Experience from a renovation project

Powerhouse, Kjørbo
Short about myself

- Morten Olav Berg, 48 years old, works as project-leader, technical installations at Itech AS – special areas are lighting solutions and energy saving potential in lighting systems.
- Formal education as electrician, had my own installation company for 8 years (1987-1995).
- Worked 17 years with lighting and lighting solutions at Fagerhult (from 1995-2012).
  - Project leader for projects as:
    - St-Olavs Hospital fase II (2006-2010)
    - Nye Ahus (2004-2008)
    - Nydalen VGS (2009-2011)
- Member of NLK (Norwegian Lighting Council)
- Co-writer for several Lyskultur publications and some standards, about lighting and energy savings
  - NS EN 3701 – Passivhusstandarden for yrkesbygg
  - Lyskulturs publikasjon 1B – Planleggingskriterier og veileder til NS EN 12464-1
  - Lyskulturs publikasjon 23 – Belysning i Helseinstitusjoner
  - Lyskulturs publikasjon 19 – Lys og energibruk
  - Lyskulturs publikasjon 12 – Kontorbelysning (pågår nå)
Agenda

- Pre-project phase – the important choice of system and installer
- Take action through the project
- When the users are taking over – the most important period
- About Powerhouse
Pre-project fase – the important choice of system and installer

- Be clear!
  - It`s very important that the main project «targets» is described clearly when we are sending it to the market!

- Hold on to decisions!
  - It`s too easy to skip good solutions only for saving «short» money.

- Check out installers real knowledge!
  - Too many say they can, but they can`t!

- Just because it`s energy-efficient, it don`t have to be bad or ugly!
Action through the project

- Everyone involved have to be interested in what we are building
  - Important that the installer have genuine interest for doing a good job!

- Make checklists for the whole solution
  - Check out from time to time that everyone is «on track»
  - The way to «shortcuts» is unfortunately really short.
When the users are taking over...

- If you don't know what you are taking over......
  - It's your responsibility that the users understand why it is like it is
About Powerhouse Kjørbo

- Built in 1980
- 2 «small» buildings, together approx. 5000sqm.
- Exposed concrete walls and roof in all areas.
- Covered with absorbents in roof and inside walls (for sound)
- Solar-panels can give approxm 41kWh/sqm per year
- Lighting installations is measured to 42% of total energy consumption.