

Introducing contract based energy prices in the Netherlands.

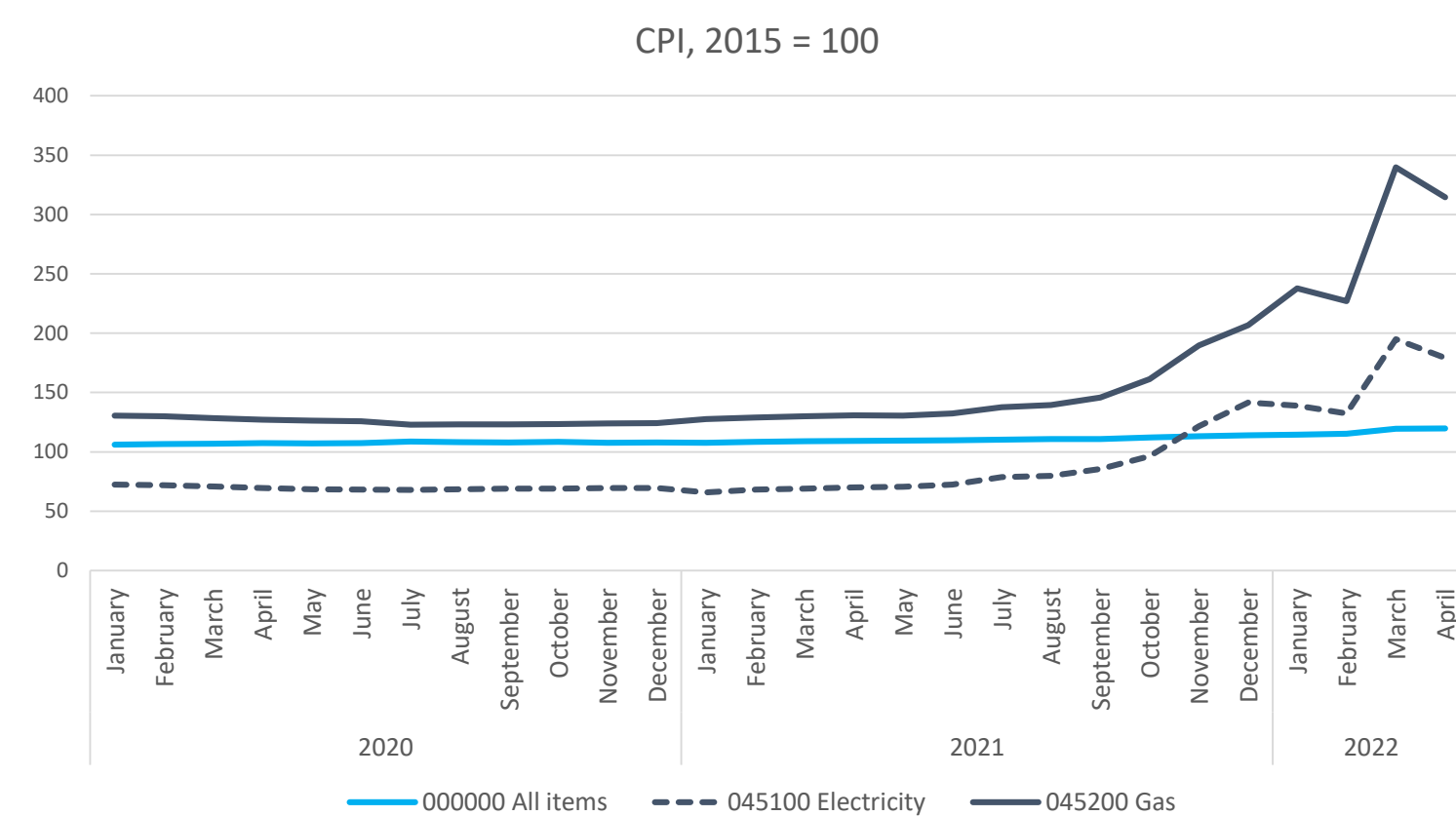
What did we do and what did we learn?

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1. Strong increase of energy prices at the end of 2021

- In June 2023 a new method for measuring energy prices was introduced in the Dutch CPI
- Previously prices for both electricity and gas were measured by using a relatively small sample survey of energy contracts,
 - taken from the regulator to reduce admin burden, with weights fixed for a year. The prices calculated with this data source only covered prices of new contracts, and prices of existing contracts were not measured. The method worked well up until 2021.
- This resulted in a strong increase of the price index of energy

Type of Contract	New	Existing
Variable Rate		
Fixed Rate	(Imputed from end 2021)	

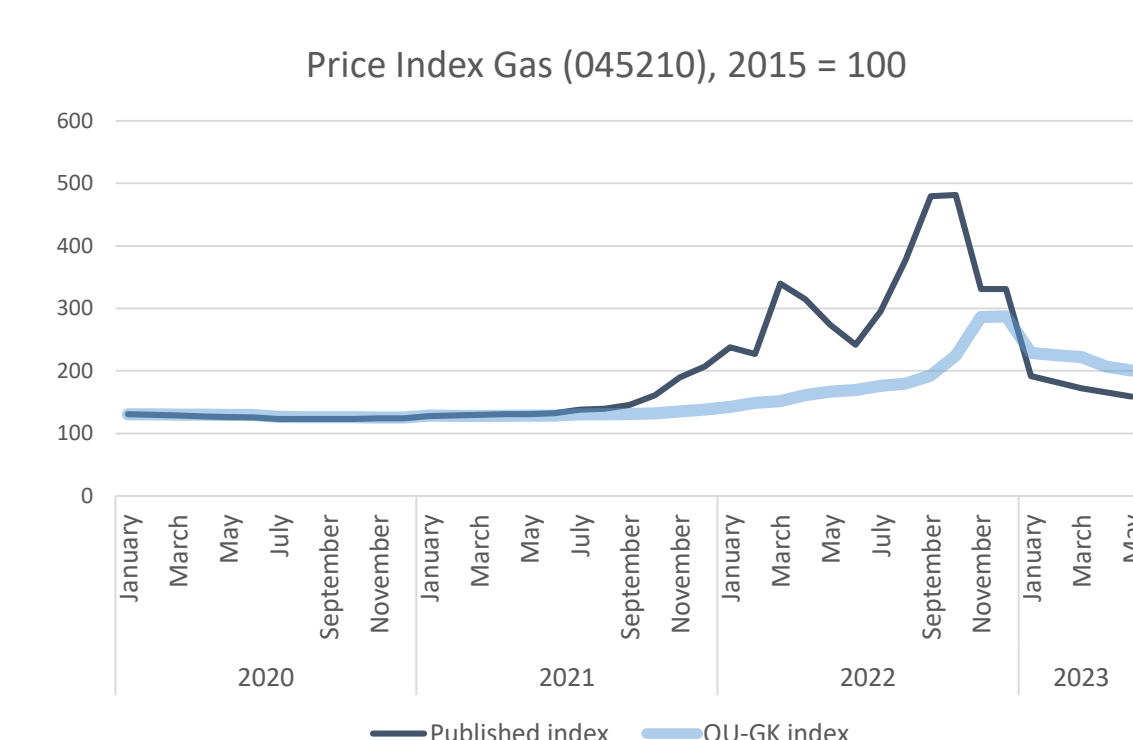
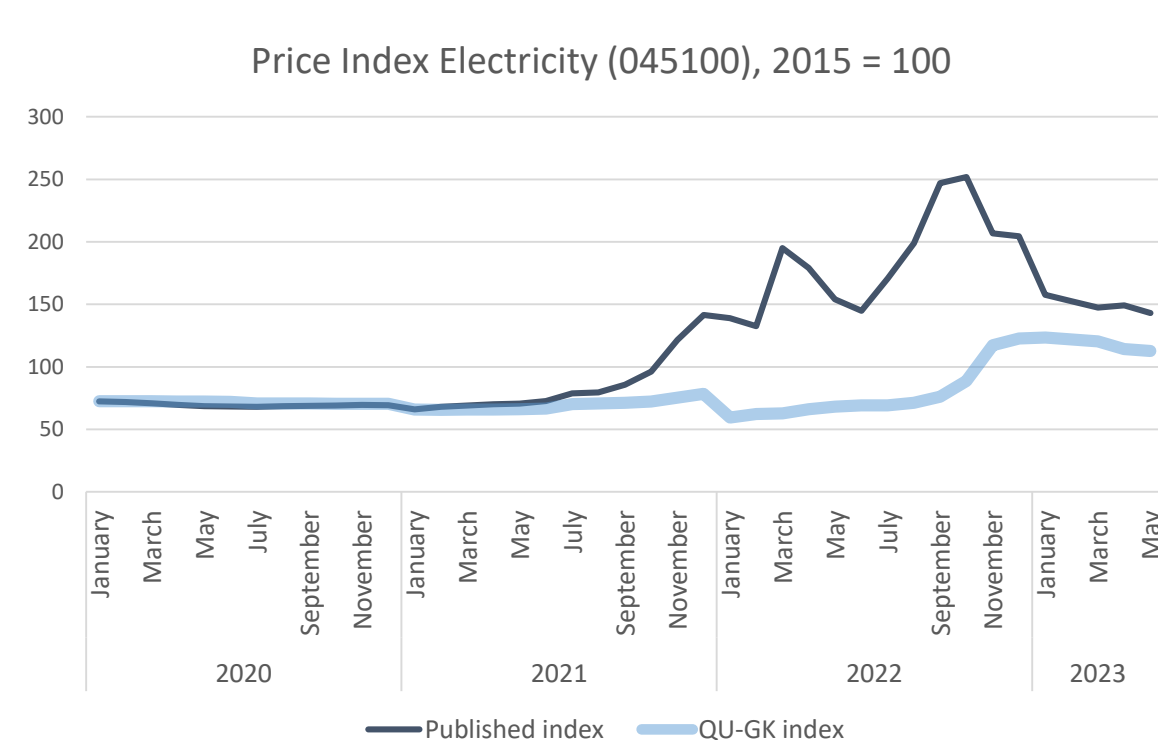


2. Data collection targeting (largest) utility providers

- Data collection, covering ca. 82 per cent of total energy contracts of Dutch households
- Contacting Utility providers, agreeing on data formats
- Mid-month “snap shot” of customer records
- Back series data and set-up of monthly transmission
- Rate per kWh, rate per m³, fixed fee, starting date, duration of the contract, name of the contract, brand name, etc.
- No identifiable records, no privacy issues

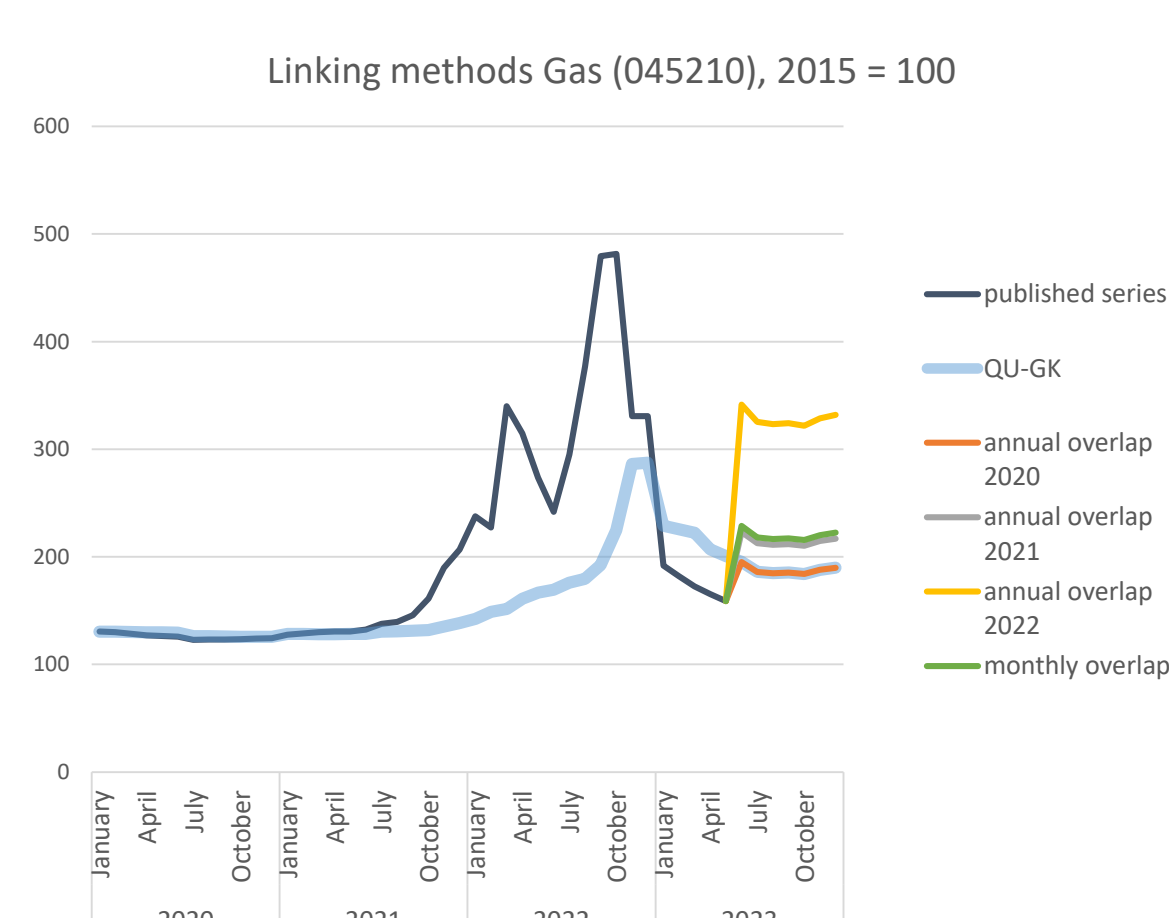
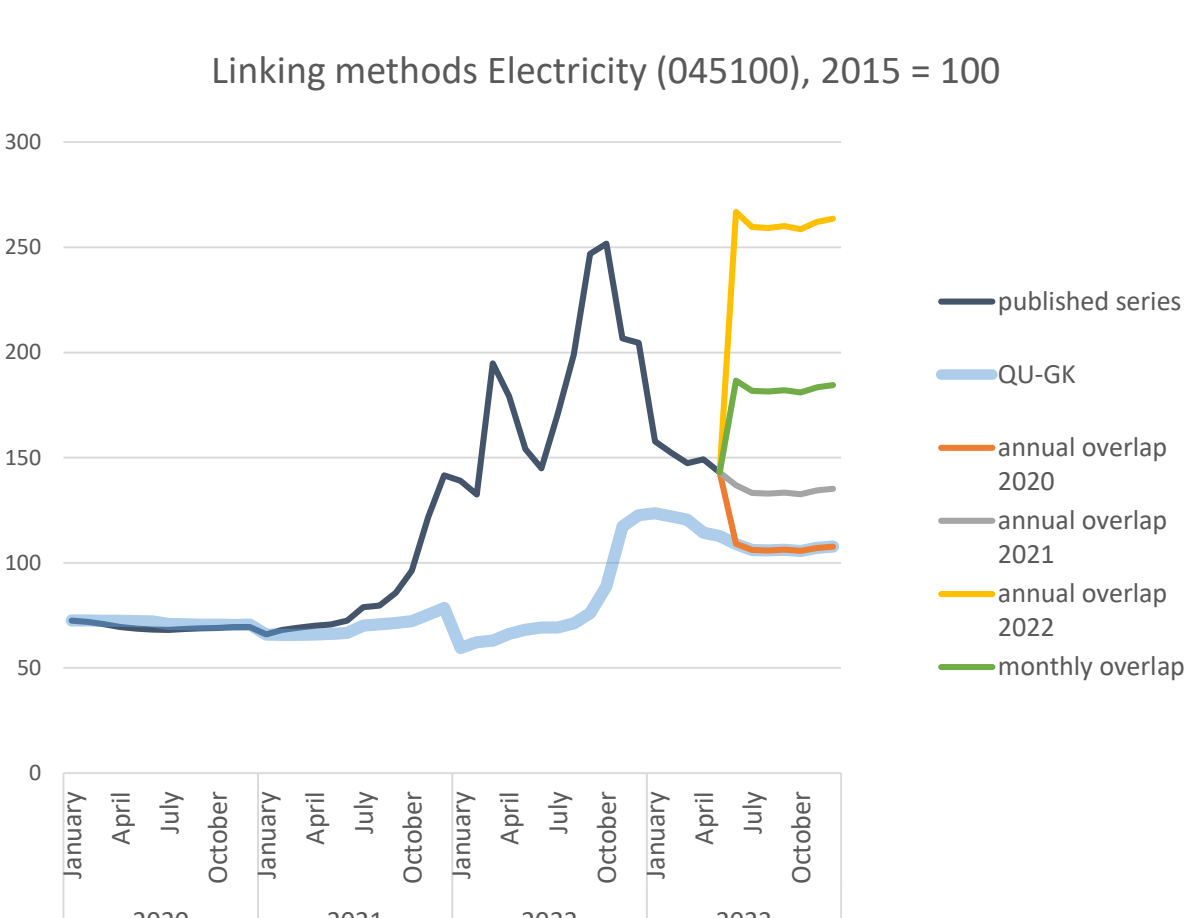
3. Switching to the multilateral QU-GK index

- Requirements for the index:
 - complying with international regulations and standards,
 - suitable for transaction data,
 - flexibility,
 - theoretical properties,
 - simplicity
- Both bilateral and multilateral indices have been compared
- Additional research: prices of new contracts, representativeness of the sample
- Stratification via MARS
- Conclusion: Quality Adjusted Unit Value Geary-Khamis (QU-GK) with fixed base expanding window (FBEW)
- Duration of the contract (0 years, 1 year, etc.) and brand name / label used for product definition.



4. Linking with annual overlap

- Conditions:
 - Prevent long-term bias of the index
 - Avoid differences in linking method between CPI and HICP
 - No revision of already published figures
 - Introduction in June 2023
- Chosen method: Annual overlap year 2020



5. Identify your audience. Communicate with relevant stakeholders

- National
 - Researchers, policy analysis
 - Policy makers, ministries
 - Dutch Central Bank
 - Media
 - Employers' organizations and trade unions
 - General public
 - Colleagues
- International
 - Eurostat
 - European Central Bank
 - OECD
 - EU member states
 - Other international organizations



Towards a new method of calculating energy prices

6. Users always want more data! Evaluating with stakeholders

- Pro's:
 - Providing relevant data to users, and a “research series”
 - Presenting preliminary results
 - Regular updates on the research
 - (Relatively) quick introduction of the new method
 - Providing additional data, e.g. percentage of contracts with a fixed duration or non-fixed duration
 - Ensuring correct data, method and compilation process
- Con's:
 - Users always want more data!
 - More additional data, e.g. heterogeneity of the data
 - Earlier introduction of the new method
 - Earlier start of the research and data collection
 - Side by side comparison of old and new method after introduction
 - Published data should have been revised according to some users
 - Stress the uncertainty surrounding the level of the index and inflation rate before introducing the new method
 - Heavy draw on available resources of the CPI-team, other projects and activities became less relevant



7. Further reading

- [CBS switches to new method for calculating energy prices in the CPI](#)
- [Research series Consumer price index electricity and gas \(cbs.nl\)](#)
- [Processing energy prices for the Consumer Price Index \(cbs.nl\)](#)
- [Choice of an Index Method for Consumer Energy Prices \(cbs.nl\)](#)



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