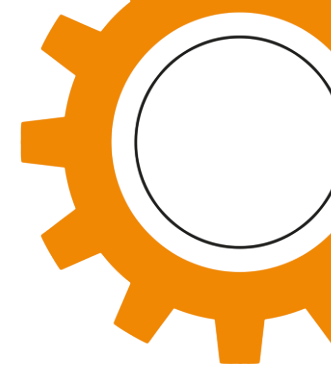
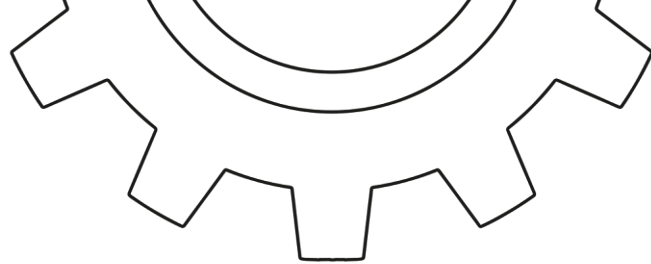
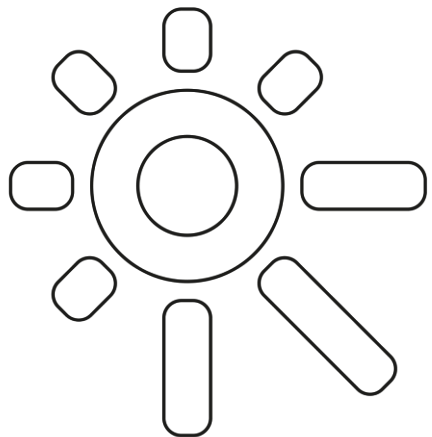
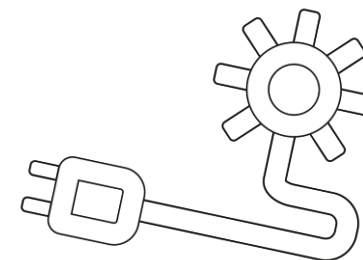
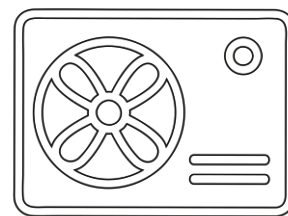
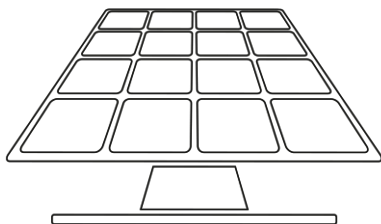
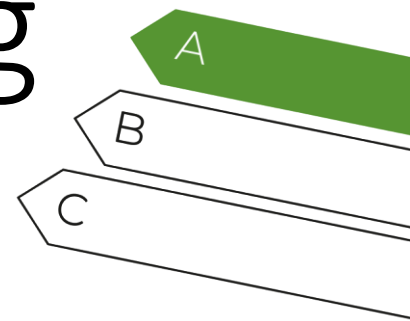


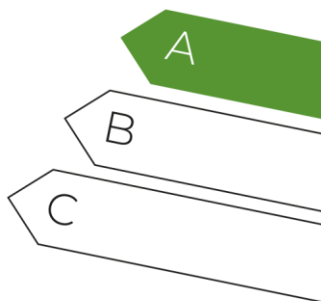
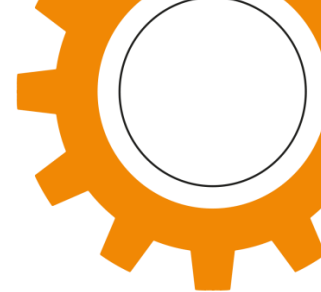
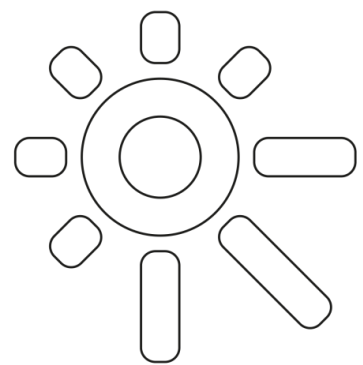


Samen maken we de omslag

Energieke Avond

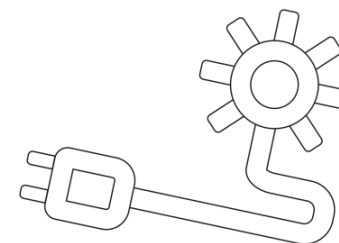
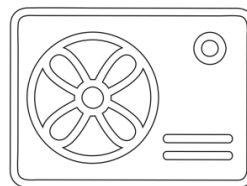
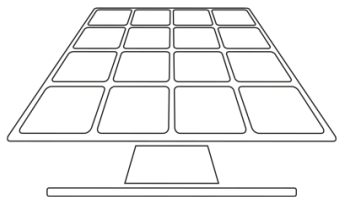
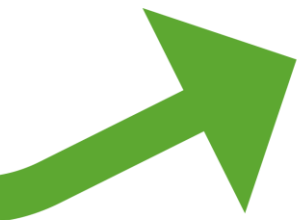
29 januari 2025
't Wouves Ransdaal

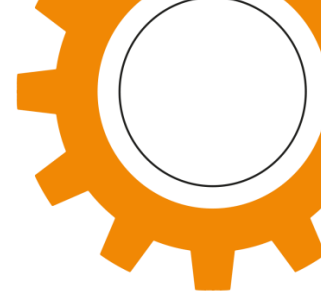
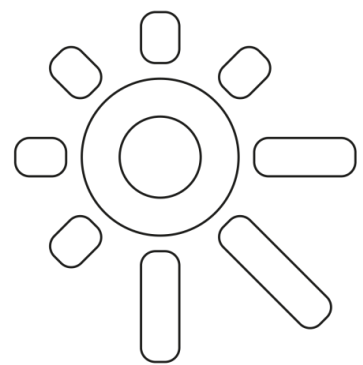




De Omslag?

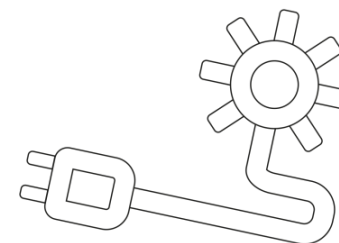
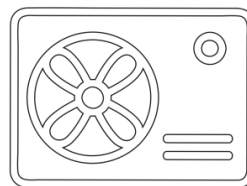
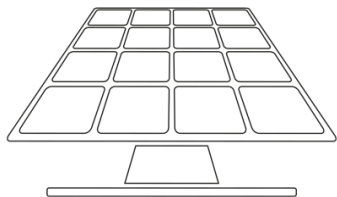
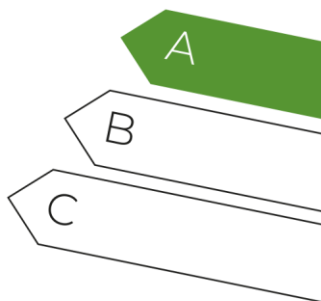
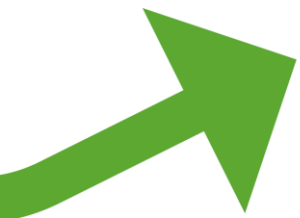
- Opgericht
 - 2019
- leden:
 - 80
- Lezers nieuwsbrief:
 - 400
- => we willen groeien!

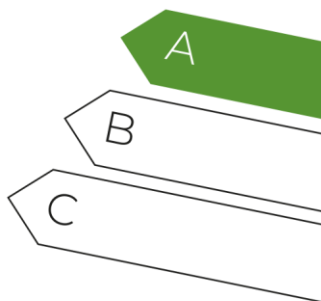
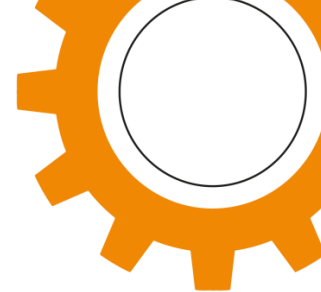
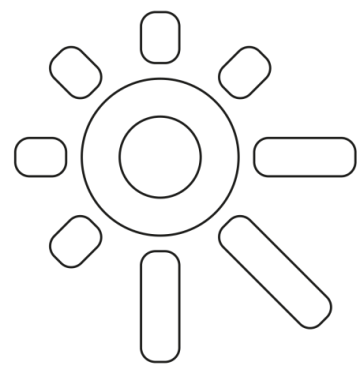




De Omslag staat niet alleen.

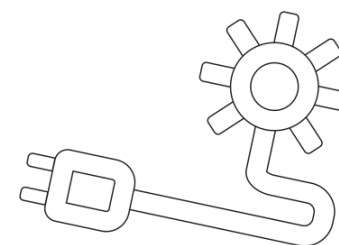
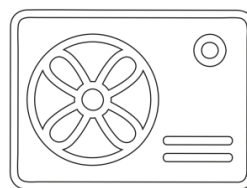
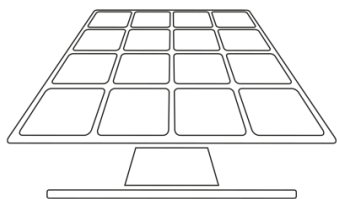
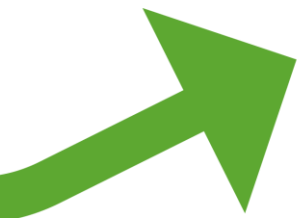
- **Andere Energiecoöperaties Limburg**
 - Werken samen, leren van elkaar
 - Ervaring uitwisselen
- **Servicepunt Rescoop Limburg**
 - Kennisbank
- **Landelijk: Energie Samen**
 - Politiek draagvlak
 - Landelijk beleid





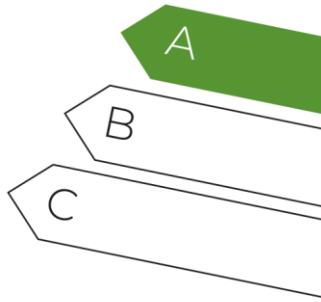
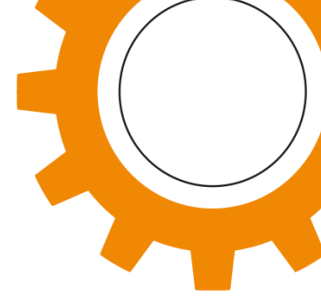
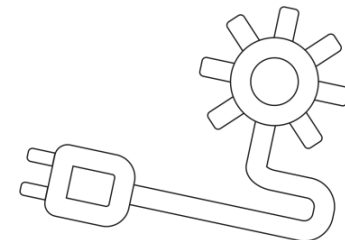
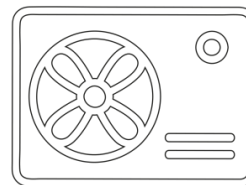
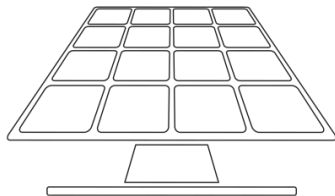
De Omslag?

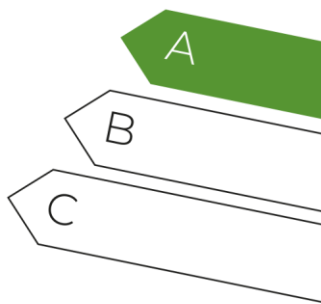
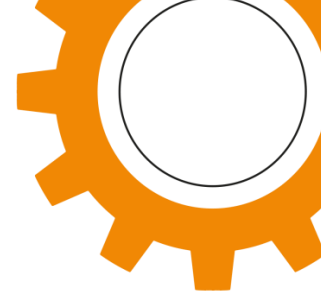
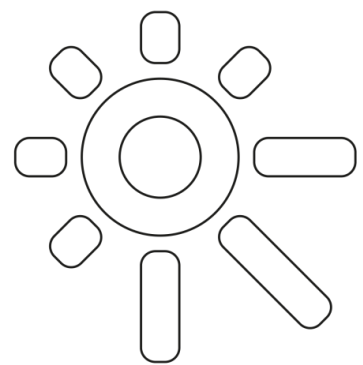
- Bekend van de Onder Ons
- Energiebesparing
 - Energiecoach (Hoom)
 - Energieke avonden
- Energieopwekking
 - Windenergie Parkstad Zuid
 - We zitten in de wachtstand
 - Energietuin Karstraat Ransdaal
 - Eerste investeringsronde in 2025



Wat kunt u van De Omslag verwachten?

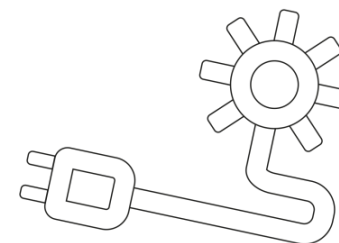
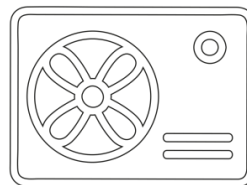
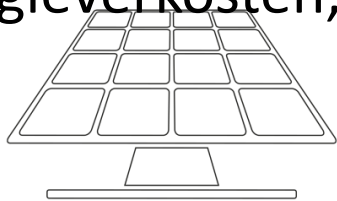
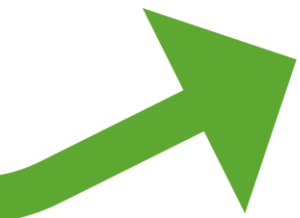
- We willen samen energie opwekken
 - Zon op andermans dak (Postcoderoos)
 - 50% lokaal eigenaarschap invullen bij projecten ontwikkelaars
 - 75/90% lokaal eigenaarschap Windenergie Parkstad Zuid:
 - 7 turbines, 40.000 huishoudens
- We willen u helpen in de transitie
 - Energiebesparing – Isolatie – IR etc.
 - Advies: samen met WWW of een Hoom – Advies (WattMeesters)





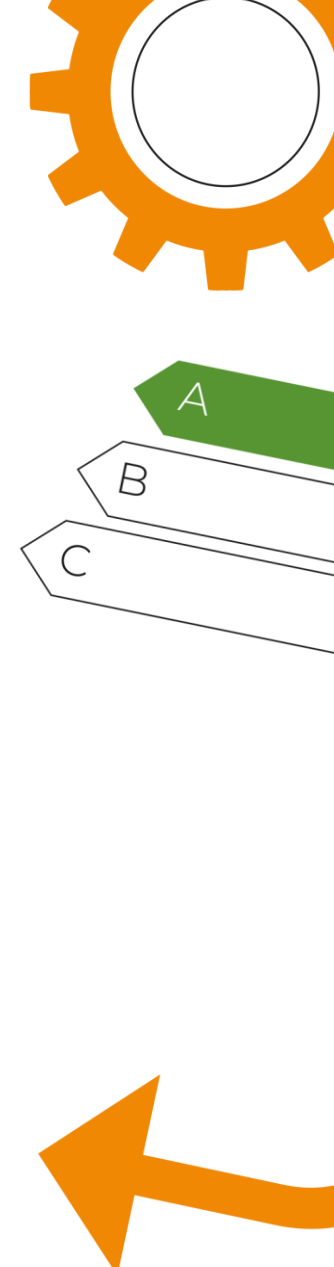
Energieke avond: thuisbatterij

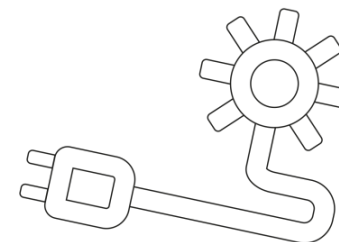
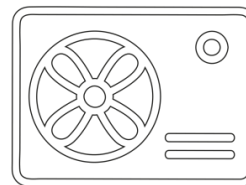
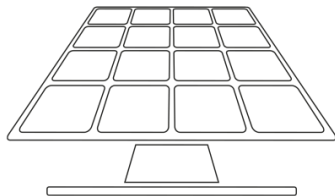
- **Waarom praten we over een thuisbatterij?**
 - Geld, Buzz: kennelijk kun je er wat aan verdienen
 - Ideële motieven: verhoogt aandeel groene energie
- **Basisbegrip is nodig**
 - Wat is een RTE wat is een SoH
 - Hoe werkt de meterkast?
- **Stroomtarief;**
 - Variabele stroomprijs, EPEX
 - Terugleverkosten, vast contract

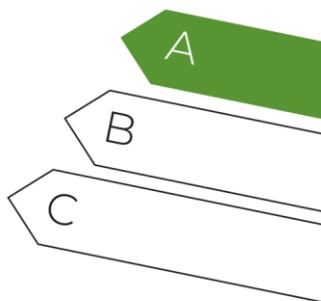
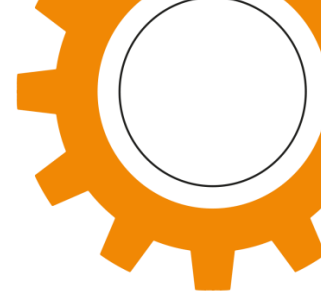
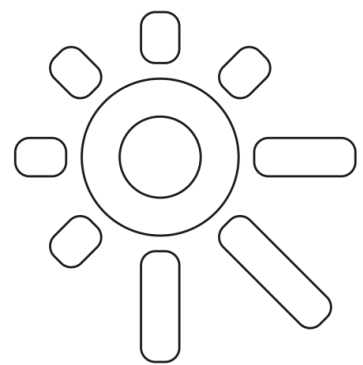




2 redenen:

- 
- Op energie besparen: Net Zero zijn
 - Stroom achter de meter houden
 - Eigen verbruik oplossen met eigen opwek
 - In energie handelen
 - Profiteren van hoge en lage markt prijzen
 - Epex
 - Onbalans
- 





Vooraan beginnen: Het E-Contract

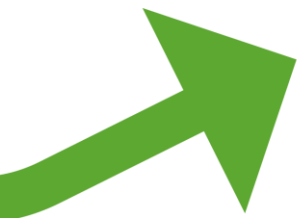
is knap ingewikkeld

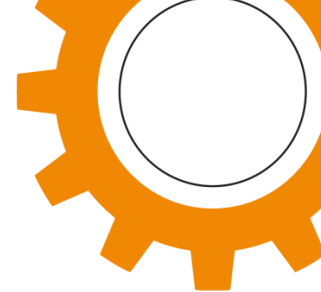
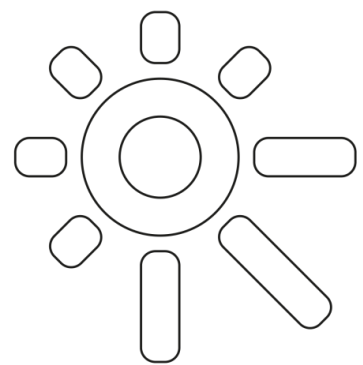
- **Wat kost stroom**

- Enexis Netwerkkosten
- Vaste kosten leverancier
- Levertarief per kWh
- Energiebelasting (Milieubelasting op Elektriciteit)
- BTW

- **Contractvorm**

- Vast contract(1-3 jaar, enkel of dubbeltarief)
- Variabel (1-6 maanden, enkel of dubbeltarief)
- Dynamisch (EPEX)
= 1uur-prijs, één dag van te voren bekend, slimme meter!)

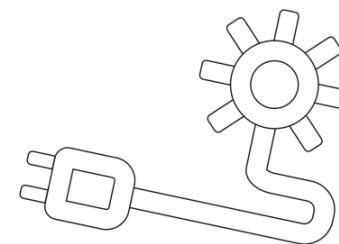
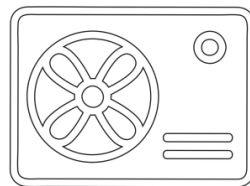
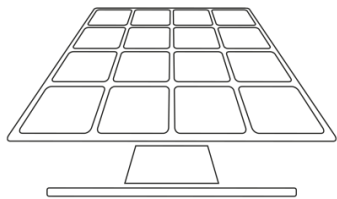
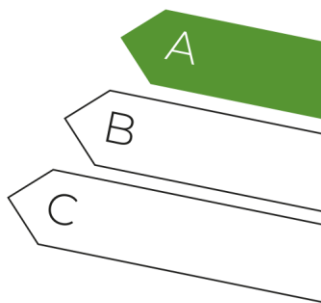
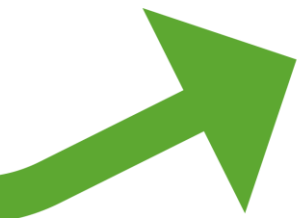


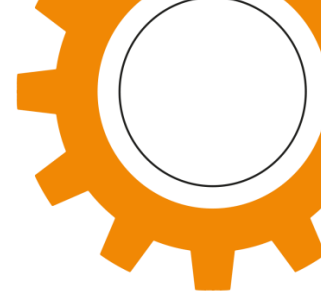
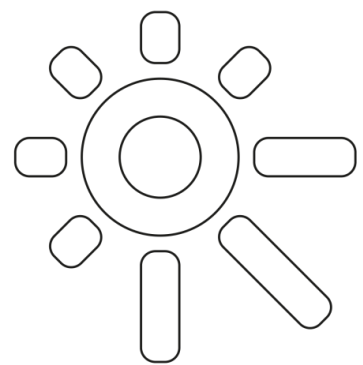


Vooraan beginnen: Het E-Contract

is knap ingewikkeld

- **Salderen (nog tot 1 januari 2027)**
 - Vast contract: terugleververgoeding = levertarief
 - Kosten teruglevering?
 - Bij hogere teruglevering dan levering: marginale opbrengst
- **Terugleveren (kan altijd)**
 - Vast contract(1-3 jaar)
 - Variabel (1-6mndn)
 - Dynamisch (Epex, 1uur)





Vooraan beginnen: EPEX

is knap ingewikkeld

- Day ahead, Prijs per uur: zeer variabel

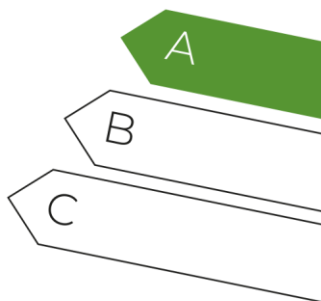
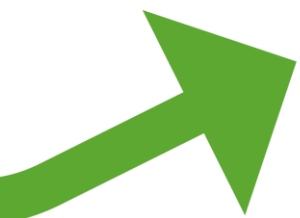
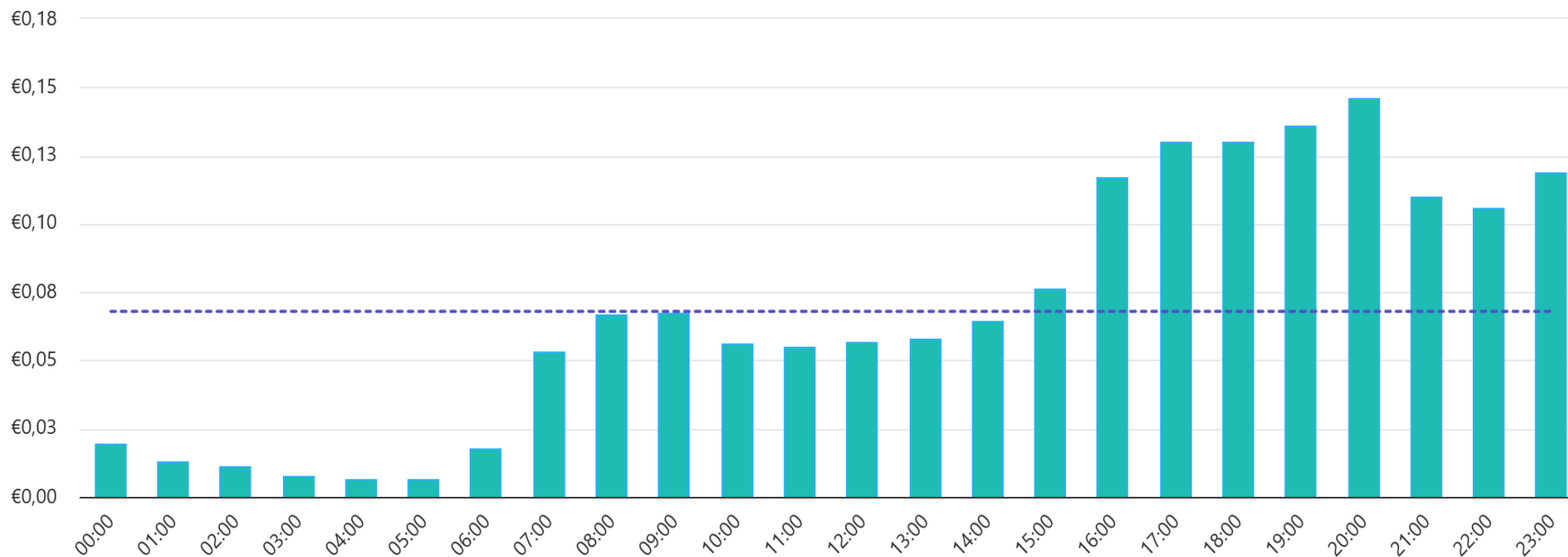
NIEUWE
STROOM energie voor
duurzaam ondernemen

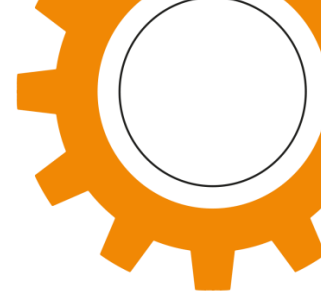
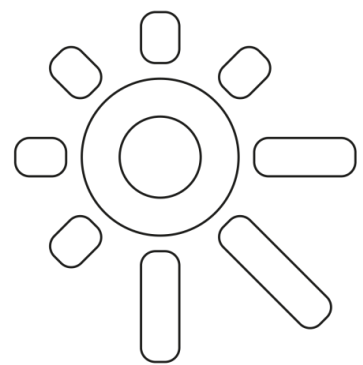


23 december 2024



● Marktprijs voor stroom per uur (kWh) --- Gemiddelde geselecteerde dag: €0,06791





Vooraan beginnen: Onbalansmarkt

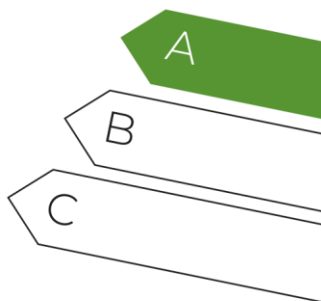
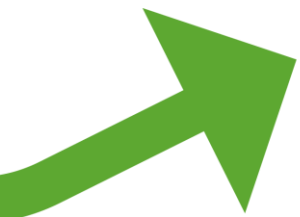
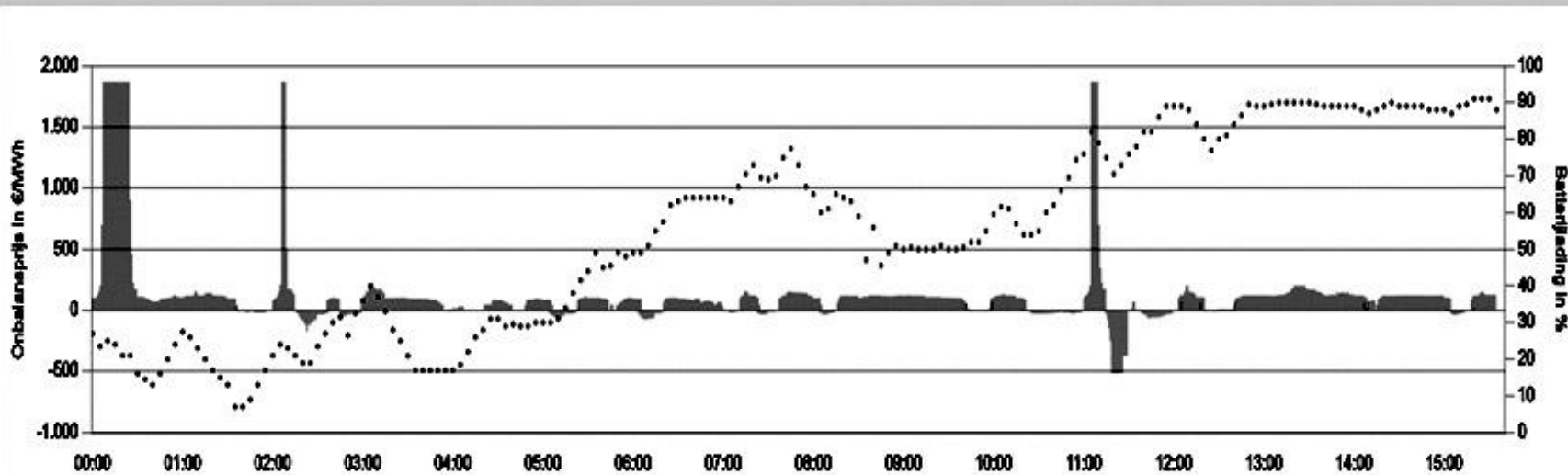
is knap ingewikkeld

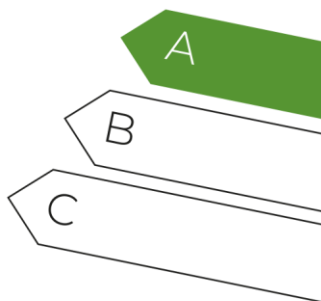
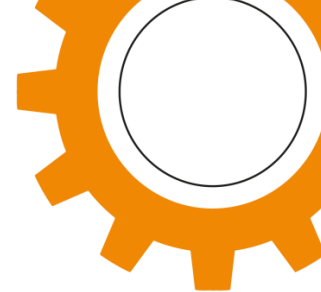
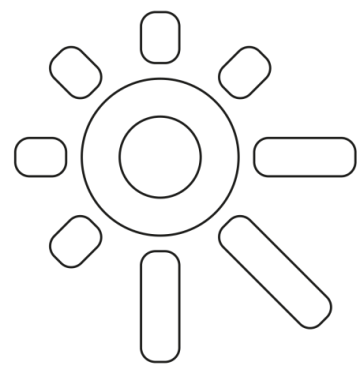
- Net moet stabiel blijven: 2-3% onbalans is normaal

Onbalansmarkt Home Installaties Resultaten Live Inloggen Registreren

Dagresultaten op de onbalansmarkt

Op deze pagina kun je de 'live' gedeelde opbrengsten vinden van thuisbatterijen die mee-regelen op de onbalansmarkt van vandaag en de afgelopen dagen. Van de systemen op deze pagina ontvangen we de actuele dagopbrengst en batterijlading via een koppeling waardoor deze gegevens met een kleine vertraging doorgestuurd worden.

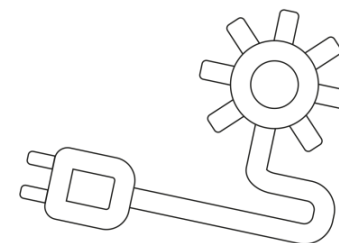
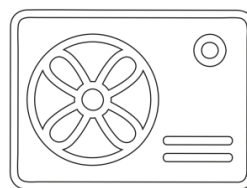
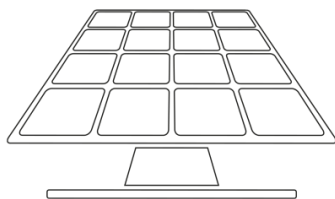
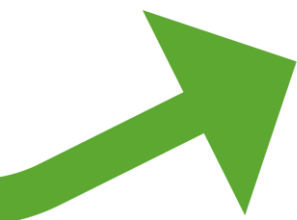


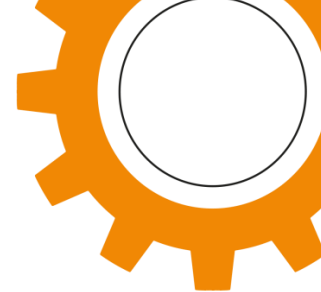
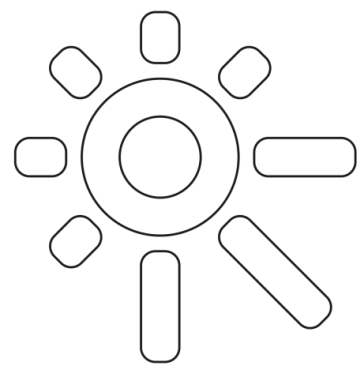


Vooraan beginnen: AC/DC

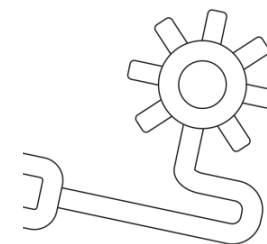
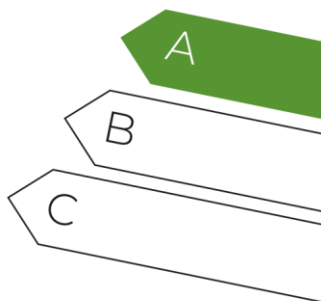
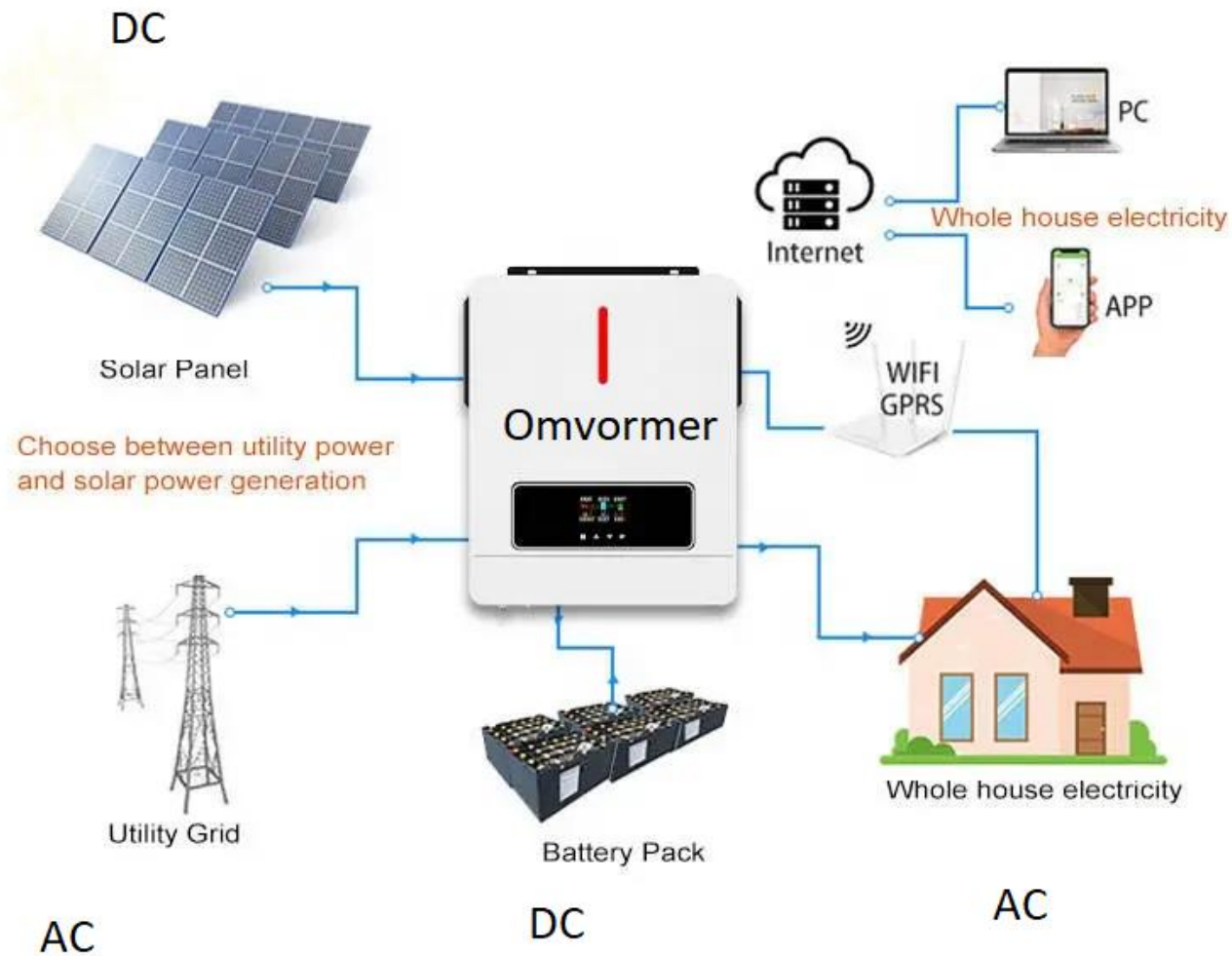
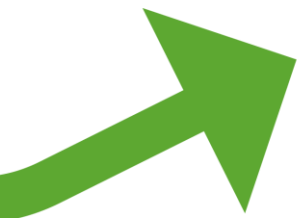
verlies van energie

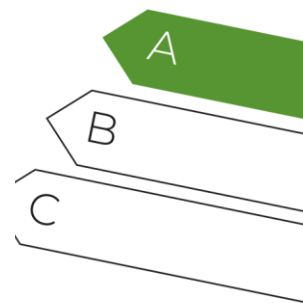
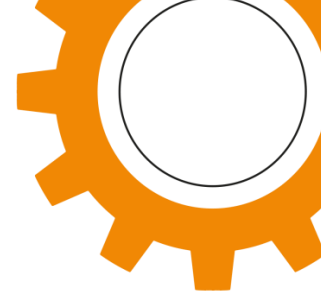
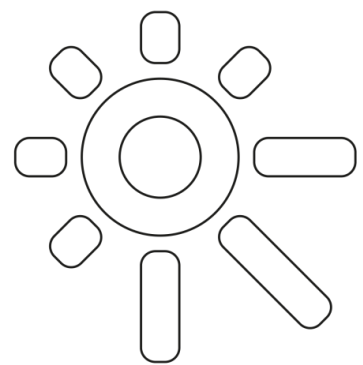
- Wisselstroom AC (alternate current)
 - Alle stopcontacten in huis: 230V
- Gelijkstroom DC (direct current)
 - Zonnepanelen 400-800V
 - Batterijen 48V, 400V
- Omvorming = energieverlies
 - AC-DC-AC
 - dus 2 keer omvormingsverlies?





Omvormer?





Welke Batterij?

- **Zelfbouw**

- Garantie? Verzekering, veiligheid.
- Kan alleen als je er echt verstand van hebt

- **Plug and Play**

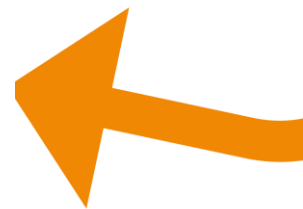
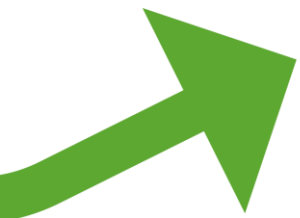
- Werkt altijd maar kan misschien niet optimaal zijn (stekkeroplossing)

- **Plug and Play extra**

- Toch een installateur nodig (Sessy, Zonneplan)

- **Op Maat (Harold Halewijn methode)**

- Doorbouwen op bestaand systeem
- Laag voltage, hoog voltage
- Systeemintegratie





Buy 320Ah Lifepo4 Batteries get 5 Accessories as gift

—CONFIDENCE COMES FROM STRENGTH—

Epoxy Insulating Board Gift 2

L-Shaped Hex Key Gift 3

Tin-Plating Copper Busbar Gift 4

Battery Terminal Cover Gift 5

Mesh Fiber Tape Gift 1

DIY Assembly Drawing (for Reference only)

Before After

€903,82 bespaard **Big Save**

€346,92 ~~€1.250,74~~ 72% korting

Prijs is inclusief btw

3 x €115,64 zonder rente

Grade A 3.2V 320AH Lifepo4 Batterij Oplaadbare Lithium-ijzerfosfaat DIY 12V 24V 48V voor Camping boten Golfkar RV Heftruck

★★★★★ 4.7 58 Recensies | 420 verkocht

Kleur: Grade A 320AH-4PCS

Grade A 320AH-4PCS

Meer prijsinformatie

€85/kWh



48V 200AH LIFEP04 BATTERY



Model: 48V 200Ah LifePO4 Battery	Max charge-discharge current: 100A
Rate capacity: 200Ah	Rated charge-discharge current: 100A
Cell Type: LifePO4 Battery	Cycle life: 6000 cycles
Nominal voltage: 51.2V	Weight: 91Kg
Capacity: 10.24kWh	Package Size: 750x520x385mm

Welkomstdeal

€1.868,57 ~~€2.532,12~~ 26% korting

Prijs is inclusief btw Extra 2% korting

3 x €622,86 zonder rente

Koop 2 stuks om 1% korting te krijgen

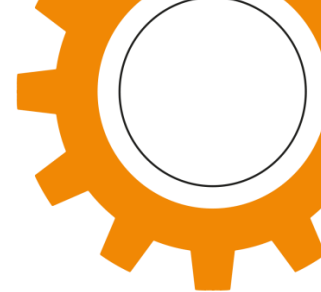
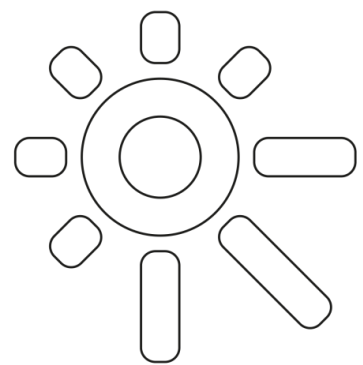
Powland 48V Powerwall 51.2V 200ah 100ah Lifepo4 Batterij 6000 + Cyclus Kan R485 16S Bms 5kwh 10kwh Voor Pv Solar Off/On Grid

★★★★★ 5.0 8 Recensies | 26 verkocht

Kleur: 51.2V 200AH Black



€187/kWh



Plug and Play

Accu's / **Duravolt 5,12kWh Slimme Thuis Batterij Plug-and-Play**



Duravolt 5,12kWh Slimme Thuis Batterij Plug-and-Play

☆☆☆☆☆ 0 Review | [Review toevoegen](#)

Dé Slimme thuisbatterij voor iedereen. Een thuisbatterij is een slimme oplossing om je zelf opgewekte zonne-energie optimaal te benutten. Door overtollige stroom op te slaan, kun je deze gebruiken...

Artikelnummer	: MSK24010003
Gewicht	: 60,000 KG
Verzendkosten	: € 0,00
1 a 2 Werkdagen	: Levering vanaf 2de week januari
EAN	: MSK24010003

€310/kWh

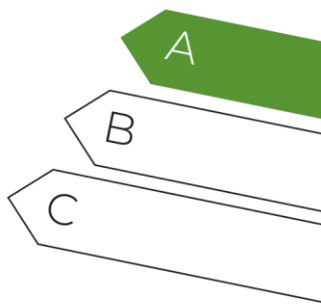
€ 1.561,15 *

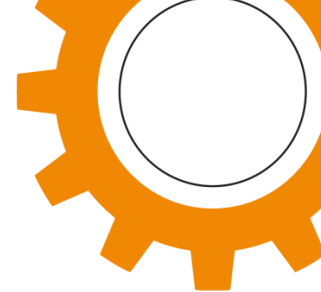
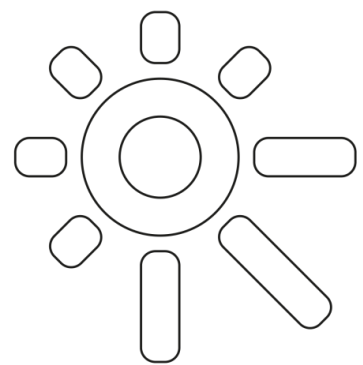
Prijs per stuk

Voorraad :

Aantal:

Bestellen





Plug and Play extra



THUISBATTERIJ
NEXUS
★★★★★ 9,2

Batterijcapaciteit

Maak een keuze

Nexus 10 kWh

Na teruggave btw: € 5490

Resultaat afgelopen 6 maanden: € 649

Meest gekozen

Nexus 15 kWh

Na teruggave btw: € 6390

Resultaat afgelopen 6 maanden: € 863

Nexus 20 kWh

Na teruggave btw: € 7290

Resultaat afgelopen 6 maanden: € 1051

Indicatie terugverdientijd 4 à 5 jaar

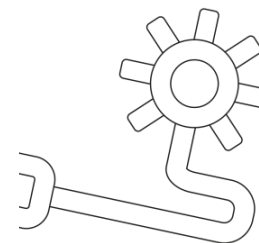
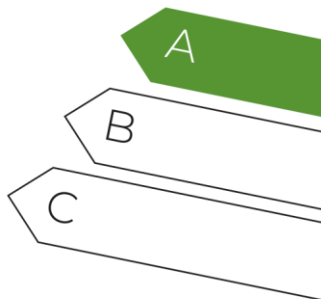
Specificaties

Opbouw van de terugverdientijd

De terugverdientijd is een schatting gebaseerd op simulatiemodellen, historisch uitgekeerde Powerplay vergoedingen en onze verwachtingen van de energiemarkt voor de aankomende jaren. Hoewel we de opbrengsten niet kunnen garanderen, hou je altijd een technisch hoogwaardige LFP-batterij met een krachtige 10 kW omvormer. Daarnaast zit er bij aanschaf een modus in die naast energie handel kan uitvoeren, ook altijd je eigen opgewekte zon kan opslaan voor later gebruik.

Benieuwd welke thuisbatterij geschikt is voor jou?

€360/kWh



Offgridtec backupkit 3-fase 14kWh met Pylontech US3000C batterij Victron MultiPlus-II 48/5000, 4-01-015805-002

 Directe verzending van de fabrikant

€670/kWh



 Vergelijken  Naar het prikbord

Fabrikant: Offgridtec 
Fabrieksnummer: 4-01-015805-002
EAN: 4262397631434



Andere producten van Offgri...

 Fax-bestelformulier

 Hebt u vragen over het artikel?

 Productveiligheid

Winkel voor meer dan €200 en ontvang een voucher van €15 voor uw volgende bestelling voor meer dan €200

15€

€ 9.371,93 *

*Incl. btw. [Gratis verzending](#)

 [Gratis verzending!](#)

 [Levertijd 6-8 werkdagen](#)

Opslagcapaciteit:

14 kWh

- 1 +

BESTEL NU

 [Veilig betalen](#)



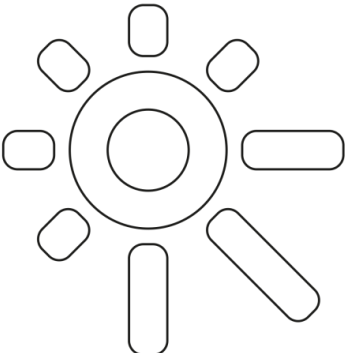
NIET-BINDEND AANBOD

[Maak snel en gemakkelijk uw PDF-offerte](#)

BEWEZEN PRODUCT



Internationale topmerken vertrouwen ons al!

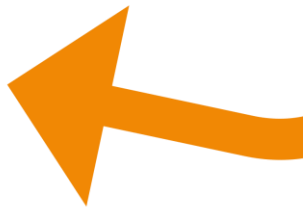
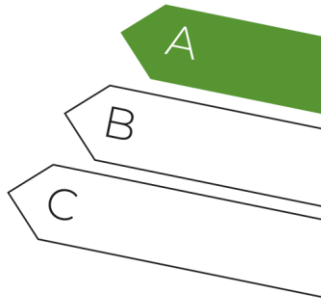
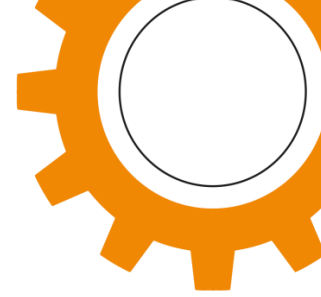
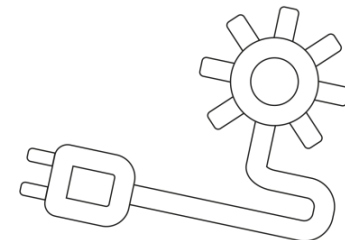
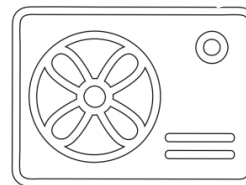
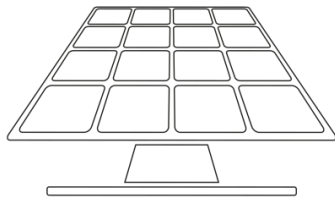


Rekening houden met

- Veiligheid

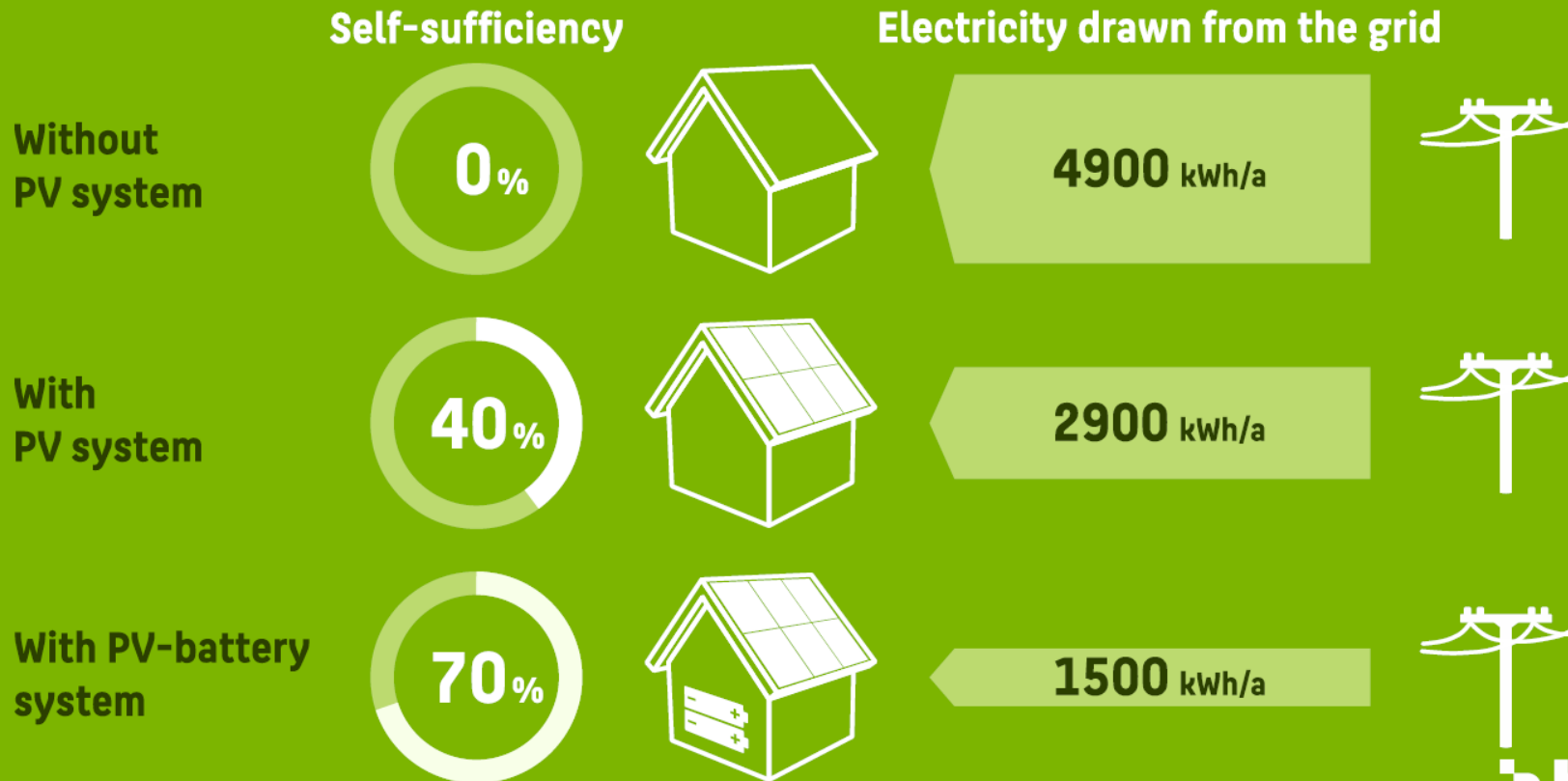
- 
- Brandgevaar
 - Kortsluiting
 - Verzekering
 - Garantie
 -

Onze tip:
minimaal een CO-alarm
(koolmonoxide)

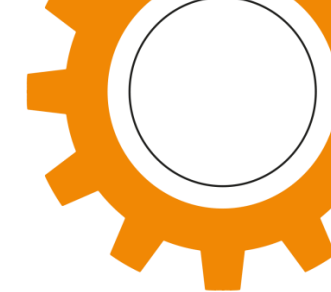
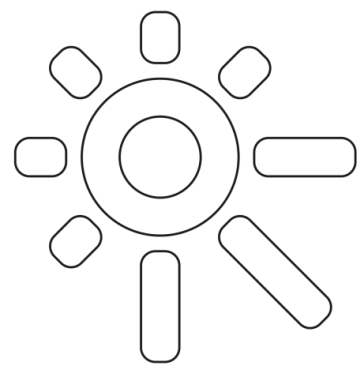


Welke capaciteit, bij welke toepassing

Residential homes with a PV-battery system are on average 69 % self-sufficient

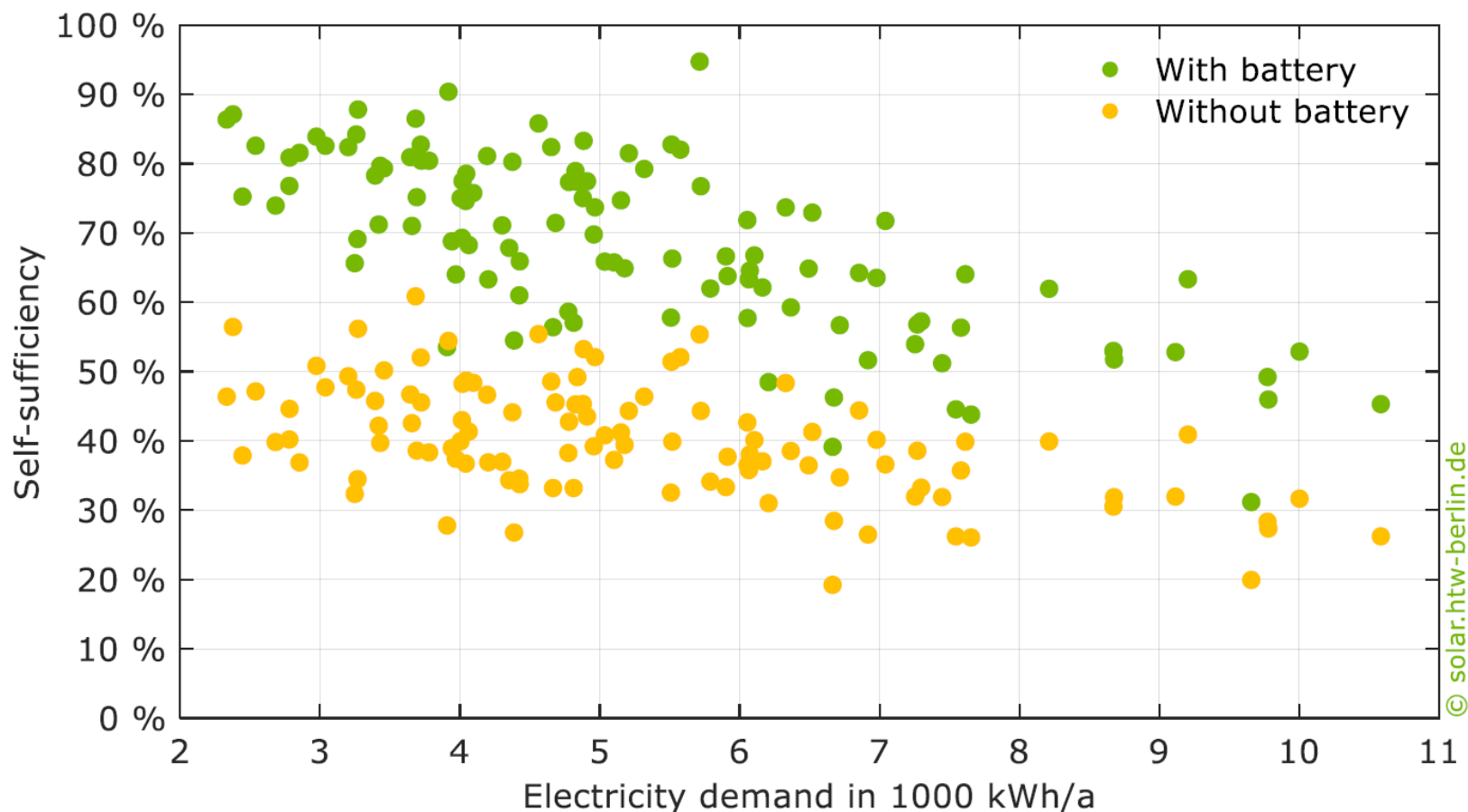


Data: Eigensonne, Kostal, median values: Operating data of 110 PV-battery systems in 2022, rated PV power 8.4 kW and battery capacity 7.3 kWh

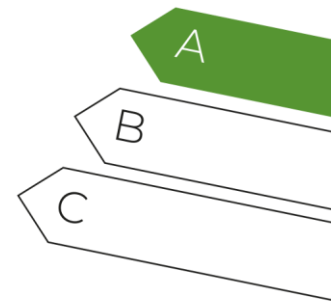
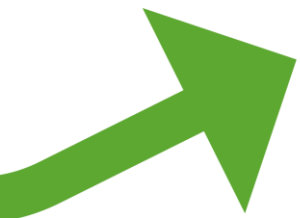


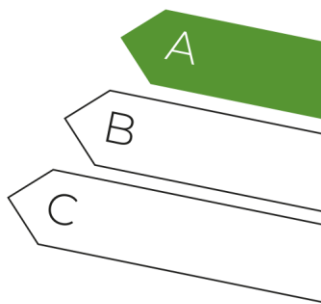
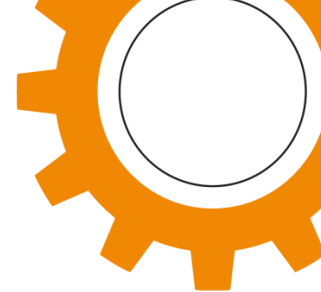
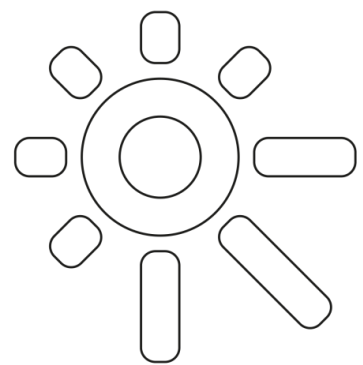
Eigen verbruik vergroten:

Increase in self-sufficiency by using a battery storage system



It can be observed that battery storage systems have a greater influence on increasing the degree of self-sufficiency of a household, especially of those with a low annual electricity consumption.

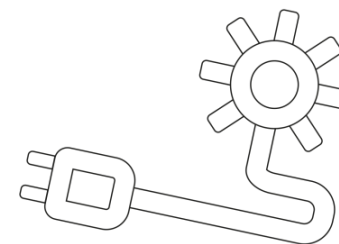
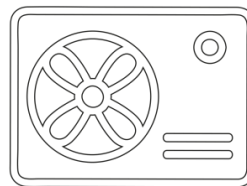
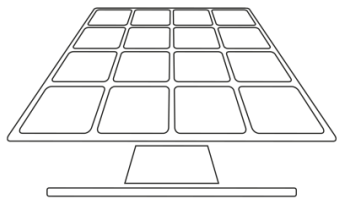


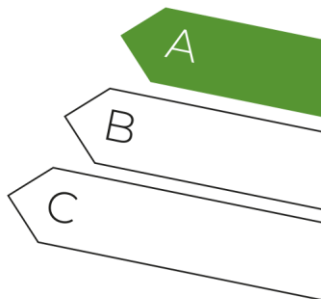
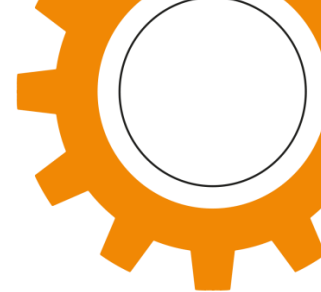
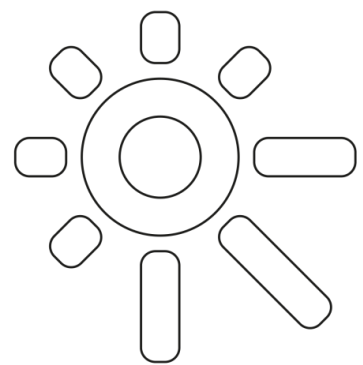


Terugverdienen?

- Batterijtechniek

- NMC = duur, minder gebruikelijk
 - Nikkel Mangaan Cobalt
 - Kan buiten staan
 - Hoger vermogen
 - 2000 cycli
- LFP = goedkoper, huidige standaard
 - Lithium Ijzer fosfaat
 - Gaat langer mee
 - 6000 cycli





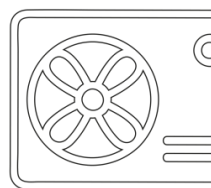
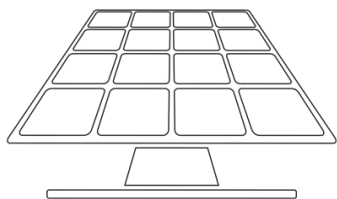
Terugverdienen?

- Stel een LFP batterij kost € 500/kWh

- 6000 cycli (soms 10.000, soms 3000)
- Is 1 kWh daadwerkelijk 1 kWh?
 - Maximale laadcapaciteit typisch 90% DoD (Depth of Discharge)
- Round Trip Efficiency max 92%
 - Vaak maar 80%

- $6000 \times 0,9 = 5400$ kWh (en dan zit je op 80% State of Health (SoH))
- $€ 500 / 5400 \text{ kWh} = 9,2 \text{ ct/kWh}$

6000 cycli 1x/dag = 6000dagen = 16,5 j!



Begrippenlijst:

Cyclus = 1x volledig opladen en ontladen

DoD = Depth of Discharge, % bruikbaar van batterij

RTE = Round Trip Efficiency, % bruikbaar stroom

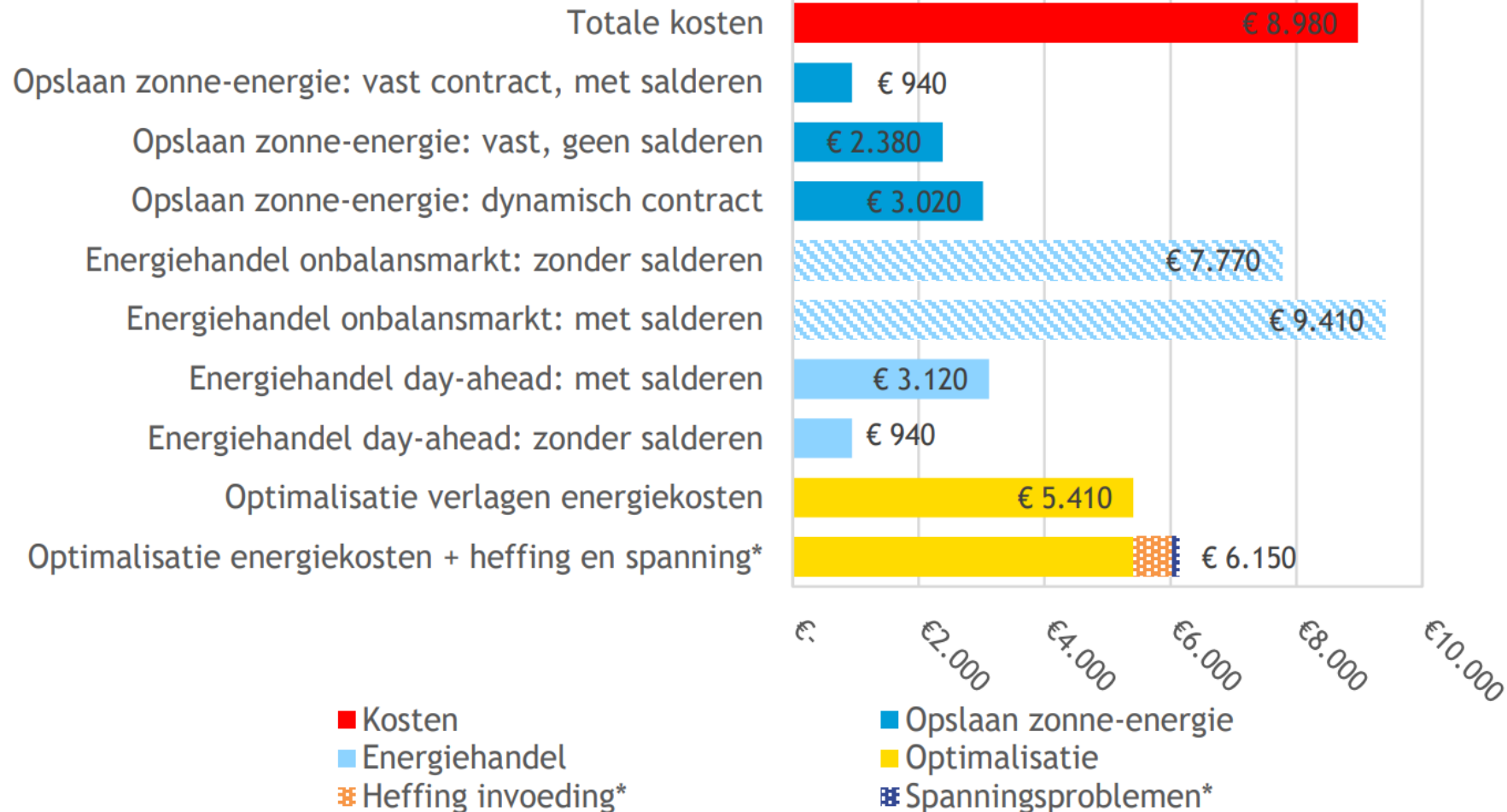
SoH = State of Health, % resterend van origineel

SoC = State of Charge, % batterij gevuld



Totalen kosten en inkomsten thuisbatterij over 15 jaar - ?
huishouden met zon-pv, EV, WP en grote thuisbatterij

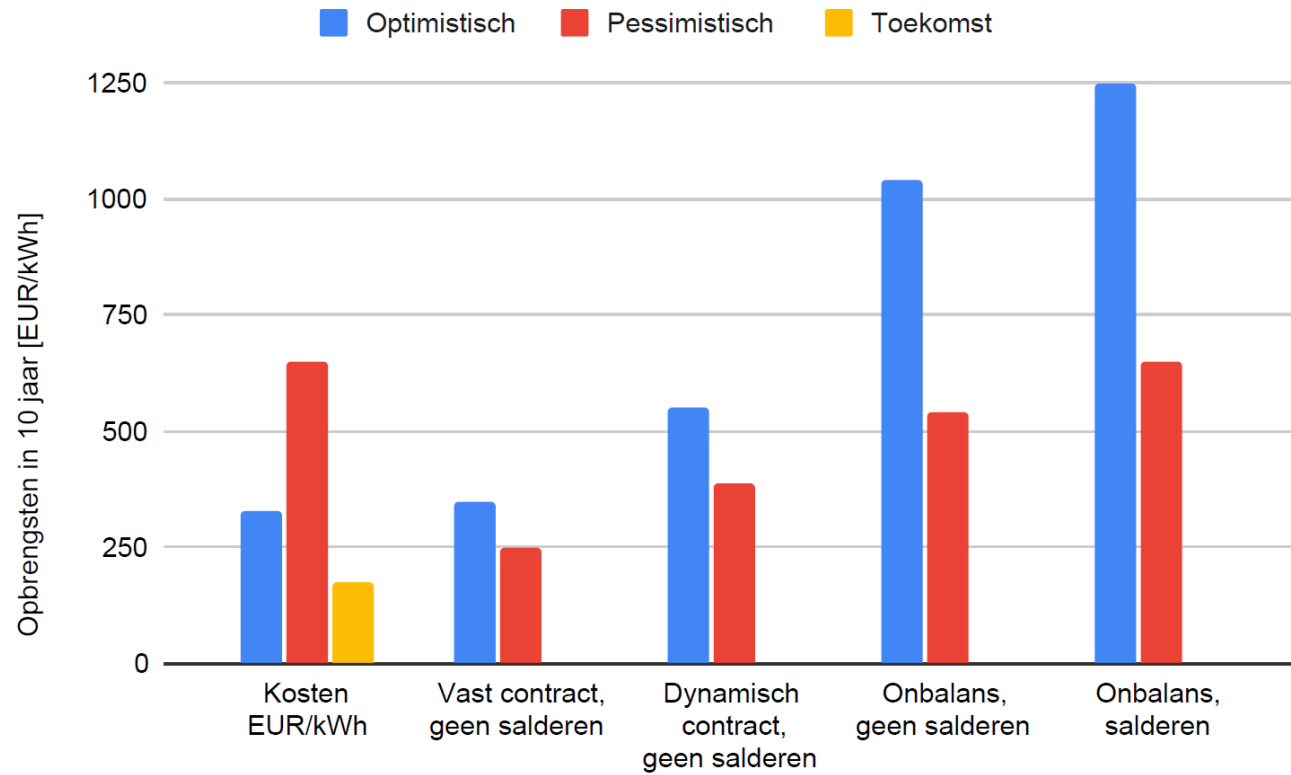
Nu: 5x goedkoper

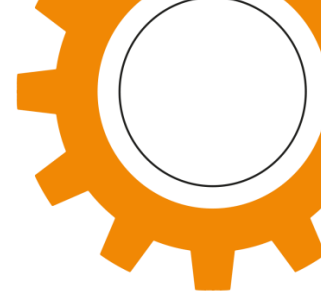
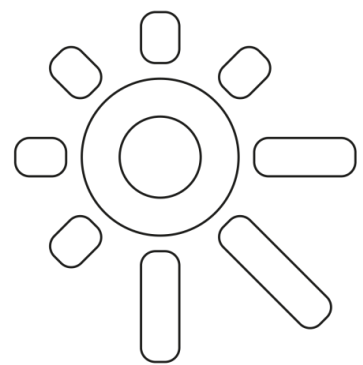


*Inkosten zijn maximale inkomsten en zeer situatie afhankelijk
(elektriciteitsnet, beleid energieleverancier, salderingsregeling)



Kosten en inkomsten in 10 jaar





Tips

- Zelfbouw?

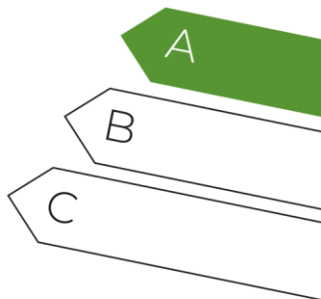


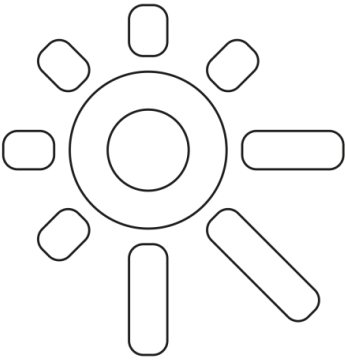
Foto: Vogelsberger Zeitung

🕒 6. Oktober 2023 👤 Redaktion 📁 Vogelsberg 💬 0

Explosion in Wohnhaus – Einsturzgefahr

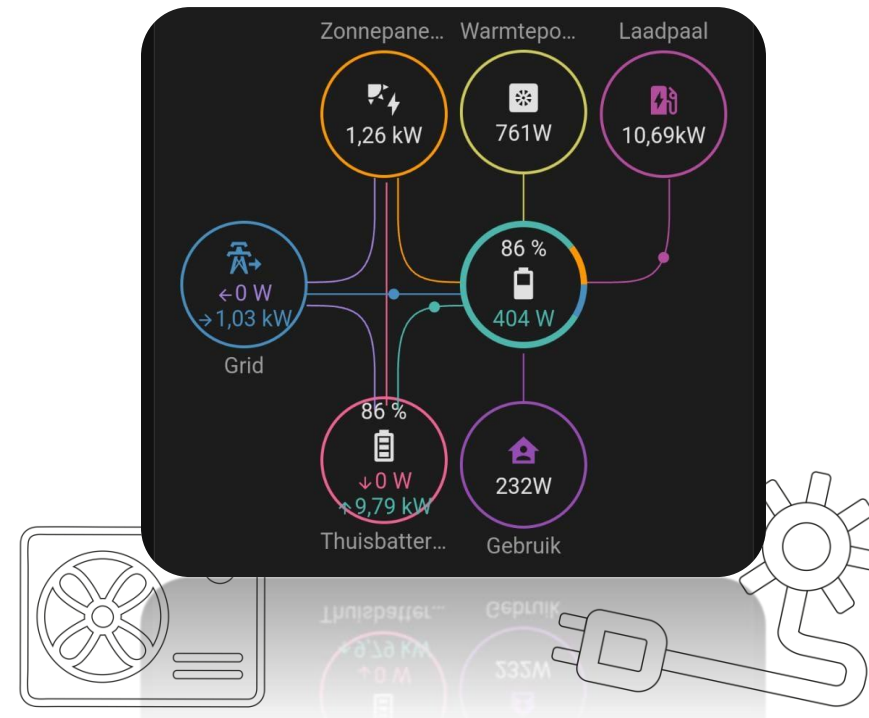
Sachschaden im oberen sechsstelligen Bereich

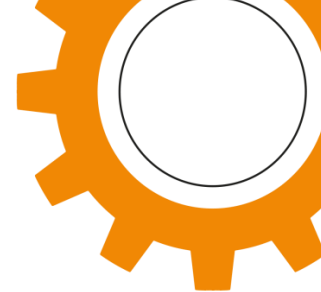
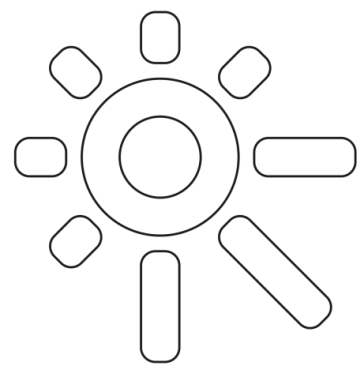




Tips

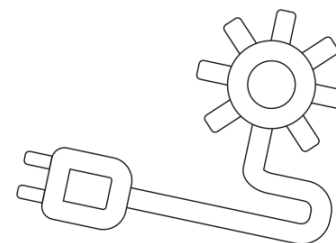
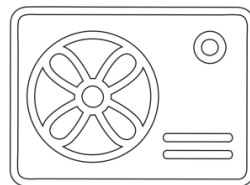
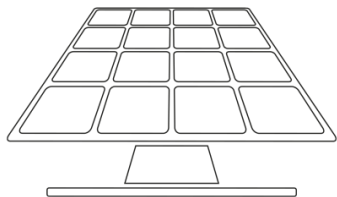
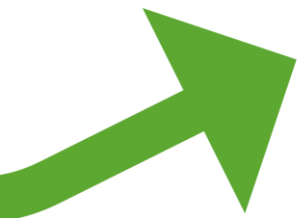
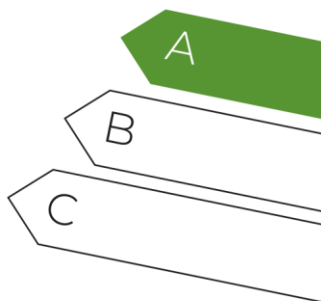
- Meten, monitoring
 - P1, homewizard, Home Assistant, Domoticz
 - Eigen software
 - Feedback
- Wachten?
 - Beter software, apps
 - Goedkopere hardware

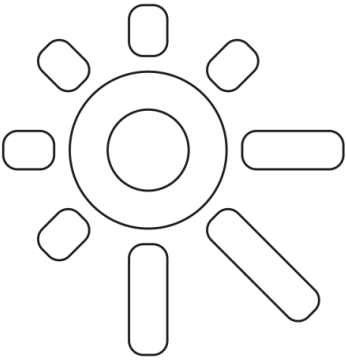




Terugverdienen?

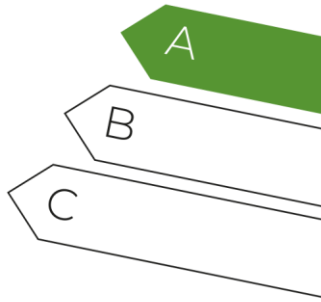
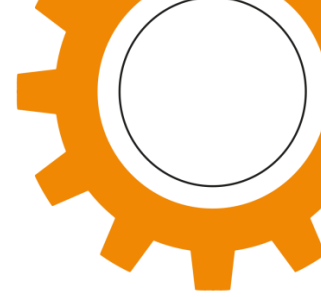
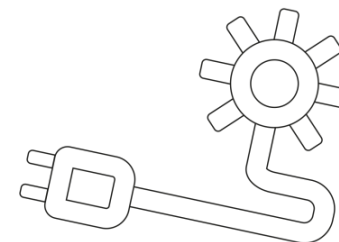
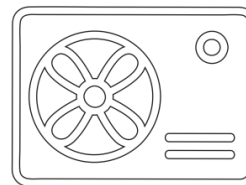
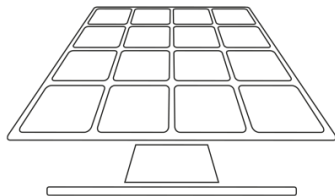
- Discussie
 - Waarom koop je een batterij?

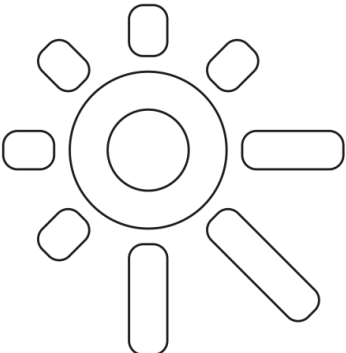




Overwegingen

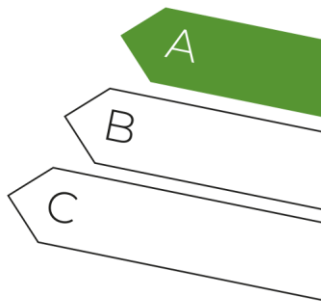
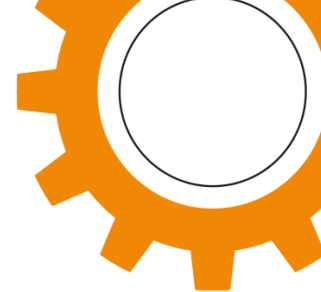
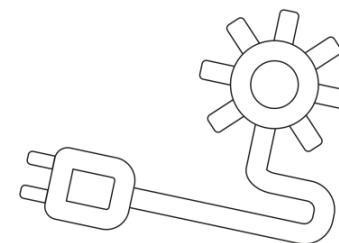
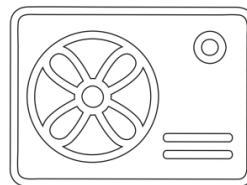
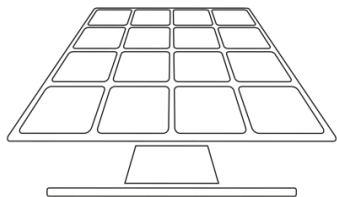
- 
- **Hoofddoel: nul op de meter**
 - Batterij kan klein zijn: 50% van dagverbruik = 5kWh
 - Vermogen: 2kW is genoeg
 - Enkelfase oplossing is goed genoeg
 - **Hoofddoel: geld verdienen**
 - Zwaardere batterij, hoger vermogen
 - Max: 25A=6kW, 3 fasen: 15kW, capaciteit: 2 x vermogen? 30kWh?
 - Bedrijfsmatig: andere overwegingen, bijv 4 uur overbruggen?





Advies: ga er voor zitten.

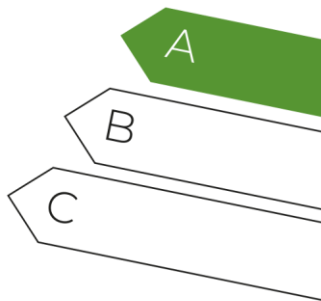
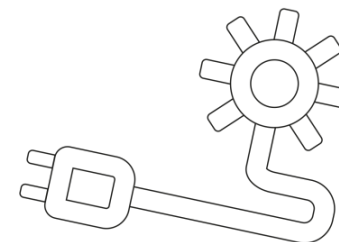
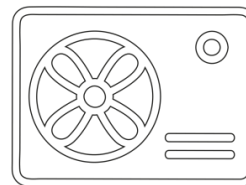
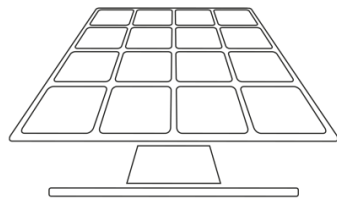
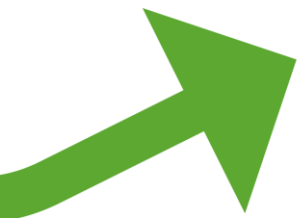
- 
- Bezint eert ge begint.
 - Terugverdienen? Twijfelachtig, geen garantie
 - Denk in systeemintegratie: het moet koppelbaar zijn
 - Verwachting: prijzen blijven zakken
 - Maak dus een plan: wachten loont.
 - Denk na over dynamisch tarief (zeker na 1 januari 2027)
 - Spotmarkt is onzeker, vergt sterke maag.



Waarom zou je het doen?

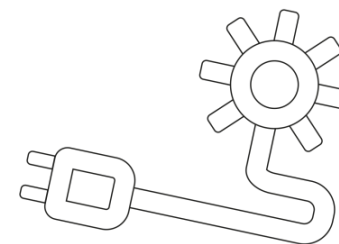
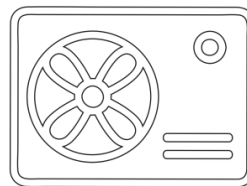
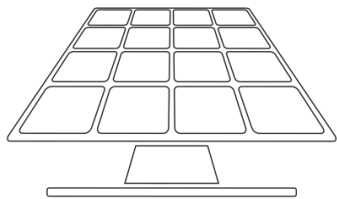
- Motivatie? Kansen stapelen?

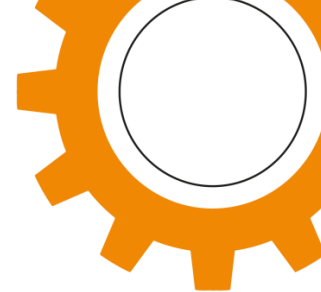
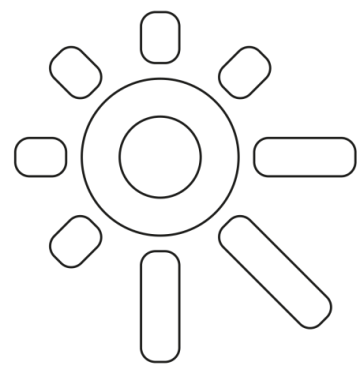
- Terugverdienen? Twijfelachtig...
- Zo veel mogelijk eigen opwek gebruiken: kosten verlagen
- Je wil de transitie versnellen 'goed bezig'
- Willen leren, meedoen, hobby, middelen zijn beschikbaar
- Voorbereid zijn op einde salderingsregeling
- Thuis-Batterij op de zaak is een businesscase
- Bedrijven kunnen wellicht uit met kleinere aansluiting (vastrecht)



Overheidsbeleid is onzeker

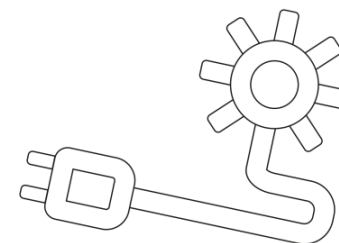
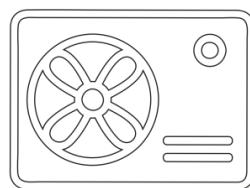
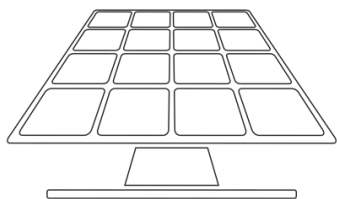
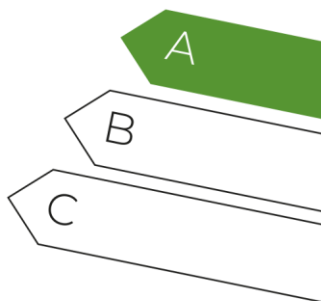
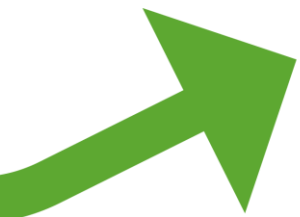
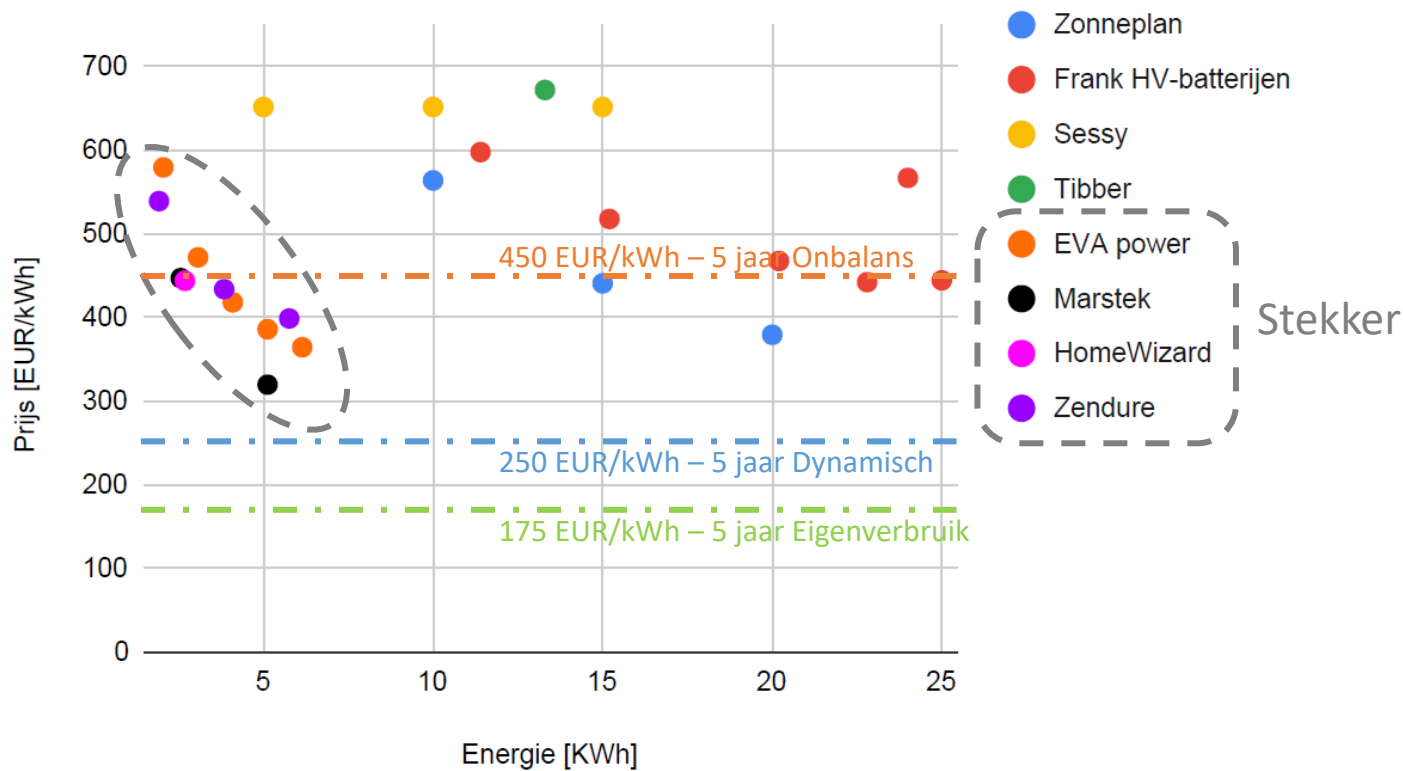
- Wat doet de overheid: welke regeling is er?
 - Dubbele Energiebelasting op teruggeleverde batterijopslag
 - Stimuleringssubsidie (BTW Vrij?)
 - Salderingsregeling nieuwe stijl?
 - Thuis-Batterij op de zaak (zelfstandigen, kleine bedrijven)
 - Betalen naar verbruik (kW, kWh)
 - Onbalans blijft een dingetje (Passief - Actief)

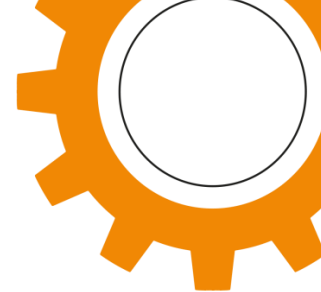
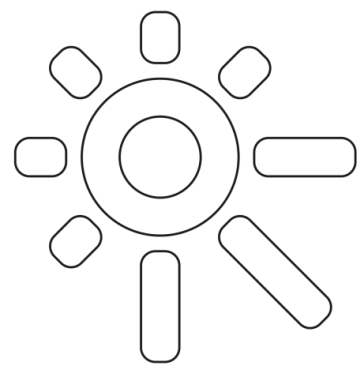




Batterij prijzen per kWh

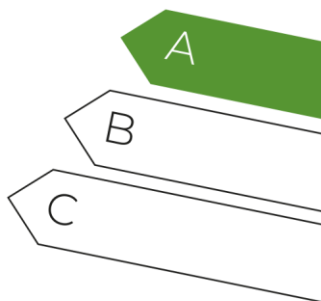
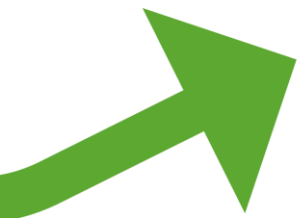
Momentopname januari 2025 (excl BTW)



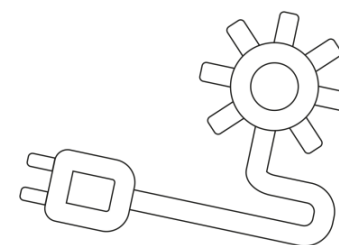
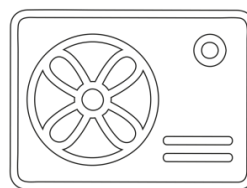
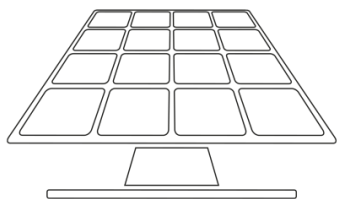


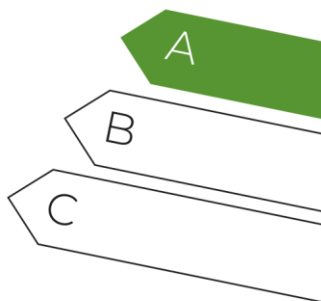
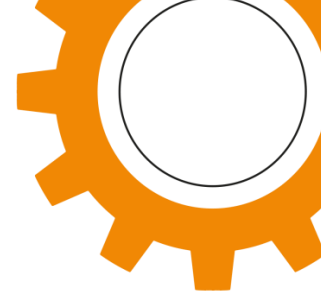
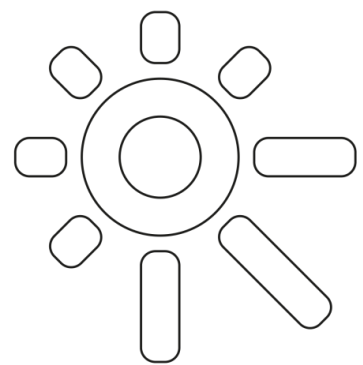
Discussie

- Basisbegrip is nodig
- Zonder nadenken wordt het niks



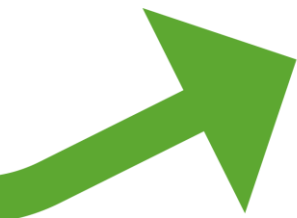
“Pràkkezére kûmp van èrm luuj”



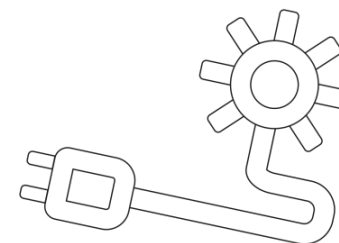
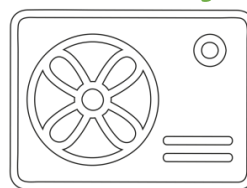
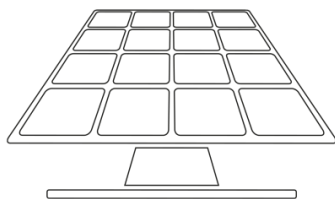


Adviezen,

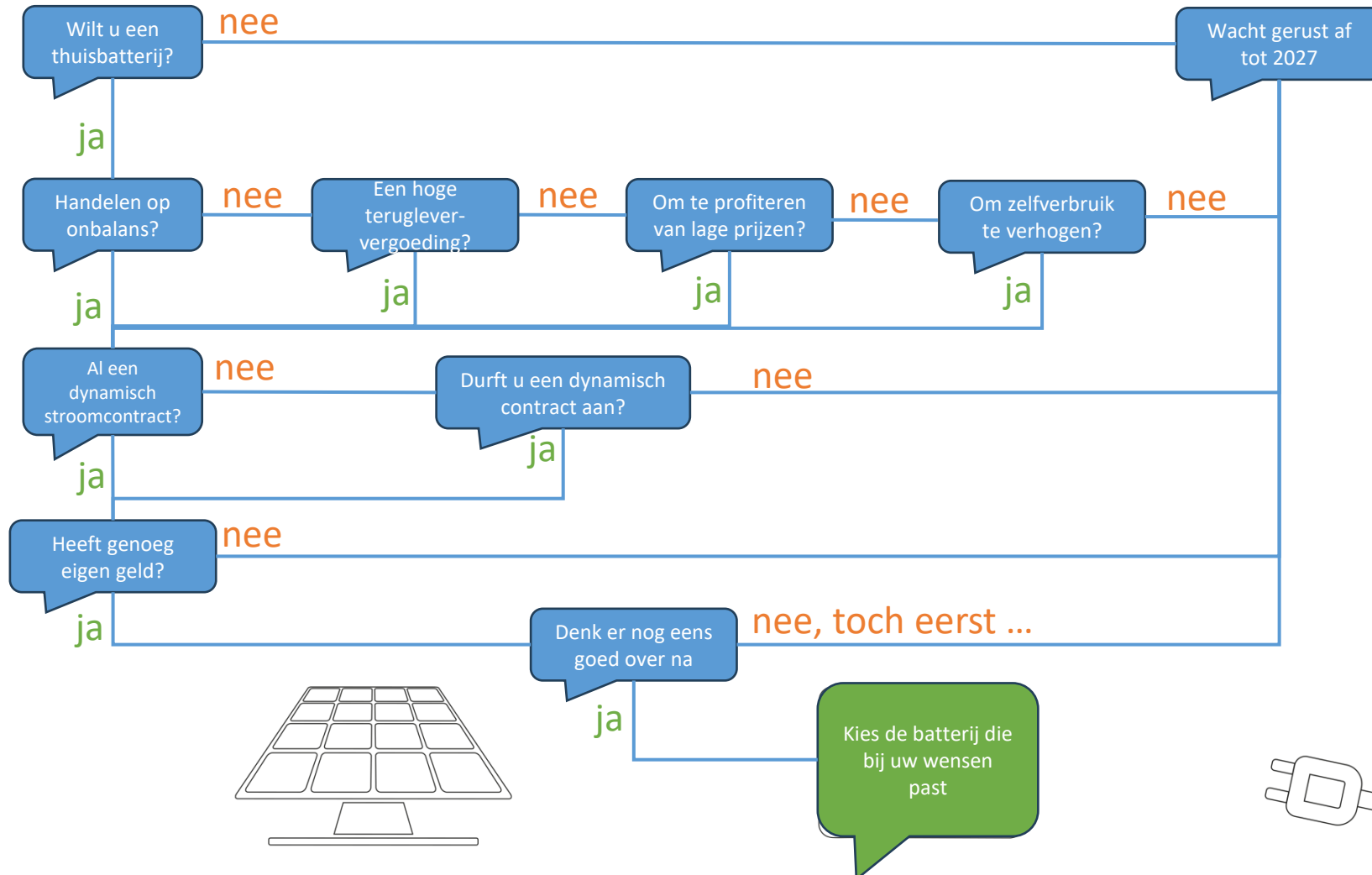
- Koop Hybride Omvormers voor je zonnepanelen
 - Dan kun je alle kanten uit
- Wacht gewoon even af, tenzij..
 - Hobby, ervaring: mag geld kosten
- De Duitsers gaan ons voor...
 - Youtube
 - E3/DC systeem integratie: zon/auto/warmtepomp/batterij/huis

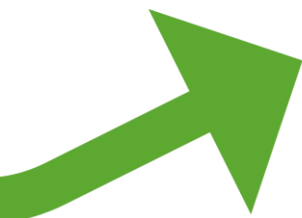
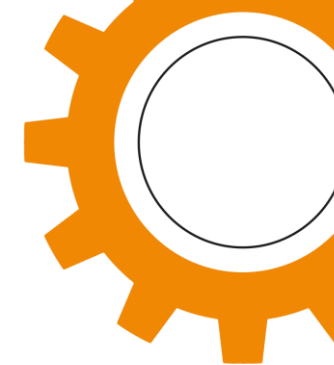
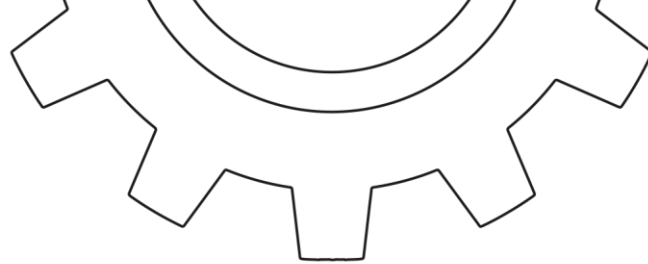
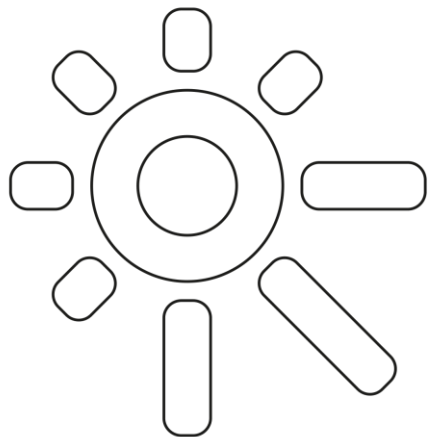


“Pràkkezére kûmp van èrm luuj”

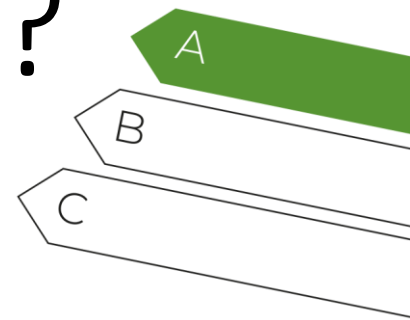


Keuzehulp



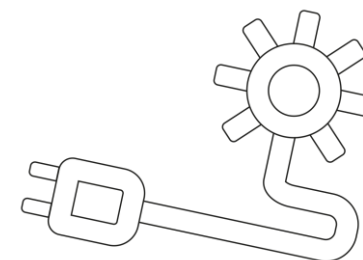
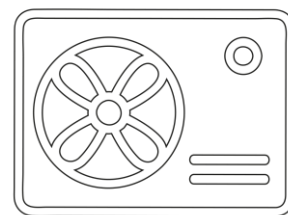
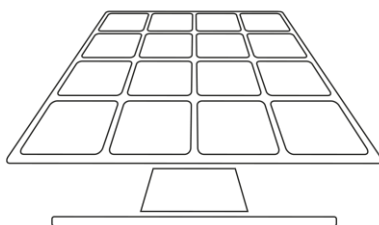


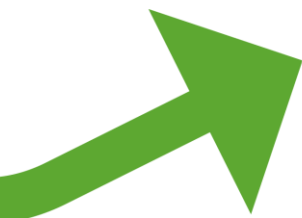
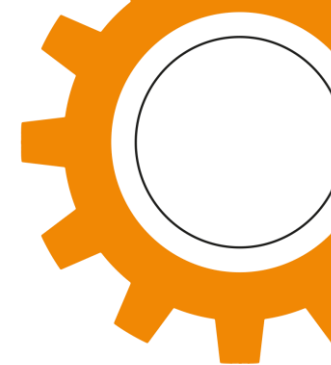
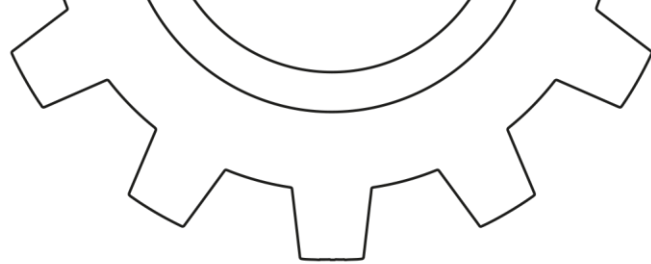
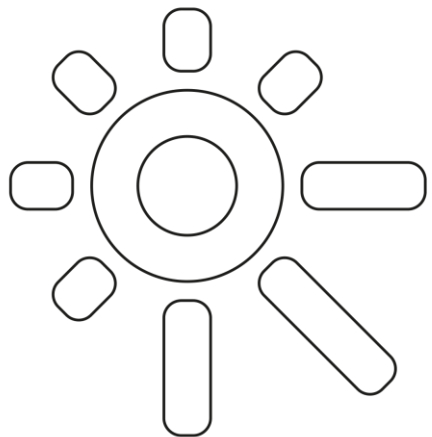
Maakt u de Omslag met ons?



Wilt u een groepje vormen met dorpsgenoten?

Samen werken aan een buurtbatterij?





Maakt u de Omslag met ons?

Wordt Lid

