DATABUILD
Research & Solutions

IEPPEC

Introduction to Evaluation and the role of IEPPEC

Introduction

- Background
- What is evaluation
- How to conduct evaluation
- How IEPPEC can help
- Resources

About me

- 25 years evaluation experience
- Energy, waste, R&D
- UK, Australia, China, SE Asia
- IEPPEC planning committee and board
- Chairman of Databuild Research and Solutions

IEPPEC

- International Energy Policy and Programme Evaluation Conference
- Peer-reviewed papers
- 200 evaluation professionals
- Every two years in Europe
- Sister conference in North America
- Planning conference in Asia

Databuild

DATABUILD
Research & Solutions

- Research and evaluation consultancy
- Established in 1985
- Birmingham, UK and Sydney, Australia
- 25 staff
- Specialising in energy, waste, enterprise, innovation and planning

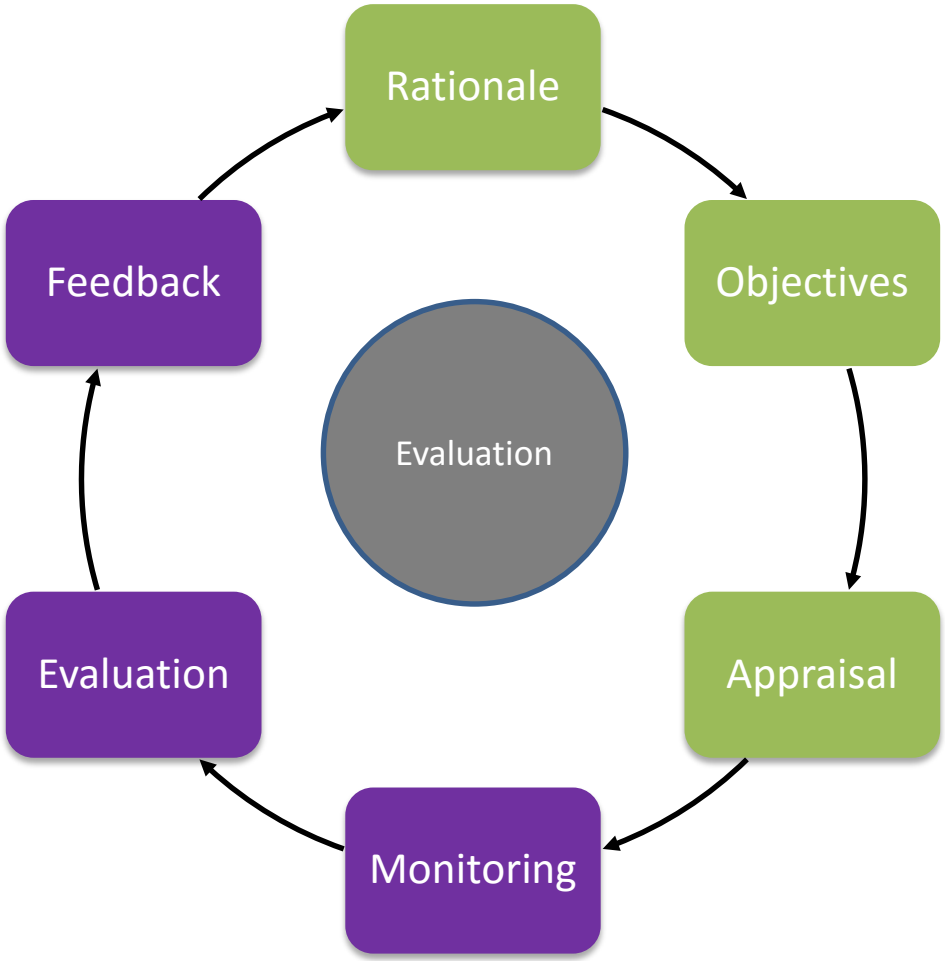
“I recognize that climate change is a complex subject with multiple causes, but this really isn’t helping.”

What?

Evaluation is an objective process of understanding how a policy or programme was implemented, what effects it had, for whom and why

Leads to more effective policies and programmes

When?



Ex-ante

Ex-post

Process

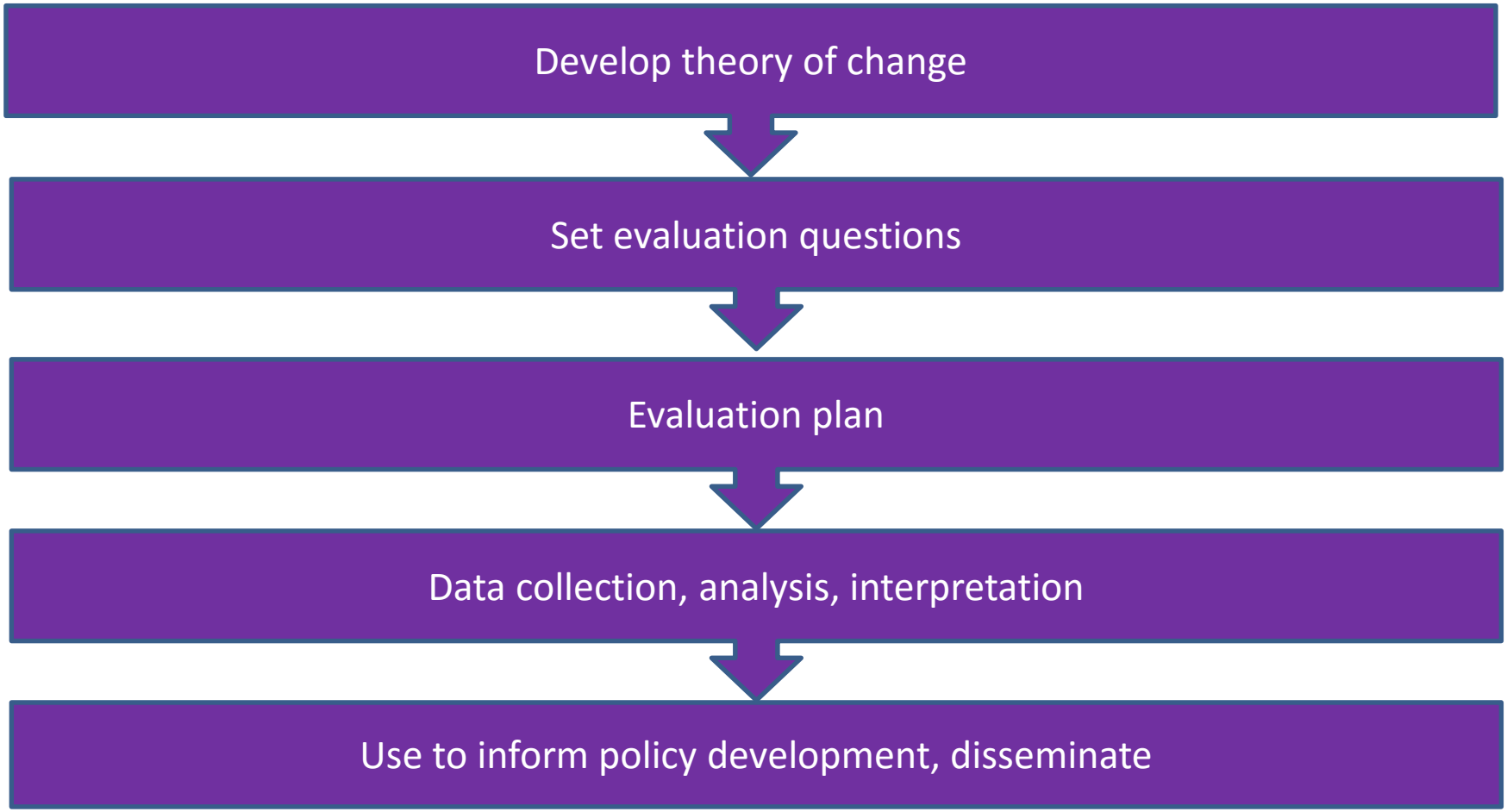
Impact

Economic

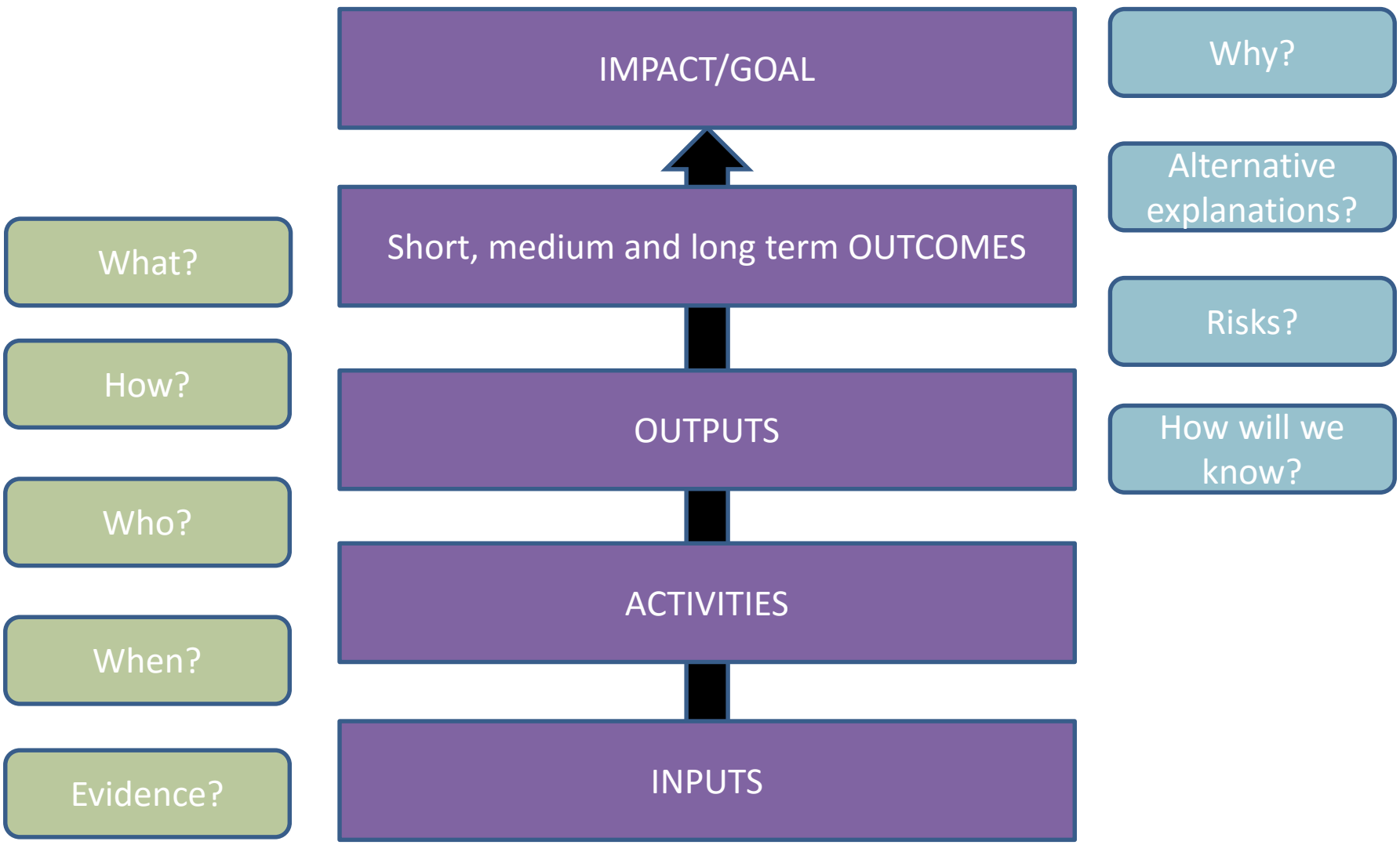
Example

Programme to subsidise energy efficiency for poor and vulnerable households

Conducting evaluation



Theory of change



Typical evaluation questions

- **What** has happened to energy consumption?
- **What** difference did the policy/programme make?
- **How** well was the policy/programme implemented?
- **How** can we do things better/what can we learn?
- **Was** the policy/programme good value for money?

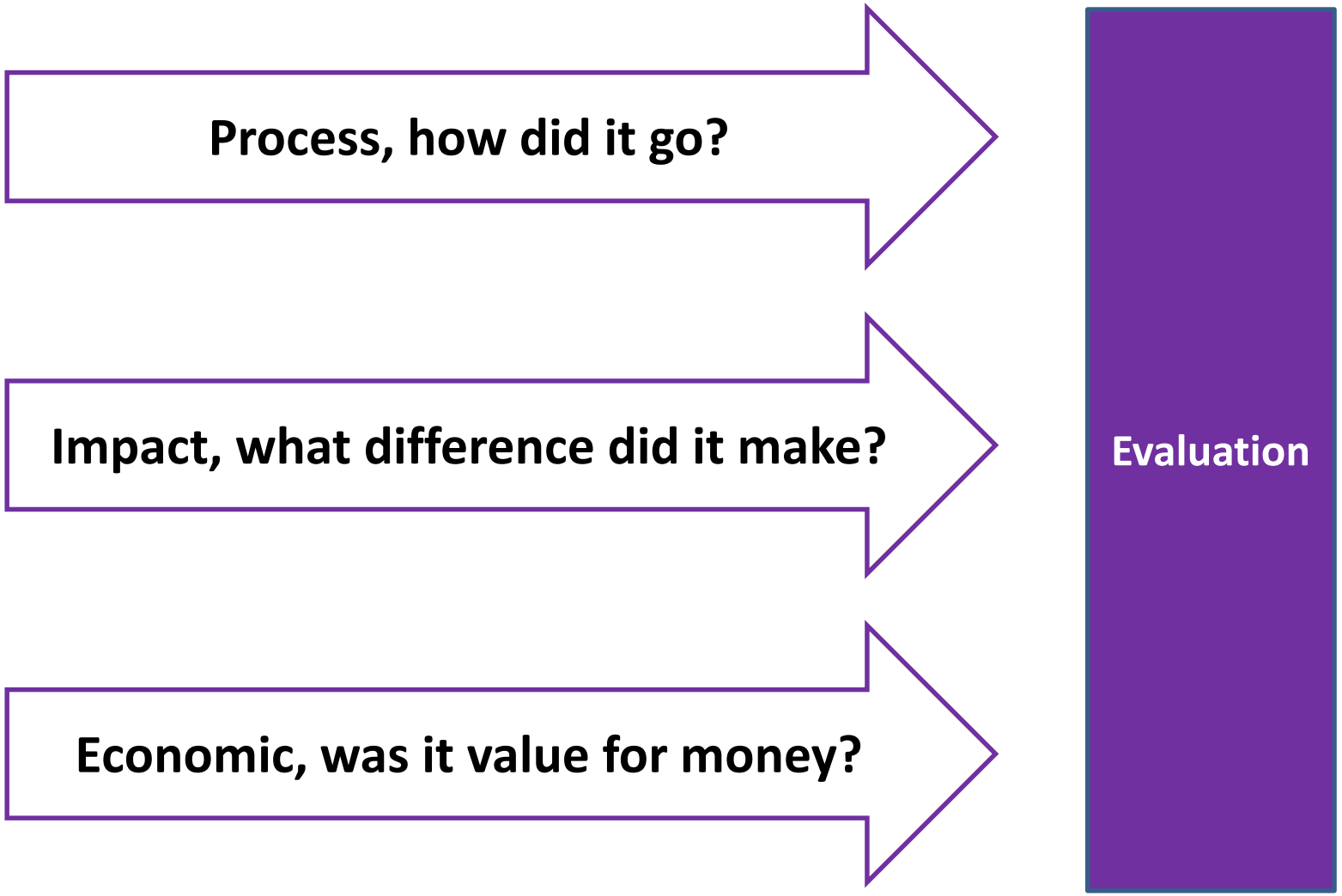
Developing evaluation plan

How will we answer the evaluation questions?

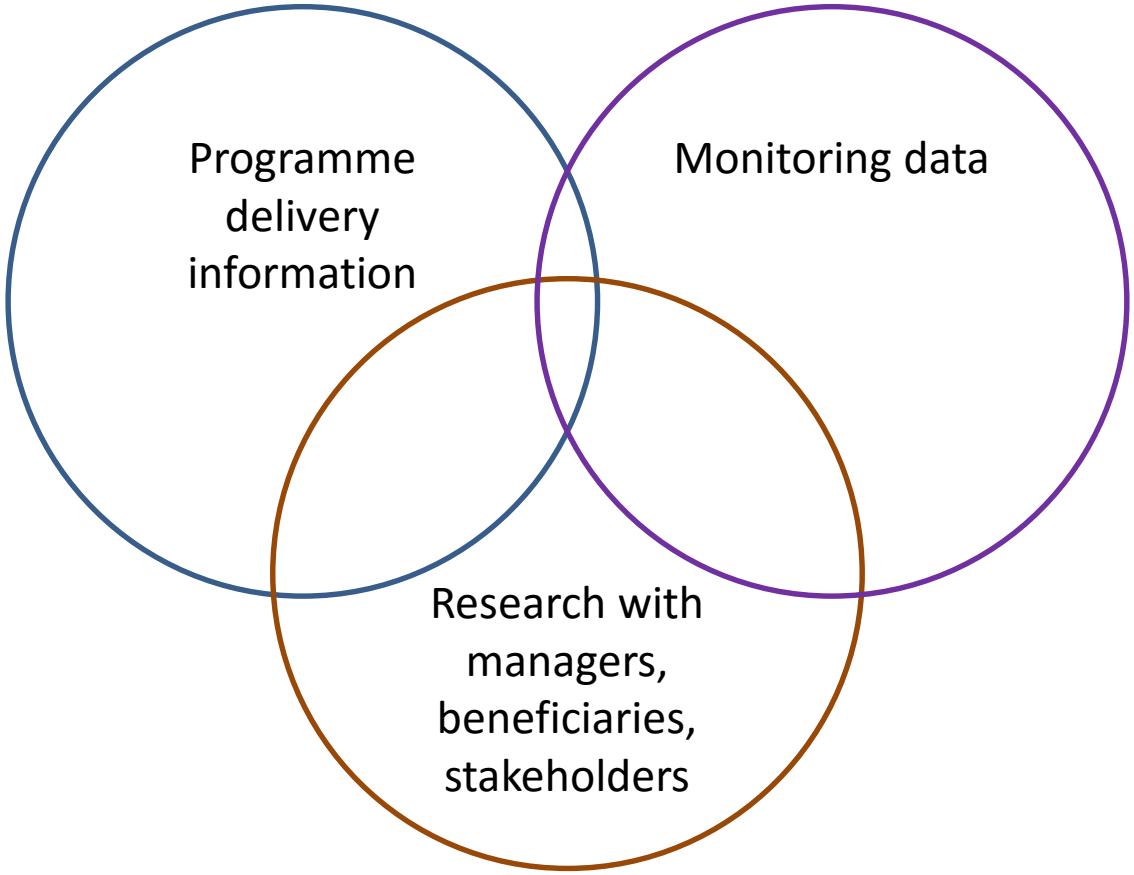
- What do we already know?
- What else do we need to find out?
- Where will the information come from?
- How will we analyse it?

- Think about audience and dissemination
- Consult widely
- Document clearly

Evaluation


Process, how did it go?
Impact, what difference did it make?
Economic, was it value for money?
Evaluation

Process evaluation



Impact evaluation

Did the programme make a difference?

Experimental

- Randomised control trials; key features:
  - Random allocation of potential participants to treatment or control group
  - Measuring indicator of interest
  - Statistically significant difference
  - Proves intervention caused the change

Statistical

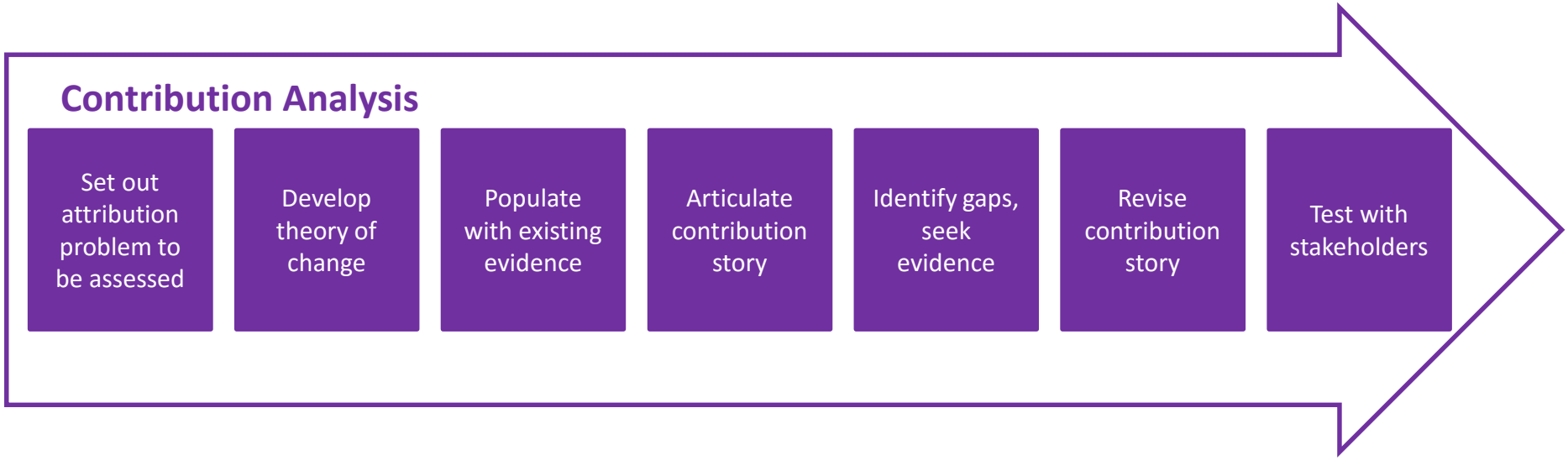
- Comparing data about groups affected by the programme with those that are not
- Establishing whether there is a statistically significant difference
- For example; compare trends in energy consumption between homes benefiting from the programme and similar homes that have not benefited

Case based

- In depth examination of specific cases
- Seek to understand what has happened and why in that case
- Learn about contexts – what works, for whom
- Compare between and within cases
- May test a theory

Theory based

- Test theory of change to establish:
  - Evidence for it holding in practice
  - Whether and how policy/programme influenced outcomes
  - The role of alternative explanations
- Can be implemented alongside the other mechanisms



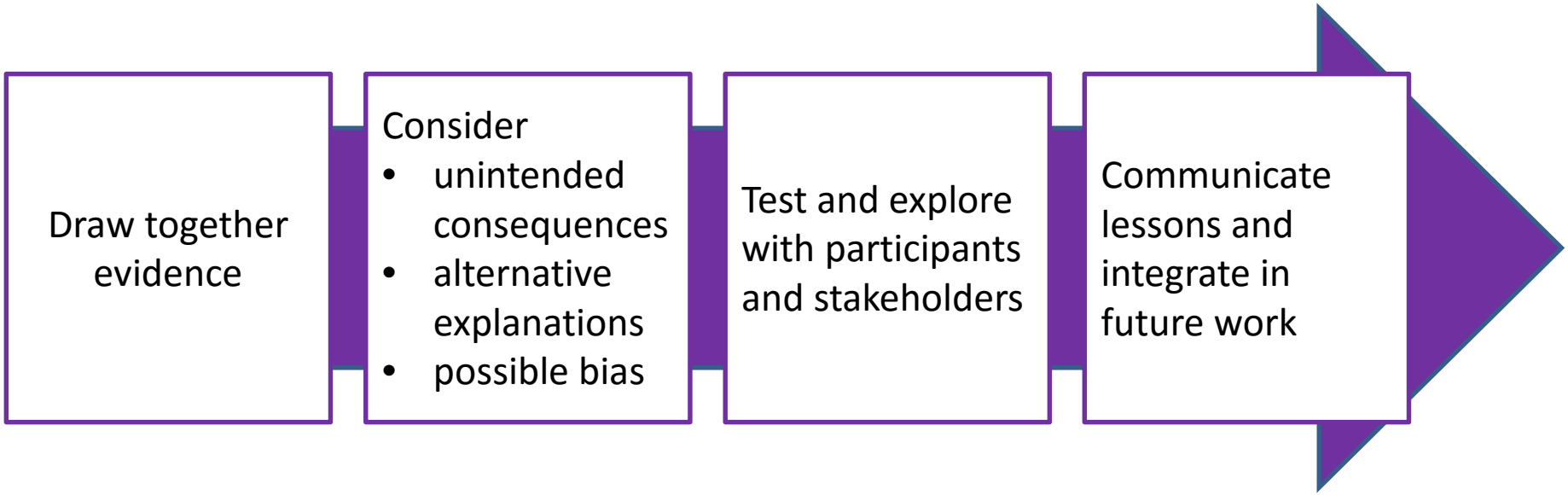
Strengths and weaknesses

Method	Strengths	Weaknesses
Experiment	Proof programme caused impact	Difficult in practice May not provide an answer Doesn't tell you: • Why/how impact • More? • Work elsewhere
Statistical	Strong evidence	Data only available in some circumstances Needs a large sample Doesn't tell you: • Why/how impact • More? • Work elsewhere
Case based	Rich understanding of outcomes Why and how outcomes are achieved	Hard to generalise Doesn't prove causality Seen as less rigorous
Theory based	Rigorous approach Considers alternative explanations Rich understanding of outcomes Why and how outcomes are achieved	Doesn't prove causality Seen as less rigorous

Economic evaluation

- **Cost benefit analysis**
  - Three levels – government, participant, society
  - Consider all additional costs and all additional benefits
  - Consider lifetime costs and benefits
- **Consider multiple benefits of energy efficiency**
  - Energy security/peak demand
  - Economic; jobs and growth
  - Health and wellbeing
  - Productivity
  - Air quality

Analysis/synthesis



Role of IEPPEC

- **Evaluation community:**
  - Conference
  - Webinars
  - Peer reviewed proceedings
- **Enables:**
  - Sharing of best practice
  - Learning from other jurisdictions
  - Testing of ideas and development of new practice

Summary

- Evaluation leads to more effective policies and programmes
- Should be embedded in policy/programme design process
- Include process, impact and economic evaluation
- Structure around theory of change
- Use transparent process, engage stakeholders, integrate learnings
- Use IEPPEC resources (and attend conference!)

Resources

1. IEPPEC (Europe) http://www.ieppec.org/ and IEPEC (US) http://www.iepec.org/
2. General evaluation resource http://betterevaluation.org/
3. UK Government guidance for ex-ante evaluation https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-govenent https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/483278/Valuation_of_energy_use_and_greenhouse_gas_emissions_for_appraisal.pdf
4. UK government guidance for ex-post evaluation https://www.gov.uk/government/publications/the-magenta-book
5. UK Department for Energy and Climate Change guidance on conducting evaluation https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256387/DECC_evaluation_guide.pdf
6. Impact assessment http://r4d.dfid.gov.uk/pdf/outputs/misc_infocomm/dfidworkingpaper38.pdf
7. Experimental methods https://www.gov.uk/government/publications/test-learn-adapt-developing-public-policy-with-randomised-controlled-trials
8. Multiple benefits of energy efficiency http://www.iea.org/publications/freepublications/publication/capturing-the-multiple-benefits-of-energy-efficiency.html

Thank you

Charles Michaelis

Databuild Research and Solutions

charles.michaelis@data-build.co.uk

+447813 799580

DATABUILD
Research & Solutions

www.data-build.co.uk
research@data-build.co.uk
21 Graham Street, Birmingham, UK, B1 3JR
0121-237-1144