

Why Energy Efficiency Doesn't Work Naturally

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The following list offers an overview of main reasons why Energy Efficiency doesn't grow up naturally. These barriers are actors' perception of reasons to not implement Energy Efficiency projects. They are not author's point of view.

Urgency awareness

- "We'll find a solution"
 - Scientism
 - Decoupling pipe dream
 - Decarbonation pipe dream
- "We won't find a solution"
 - Fatalism
 - Degrowth imperative
- "Energy saving is not a subject"
 - "I don't care about these ecologist stuff"
 - "This is not significant in terms of budget"
 - "I have many responsibilities so this is not my top priority"
 - "Signal price is not relevant for me"
- "I am too far from the field"
 - Centralization of institutional competences
 - Lack of information
- Lack of regulatory policies
 - Still too much discouraging policies

Decision process

- "I act where I have leverages" (takeover, finance, etc)
 - "I think in terms of what I know"
 - Street light syndrome
- "My power balance would be reduced"
 - Natural change resistance
 - Status quo bias leads to hesitate upsetting current situation
 - Loss aversion
- "I like big and real stuff"
 - Appetence to capitalistic projects and objects
- "I don't get other benefits"
 - Green value is not enough valuable
 - "My organisation's image wouldn't be significantly improved"
 - Still too much discouraging policies
- "I'm not allowed to change"
 - Ambiguities in the legislative framework
 - Complexity in the legislative framework
- "The Energy Performance Contract is too complex"
 - Intelligibility
 - Risky

Technical barriers

- “Not enough technical solutions”
 - “I think in terms of what I know”
 - Lack of systemic approach
- “An energy saving is hard to prove”
 - How to prove a non resources consumption?
- An energy saving is not a physical output
- “An energy saving is hard to industrialise”
 - Often too specific
- “Some solutions are impossible to implement”
- “Energy benefits (production, comfort, etc) are too important to switch off energy equipment”
- “Energy savings are often an intrusive process”
 - “This is risky for my production/comfort”
 - I don't want my potential errors highlighted
- “This will induce a counter-productive effect”
 - Wasted source of energy
 - Technical systems are often stabile
 - Lock-in Energy Efficiency
 - Often energy savings involve other dimensions increases
- “This will induce a rebound effect”
- “There will be a difference between expected and actual output”
 - Technical execution quality (non-fulfilment)
 - Improper use of equipment
- What if there is an evolution of demand?
 - Need of more energy consumption
- Logistic of the project
 - Some suppliers may not stock products
- Complexity

Agency barriers

- “This will induce a counter-productive Energy Efficiency”
 - Lock-in Energy Efficiency
- What about energy insecurity?
- Lack of clear division of responsibilities between constructor and operator
- Highly fragmented market
- Buyers are not always the consumers
- Different points of view of how to implement
 - Architects vs engineers, for example
- “Everyone is not good at energy saving solutions”
 - Stakeholders hierarchy
- Lack of systemic approach
- Policies change too often
 - Lack of visibility
- “As a user, I lose more than I gain”
 - Investment / utility => 0
- “ESCO have a lack of experience”
 - Non-consumption => less to maintain, resell, ...
 - Natural change resistance
 - Appetence to capitalistic projects and objects
 - “I think in terms of what I know”
 - Energy Efficiency solutions = more brain juice = less margin
 - Natural change resistance
 - “I think in terms of what I know”
 - Innovation is risky
 - Natural change resistance
 - Loss aversion
 - Training and learning are expensive
- Complexity

Financing

- An energy saving is virtual
 - "Cash inflow" doesn't equal "non cash outflow"
- "An energy saving is hard to prove"
 - "There is a risk, I need a guarantee"
 - Uncertainty
- "Incomes won't be guaranteed"
 - No guaranteed performance
 - Lack of visibility
 - "I don't trust in ESCO"
- "Solutions are not enough profitable"
 - "Energy prices too low"
 - "All costs are not included"
 - "Discount rate is too high"
 - "Green value is not enough valuable"
 - Biased financial perceptions (initial costs / pay-back period)
- "Not enough profitable solutions"
 - "I can't reduce significantly my energy consumption"
 - Biased financial perceptions (initial costs / pay-back period)
- "This is a huge investment"
 - Lack of systemic approach
 - Biased financial perceptions (initial costs / pay-back period)
- "I don't have enough money"
 - "I have to invest in other things (compulsory, urgent, ...)"
 - "I don't have money at all"
 - Competing alternative financing mechanisms (not enough subsidies, loans, etc)
 - Lack of cash-flow based lending
 - Refinancing capacity
- "Leasing is not always a solution"
 - "Often uncollected appliances and equipment"
 - "Equipment/labour investment ratio often too low"
 - Need of high guarantees
 - Counter-parts issues with SMEs or low cash deposit organisations
- "There are high transaction costs (financial, time, trouble)"
 - Investment appraisal and feasibility studies
 - Development of proposal and business case
 - Compliance costs (permits, applications)
 - Measurement and reporting costs
 - Legal and accounting fees
 - Search for information, project identification
 - Management time in considering and evaluating project
 - Contract negotiations and procurement
 - Production shutdown or disruption of space
- "This will induce a counter-productive effect"
 - Wasted source of profitability

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- [Vincent BRYANT](#)

Sources:

- [MEDEF \(France\)](#)
- [McKINSEY \(UK\)](#)
- [ADEME \(France\)](#)
- [DECC \(UK\)](#)
- [Spontaneous Theoretical Research on Influence and Networking Group \(France\)](#)