcome of the social, infrastructural and institutional ordering of what people do.”

What do these ideas mean for **DeMand**
REDUCTION ?

Some people think

The challenge is to maintain present ways of life but make related goods and services more efficient.

DEMAND says

Strategies to increase efficiency play out in a social world that is constantly on the move.

Future ways of life are unlikely to be the same as they are today.

DEMAND reduction

depends on understanding how end-uses of energy are changing and how they can be modified and steered.

DEMAND reduction

depends on asking more fundamental questions about what energy is for.

Some people think

Energy demand reduction depends on making technologies more efficient, and persuading people to adopt them.

DEMAND says

Technologies and infrastructures of supply are implicated in making and reproducing services and practices.

Efficient technologies can sustain social practices that call for high levels of energy demand.

DEMAND reduction

depends on reconfiguring services and social practices.

DEMAND reduction

depends on recognising that technologies and infrastructures do not simply meet existing needs: they shape future practices and the demands that follow.

Some people think

Energy demand is something that can be turned up and down.

Some think demand is like a commodity that suppliers can manage.

DEMAND says

Patterns and peaks of energy demand reflect sequences and societal rhythms of practice - across the day, the week and the year.

DEMAND reduction

at peak hours depends on understanding which practices occur at peak times, and why.

What are the forms of temporal fixity/flexibility associated with each?

DEMAND reduction

depends on modifying social and institutional rhythms.

Some people think

The only policy relevant to energy demand reduction is energy policy.

DEMAND says

There are many areas of public policy that unknowingly impact on the range of social practices enacted in society, and hence on energy demand.

These include education, employment, business, health, planning and more.

DEMAND reduction

Depends on understanding the unintended consequences that 'non energy policies' have on what people do, and hence on energy demand.

DEMAND reduction

Depends on actively fostering new social arrangements and different ways of life.

Some people think

Energy demand is about energy use in the home, or at work.

Or that it is about people driving cars. But...

DEMAND says

These are not totally separate 'domains'.

Different forms of energy demand intersect: they link together in the course of a day, and over peoples' lives.

DEMAND reduction

depends on combining expertise from traditionally separate areas – including transport and buildings.

To finish

Different methods of conceptualising energy demand have practical implications for

- The questions we ask
- The research we do
- The methods we adopt
- The theories we develop
- The debates with which we engage
- The contributions and connections we want to make

They are also hugely important for the strategies of demand reduction that follow