CB 4 - W/E Consultants Sustainable

Country: NL

SAVE AGE
Save Energy
green energy for elderly

SUMMARY

1- Roo van Capelle

1/ Identification

Name of RCHEP: Roo van Capelle

Name of contact if authorized: Rob Buitelaar

2/ RCHEP main issues

- Stichting ZorgBreed rents the building form another organisation. Taking (energy saving) actions is sometime difficult because of different interests.
- Heating installation is for the whole building, including the sheltered housing which were excluded from the investigation. No separate meters for the sheltered housing. They charge for energy costs with a fixed distribution: 28,5% for RCHEP, 71,5% for sheltered housing. It's unknown how this number was determined in the past.
- They test low-energy lighting in a part of de building. Results are not available and hard to measure.
- RCHEP is built in 1973. No large-scale renovation has been taken place since then. Only heating installation (1993) has been replaced and several windows (1997).
- Large renovation is in planning some time after our visit to the RCHEP. Technical details are unknown at that moment. This is typical for health sector: long taking process till planning.
- Inside temperature is high, especially in summer. Except large meeting room, difficult to heat.
- Circulation pipes are not insulated. That's one of the reasons why rooms have high temperatures when radiators are put off.
- Ventilation is of bad condition. No permanent ventilation system, much cracks and crevices). Windows kept closed because of security reasons and many people experience draught. The few available air vents are blocked with tape.

3/Action plan of RCEHP

Detail of the different actions determined in the plan:

Given advice:

- Building improvements: Insulate of roof, outside wall (including panels), floors, changing bad quality windows, changing glass to HR^{++} and improving airtightness
- Insulate heating exchange element from heating installation (warm water and space heating). Also insulate other installation elements.
- Cooling the room of water booster system (hydrophoric installation).
- Thinking of heat pump if heating installation will be changed within 3 years.
- Self-regulating air vents in new windows. Capacity of air ventilation on level prescribed for new buidlings.
- Changing lightning to energy safe lightning (TL5-HF) and in some rooms presence detection with daylight control.
- Look for possibility of limit radiator taps.
- Changing older tv's for modern LCD tv's.

- Splitting meters of heating installation. Avoid fixed distribution.
- Perform planned monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).
- Chose a person responsible for energy policy.
- We expect problems of moisture, look for it carefully.

4/ Energy efficiency activities implemented in the RCHEP

- Building owner have changed recently their policy. They don't want to invest for more than 10 years. Conclusion: 1,5 year of preparation for renovation (lifetime extension 15-20 years) is not suitable anymore. All actions are stopped, including implementation of advice from Save Age team.

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison: not available
- energy efficient behaviour of staff and residents: not available

7/ Conclusion

main difficulties: different building owner and organisation health care elderly.
main success: the facility manger has more awareness of energy saving options
further activities to be implemented: unsure.

2- Amsta

1/ Identification of the partner

Name of partner: Amsta

Name of RCHEP: Jan Bonga

Name of contact if authorized: Rob Haker

2/ RCHEP main issues

- In 2010 they received an customized EPA .
- Expected renovation in 2013, after part of patients is moved to a new location.
- No monitoring
- Split incentive

3/ Energy efficiency activities implemented in the RCHEP

- to our knowledge no measures have been implemented

4/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

5/ Monitoring when available

- energy savings or energy consumption value/comparison
- energy efficient behaviour of staff and residents

6/ Conclusion

main difficulties: very difficult to get in contact with home after initial phase

main success: more awareness of energy saving options

further activities to be implemented: unknown

3- Rumah Sayah

1/ Identification of the partner

Name of partner: Rumah Sayah

Name of RCHEP: Nusantara

Name of contact if authorized: Richard Sanders

2/ RCHEP main issues

- Cold draught at windows in new extension (build in 2010). In some of these rooms are equipped with underfloor heating and natural ventilation with air vents.
- One (larger) heating installation for warm water and space heating.
- No monitoring.
- Possible split incentive in near future.

3/Action plan of RCEHP

- Look for de possibility of a smaller separate heating installation for warm water.
- Analyse solar system for expansion.
- Insulate elements of heating installation.
- Check for large windowsills witch are blocking radiant heat.
- Extra investigation of ventilation in de rooms with underfloor heating and cold trap.
- Automatic operation for sun blocking or inform staff how to use sun blocking properly.
- Monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).
- Only use independent advice (not from an plumber).
- Know what your energy costs are (awareness).

4/ Energy efficiency activities implemented in the RCHEP

- Lots of changes within internal staff. Especially by management. That's why energy has al low priority these past few years.
- Responsibilities are constantly moving to other persons.
- Started with behaviour actions.
- No other energy saving activities.

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison: Non
- energy efficient behaviour of staff and residents: non

7/ Conclusion

main difficulties: changing persons within organisation.
main success: major energy effieciency actions were implemented before our visit. Changes in the technical staff and management have caused that no further actions have been taken after that.
further activities to be implemented: description of the work for residents.

4- Schakelring

1/ Identification of the partner

Name of partner: Schakelring
Name of RCHEP: Eekhof
Name of contact if authorized: Martine van den Bouwhuijsen

2/ RCHEP main issues

- Planned renovation of interior (lightning, extra lift, small extension and reduce reverberation).
- Problems with reverberation of sound. Caused by residents (shouting) and the type of covering of floor, walls and ceiling.
- Rooms are very dark inside. Lighting is too little, only at one side windows and rooms are deep (natural lightning can't take far enough).
- A lot of two-person rooms. They need to been changed into one-person rooms.

3/Action plan of RCEHP

- No advised actions for insulation.
- Advise: connect solar heat to the present gas boiler (hot water supply).
- Advise: cleaning the ventilation valves and readjusted capacity of each room.
- Advise: chose an gas humidifier instead of an electric humidifier.
- Changing lightning to energy safe lightning (TL5-HF) in offices, surgeries and hallways. Energy safe lightning in bedrooms and in other surgeries and sister rooms use presence detection with daylight control.
- Advise: extra investigation how to solve reverberation in sleeping rooms. (How many en where to putt absorbing materials).
- Look for possibility of limit radiator valves.
- Perform monitoring. Analyse numbers and make an energy policy (for changing building and behaviour).

4/ Energy efficiency activities implemented in the RCHEP

We don't know. Despite several efforts we have been unable to get into contact with RCHEP management any more.

5/ Behavioural measure for residents and visitors

No contact possible any more

6/ Monitoring when available

- energy savings or energy consumption value/comparison: Energy use is something below average comparing to other visit RCHEP's.

7/ Conclusion

After initial enthusiasm contact with the RCHEP became difficult, they seem to have lost interest.

5- Nieuw Sandenburgh

1/ Identification of the partner

Name of partner: Zorgstroom

Name of RCHEP: Nieuw Sandenburgh

Name of contact if authorized: Huib den Hollander

2/ RCHEP main issues

- No insulation on roof older part of the building.
- One (larger) heating installation for hot water and space heating.

3/Action plan of RCEHP

- Insulate the roof older part of the building.
- Look for de possibility of a smaller separate heating installation for warm water.
- If separate warm water installation is be installed, install weather-dependent control on the heating installation (space heating).
- Insulate parts of the heating installation.
- Change existing circulation pumps (fixed speed) for energy saving circulation pumps.
- By night lower de ventilation capacity.
- Advice: don't use that many different types of lightning.
- Perform monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).

4/ Energy efficiency activities implemented in the RCHEP

- Roof is been insulated.

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison: Electra use is low comparing to other visited RCHEP's. Gas use is average comparing to other visited RCHEP's.
- energy efficient behaviour of staff and residents: none

7/ Conclusion

main difficulties: time and priority for energy saving.
main success: insulate roof further activities to be implemented: unknown

6- Ter Valcke

1/ Identification of the partner

Name of partner: SVRZ

Name of RCHEP: Ter Valcke

Name of contact if authorized: Rocco Rentmeester

2/ RCHEP main issues

- Building is built in 2004 till 2007.
- Complains about one type of air vent (demand-driven). They are very susceptible to interference. Residents are cold.
- Responsibility for energy is splits to several persons.
- One central purchase of energy for whole organisation.

3/Action plan of RCEHP

- Change existing circulation pumps (fixed speed) for energy saving circulation pumps.
- Advice: use the same air vents which are used in de lower building.
- Advice: Use natural daylight, by example in the atrium. One possibility is using daylight control.
- Centering responsibility for energy by one person or one department.
- Advice: let different locations know what their energy use is. At this moment they don't know. If this will happen: Perform monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).

4/ Energy efficiency activities implemented in the RCHEP

- Nonspecific activities are implemented for the location Ter Valcke.
- For de organisation: changing emergency lightning into LED. Also changing on some places emergency lightning into LED.
- For de organisation: if there will be new buildings build, they will choose for more insulation then the government demands. They chose for triple glass.
- Other location: they think of decentralized heating generation for warm water.
- Management is making a new environment policy.

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison: Electra use is more than average comparing to other visit RCHEP's and also comparing to Dutch uses. Gas use is low comparing to other visit RCHEP's. Comparing to Dutch uses it's average (comparing to buildings the same age).
- energy efficient behaviour of staff and residents: non

7/ Conclusion

main difficulties: ?
main success: They think of more energy saving actions then before.
further activities to be implemented: new environment policy, if there will be new buildings build, they will choose for more insulation then the government demands. They chose for triple glass in windows and LED lighting.

7- Engelenburg

1/ Identification of the partner

Name of partner: Zorggroep Charim

Name of RCHEP: Engelenburg

Name of contact if authorized: Ruud Hazeleger

2/ RCHEP main issues

- Little insulation in outside walls.
- One (larger) heating installation for warm water and space heating.
- Ventilation is poor and quality of inside environmental is bad.
- Ventilation installation in one part of the building (de zwaai) is noisy.
- A lots of complain of cold in winter and heat in summer.

3/Action plan of RCEHP

- Insulate outside walls.
- Solving cold problems and heat problems with more insulation (new, better windows).
- Automatic operation for sun blocking or inform staff how to use sun blocking properly.
- Also look for the possibility of air vents (self-regulating).
- Look for de possibility of a smaller separate heating installation for warm water.
- If separate warm water installation is be installed, install weather-dependent control on the heating installation (space heating).
- Insulate parts of the heating installation.
- Change existing circulation pumps (fixed speed) for energy saving circulation pumps.
- Look for possibility of limit radiator valves.
- Change ventilation installation in 'de zwaai' and put it in a shielded room. Also use acoustic insulation in installation. Save energy by choosing an installation with several levels.
- Replace ventilation installation in the kitchen.
- Use daylight control where it's an option.
- Change some off the lightning for energy save lightning.
- Perform monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).

4/ Energy efficiency activities implemented in the RCHEP

- unknown, couldn't get in contact any more

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison: Electra use is low comparing to other visit RCHEP's and average comparing to Dutch uses. Gas use is average comparing to other visit RCHEP's and comparing to Dutch uses.
- energy efficient behaviour of staff and residents: non

7/ Conclusion

main difficulties: After energy advice was prepared RC HEP staff was not available for discussion any more
main success: more awareness of energy efficiency options
further activities to be implemented: unknown

8- Buitenhof

1/ Identification of the partner

Name of partner: Cordaan

Name of RCHEP: Buitenhof

Name of contact if authorized: Sjoerd Hoogstins

2/ RCHEP main issues

- Moderate outside wall insulation.
- Old and large heating installation.
- Old ventilation system in higher building. Intern environment is not so good.
- A lot of different types of lightning.
- Heat in de summer.
- No monitoring.

3/Action plan of RCEHP

- Insulate outside wall (including panels).
- Change windows into energy safe windows (HR^{++}-glass).
- Changing heating installation after finishing actions outside wall en changing windows.
- Energy safe heating installation with weather-dependent control (space heating).
- Separate heating installation for warm water.
- Insulate elements of heating installation.
- Replace ventilation system in higher building. Choose for balanced ventilation system with back heat extraction. Or choose for natural air supply with air vents (self-regulating or demand-driven).
- Use flow-control in ventilation system.
- Advice: chose a gas humidifier instead of an electric humidifier.
- Advice: don't use that many different types of lightning.
- Use daylight control.
- Automatic operation for sun blocking or inform staff how to use sun blocking properly.
- Perform monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).

4/ Energy efficiency activities implemented in the RCHEP

- Description of the activities led in the RCEHP (funding scheme, technologies, training, soft measures, raising awareness, guide book…): None

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison: non
- energy efficient behaviour of staff and residents: non

7/ Conclusion

main difficulties: higher management don't approve investments. And there is no budget.
main success: more awareness among lower management staff
further activities to be implemented: ?

9- Eschpoort

1/ Identification of the partner

Name of partner: Ariens Zorgpalet

Name of RCHEP: Eschpoort

Name of contact if authorized: Henk Hardieck

2/ RCHEP main issues

- Part of de building built in 1975 will be demolished. Other parts are built in 2000 and 2007.
- Some parts of the heating installation don't have insulation.
- A lot of different types of lightning. Not all are energy saving.
- draught in new built buildings.

3/Action plan of RCEHP

- Insulate parts of the heating installation.
- By night lower de ventilation capacity.
- Use energy saving lightning with daylight control.
- Advice: don't use that many different types of lightning.
- Probably draught will be solved by readjusting the ventilation system (air supply valves). Extra investigation is advised.
- Perform monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).

4/ Energy efficiency activities implemented in the RCHEP

- Building parts from 1975 are still complete, demolishing is unsure. Priority are other parts of the building.
- They start with monitoring energy uses (2012).
- In 2013 is budget reserved for changing lightning into LED. After they tested this lightning on a small location.
- They analyse where they can use daylight and put down the lightning.
- By night they put down a part off the lightning.
- In some rooms they installed presence detection.
- Raising awareness for energy saving.

5/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

6/ Monitoring when available

- energy savings or energy consumption value/comparison
- energy efficient behaviour of staff and residents: creating. Team leader speaks to staff when noticed of energy-cost actions.

7/ Conclusion

main difficulties: none.
main success: awareness, if investment have good arguments management agrees, changing of lighting to LED.
further activities to be implemented: yes, awareness program for organisation (staff and management). Investigation with waste incineration organisation for use of waste heat.

10- Kempenhof

1/ Identification of the partner

Name of partner: Valkenhof

Name of RCHEP: Kempenhof

Name of contact if authorized: Renate Weber

2/ RCHEP main issues

- Building is built between 2001-2005.
- Bad air quality off installation room.
- A few energy unsafe circulation pumps.
- A few parts of heating installation without insulation.
- 3 different intallations (for heating, cooling and ventilation) places in 3 different years. This is complex for maintenance.
- Broken insulation by cooling pipes.
- High electric energy use!

3/Action plan of RCEHP

- Improve air quality off installation room!
- Change energy unsafe circulation pumps.
- Insulate parts of heating installation.
- Advice: lower the ventilation capacity by night.
- Probably is the high electric used caused by the cooling-unit in combination with in-efficient use of sun-blocking. Changing this installation is difficult. About 10 years maybe replace for better installation.
- By night turning a part of the lightning down.
- Advise: because of high electric use, look at possibilities for changing lightning.
- Automatic operation for sun blocking or inform staff how to use sun blocking properly.
- Look for possibility of limit radiator taps.
- Know what energy costs are (awareness)!
- Perform monitoring. Analyse numbers and make an energy policy (for changing building en behaviour).

3/ Energy efficiency activities implemented in the RCHEP

- Almost none of the energy saving actions was performed.
- Working group for environmental and sustainability are established. For creating support and involve more departments/people.

4/ Behavioural measure for residents and visitors

- the option of an awareness raising meeting with residents was discussed with RCHEP management but they declined the offer
- visibility sign: same as above, offer declined by home

5/ Monitoring when available

- energy savings or energy consumption value/comparison: Electra use is the highest comparing to other visit RCHEP's and high comparing to Dutch uses. Gas use is low comparing to other visit RCHEP's and average to Dutch uses (for buildings this age).
- energy efficient behaviour of staff and residents: non

7/ Conclusion

main difficulties: creating support and involve more departments/people.
main success: working group on energy and environment
further activities to be implemented: al lot, depended on results of working group.