

A photograph of two young girls, one on the left and one on the right, looking towards the camera. They are positioned behind a large, dark blue solar panel with a white grid pattern. The background is a wall with a large, arched window frame. The girl on the left has braided hair and is wearing a patterned top and a pearl necklace. The girl on the right has braided hair and is wearing a pink shirt. The overall scene is brightly lit, suggesting an outdoor setting.

2018

**ANNUAL REPORT**  
FRES Foundation Rural Energy Services



Installing  
FRES solar  
home system

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## FRES Solar home system installed and in use



## General introduction

Foundation Rural Energy Services (FRES) advances electrification in rural areas in Africa by establishing small-scale, commercially operating utility companies. FRES addresses the UN sustainable development goals by contributing directly to fighting poverty, increasing employment and improving living conditions. Our preference for the use of solar energy to generate electricity means that people use fewer fossil fuels, which benefits the environment. This leads among others to the improvement of living standards and boosts local economies in rural areas. It also increases safety on the streets with more (public) lighting, and results in improvements in healthcare due to the availability of energy in hospitals. In schools there are more opportunities for education while access to communication tools such as radio, television and mobile phones is also improved.

All our companies (FRESco's) are managed by African management and staff. These FRESco's provide households and small businesses with electricity. Our customers are either connected to a mini-grid or use the solar home systems we offer. They pay a fixed amount per month for a service level they can choose and adjust themselves when needed, without having to pay for an expensive solar panel installation upfront or lend money to finance such an investment. The technology we use is robust and generally enables a high service level.

FRES is a small non-profit multinational, founded in 2004 with seed funding from NUON NV (currently Vattenfall), and consists of companies (FRESco's) in Mali, Burkina Faso, Guinea-Bissau, Uganda and South Africa. We fund our activities via grants and subsidies from institutions like the World Bank, OFID and the EU, as well as private donations. FRES holds an ANBI status, which means that it is accepted by

the Dutch tax authorities as an institution that serves the public interest.

By the end of 2018, FRES had 27,737 customers, which means that over 42,027 people in households and local businesses that provide income to local people have access to sustainable electricity. Our operations are supported by a small international staff at our head office in Amsterdam.

FRES is usually one of the larger employers in the rural areas where we operate. We create stable, well-paid and high-value jobs. By the end of 2018, the FRESco's provided direct employment to 227 people and indirectly employed 302 people. By using locally supplied goods and services where possible, a manifold of these numbers is benefitting from FRES' activities as suppliers or subcontractors. All FRESco's contribute to the budgets of governments by paying taxes and duties in accordance with local legislation.

As the training and personal development of local staff is vital to our operations, we encourage cooperation and the exchange of skills and knowledge between FRES companies. We organise this through individual programmes for managers and general training before and during our annual company week in which all general managers participate.

After significant customer growth in recent years, the operational focus moved towards operational excellence as a basic condition for financially sustainable local companies. An adaptation of the governance structure of FRES companies laid the foundation for an improved performance in four key objectives: payment rate, cost performance, customer growth, and financial sustainability.

## Message from the Board

FRES operations continued throughout 2018 – business as usual – but 2018 also brought a number of challenges to our operations in Africa that needed the full attention and awareness of every person in our organisation. The operations over 2018 were influenced by situations like grid encroachment in Uganda and South Africa and the security situation in Mali and Burkina Faso. In Burkina Faso we experienced major administrative challenges in operations and finance. This led to a delay in finishing our annual accounts. Also these circumstances put pressure on our local staff and the population in the areas in which we operate, as well as on our head office in Amsterdam.

We do not see grid encroachment as a threat. On the one hand, the availability of a reliable national grid will help the population develop new initiatives and will stimulate local economies. On the other hand, there are many areas left where a grid connection will not be possible for years to come. With mini-grids and SHS packages, FRES companies are well equipped to offer solutions which contribute to basic needs and economic development in these areas.

The security issue has not improved in 2018. This prohibits safe travel to and direct

contact with our local operations in Mali and Burkina Faso. It also prohibits our local staff from conducting business normally and contributing to a better society. This means that we have to spend more time and effort on basic management issues; time which cannot be dedicated to our business and the further growth of the number of people in the area who can rely on a sustainable energy. We stay in constant contact with our African operations and have safety and security protocols implemented in each company.

In Mali, we are in constant talks with the government and Amader (the local utility company) regarding the handover of a number of our activities to the government. We reached an agreement and are now awaiting further steps. This does not mean that we want to leave the country, however, as there is still sufficient demand for our services. With this in mind, we are looking for new concession opportunities, but we can only move forward when sufficiently supported by the authorities.

Financially, we see that our companies are slowly becoming more sustainable as a result of the constant efforts of our local staff to



*Win Plaizier Chairman of the Board*

optimize the number of paying customers while driving down operational and replacement costs. Revenues excluding NuRa (non-consolidated) increased to € 3,244 million (2017: € 3,206 million).

Our overall OPEX level remained stable at € 5,734 million (2017: € 5,711 million). As our income from fundraising was at a considerably lower level at € 0,498 million (2017: 1,955 million) our EBITDA over 2018 decreased to – € 1,442 million (2017: – € 0,550m million).

In terms of the number of customers we serve, we saw a decrease from 31,263 to 27,737

customers. When we eliminate the negative effect of grid encroachment especially in South Africa of 3,526 customers. We acquired a net total of 241 new customers. In general terms churn, although strongly influenced by general economic factors, remains a main focus point in our operations.

As heavy grid encroachment continued at NuRa in 2018 and 2019 it became clear that the operations in the current form were no longer economically sustainable. This ultimately led to a strategic initiative that resulted in selling the company early 2020.



*Annemarie Goedmakers, Caroline Nijland, Coen de Ronde and Martijn Schootstra*

In Uganda, we tested the concept of mobile payment for our customers. We are now implementing this on a full scale throughout the country, while looking to implement it in the other FRESco's as well. The technology is easy and safe to use for our customers, and helps us improve efficiency and enhance payment discipline, while further preventing cash fraud in our operations.

With regard to fraud and other possible irregularities, we introduced a Code of Conduct for all FRES staff in Africa and Amsterdam. The code can be found online via <https://www.fres.nl/organisation/#Code>. A whistleblowing procedure was adopted as well, enabling staff to report issues through the following email address: [fcc@fres.nl](mailto:fcc@fres.nl).

This email account is read directly by members of the Board.

Looking forward, we intend to expand our operations as agreed with our highly appreciated funding partners regardless of the challenging conditions. We are seeking new investment opportunities in the countries where we currently operate, and consider expanding to a new country as well. We also aim to improve the efficiency and effectiveness of our operations via low-key technical innovations and, in the longer term, by means of new standardised IT.

All developments require constant efforts from our dedicated staff and volunteers. Without them, all this would not be possible.

We will continue the process of providing them with additional training to enhance their skills.

The year 2018 also marked significant developments in the governance of our organisation, through changes in leadership and structure.

Three prominent people left the FRES organisation in 2018. In May, FRES Managing Director Caroline Nijland left. Caroline was with FRES in a number of functions from the start, and helped expand our activities in Africa and establish a dedicated support organisation in Amsterdam. Coen de Ronde took over as Managing Director from 1 June. FRES Chair Annemarie Goedmakers left the organisation in May. Annemarie was the founder of the FRES initiative and chaired FRES for 14 years. She will be remembered as an exceptionally inspired and driven person, who shaped FRES' activities with endurance and total commitment. Wim Plaizier took over as Chair.

In December 2018, Joop Lasseur, who significantly contributed to improving the daily operations of the FRES companies, left as a Board member. He was replaced by Serge Leijten who returned to the Board to ensure institutional knowledge within the key supervising body of the company is maintained.

In the second half of 2018, the governance of FRES was adapted via a merger of the Executive Board and the Supervisory Board into one Board. In addition, Coen de Ronde was appointed as Statutory Managing Director to lead the central team in Amsterdam and supervise the daily operations of the FRESco's. The Director reports directly to the FRES Board. Supported by a small and dedicated team in Amsterdam, the Statutory Managing Director

of FRES is also the Chair of each Supervisory Board of the local FRES companies in Africa. With the new structure, the FRES organisation is ready for years to come.

On June 4, 2018, the Board adopted the financial statement 2017 and approved the 2017 annual report. The auditors issued their independent auditor's report, and the Board granted the former Executive Board discharge over 2017. In the same meeting, the Business Plan 2018-2022 and the annual budget for 2018 were discussed and approved.

Reviewing the performance of 2018, the Board is satisfied with the results and saw general improvements in the way in which FRES operates. The team handled the many and important senior staff changes, and despite the challenging circumstances, the operational and financial results over the year remained in line with the expectations. The focus clearly remained on serving customers, while continuously improving business processes with new initiatives such as mobile payments. With these steps we aim at improving our internal controls within our companies.

The Board wishes to thank all employees, donors, suppliers, volunteers, and customers for their continued high level of commitment and their contributions in 2018.

*Amsterdam, June, 30, 2020*

**Board of FRES**

- Wim Plaizier
- Serge Leijten
- Paul Gaalman
- Lidwien Schils
- Peter Smink
- Wim Sinke
- Paul Hol
- Sophie Dingenen

Newly installed solar-panels



## Key operational figures 2018



**5**  
companies

**5**  
countries

**27,737**  
customers

**227**  
staff (direct)

**302**  
staff (indirect)

**46,572,000**  
cumulative gross investments in Euros since the start of Fres

**3,387**  
installed solar capacity (kWp)

**Yeelen Kura**  
7,644 customers  
👤 57 👤 29  
€ 12,678,000  
1244 kWp

**FRES Uganda**  
5,703 customers  
👤 68 👤 116  
€ 4,423,000  
864 kWp

**FRES Guinea-Bissau**  
4,681 customers  
👤 32 👤 80  
€ 3,918,000  
598 kWp

**Yeelen Ba**  
3,051 customers  
👤 25 👤 32  
€ 4,494,000  
225 kWp

**NuRa**  
6,653 customers  
👤 45 👤 45  
€ 21,059,000  
456kWp

👤 Staff (direct)  
👤 Staff (indirect)

# 01

## Overview 2018



FRES  
companies  
enable  
evening school

## 1.1 General remarks and financial overview

FRES has been providing a better and cheaper alternative via solar powered electricity for over 15 years now. Gradually, the market for solar systems as consumer goods is developing both in cities and in rural areas.

Our proposition offers services comparable to that of a western utility: high-quality service with guaranteed maintenance including lamps at a reasonable monthly all-inclusive fee without upfront costs.

As FRES is a non-commercial organisation, electrification by local authorities is a goal instead of a threat. But despite the arrival of the national grid, some customers may still prefer the high reliability of our services or using them as a back-up system for the grid connection. Nonetheless, for most people in rural areas, small villages and around small cities, the national grid will remain too distant to offer a connection at reasonable costs for years to come.

Our fully owned subsidiaries Yeelen Kura in Mali, Yeelen Ba in Burkina Faso, FRES Guinea-Bissau and FRES Uganda are consolidated in our annual accounts. NuRa in South Africa is not consolidated in the annual accounts, as the

shares are held by Vattenfall, the Netherlands. Vattenfall holds 80% of the shares in Nura. FRES manages Nura on behalf of Vattenfall. This is based on a management agreement. For this reason, this company's activities and results are included in this board report.

### Installed capacity

At the end of 2018, FRES companies had an installed capacity of 3,387 MW for their customers – an decrease of 183 MW compared to 2017. This is mainly due to the large number of disconnections at NuRa over the year.

### Operational excellence

After a period of expanding our networks and installing Solar Home Systems, the FRES Board decided it was time to increase our focus on realising the financial sustainability of the FRES companies.

The first hurdle in this effort is becoming cash positive in our daily operations. Generally, this is achieved by improving the payment rate while maintaining a high quality of service for our customers.



FRES:  
replacement of  
lamps included

### Objectives 2018

For 2018 we had the following objectives:

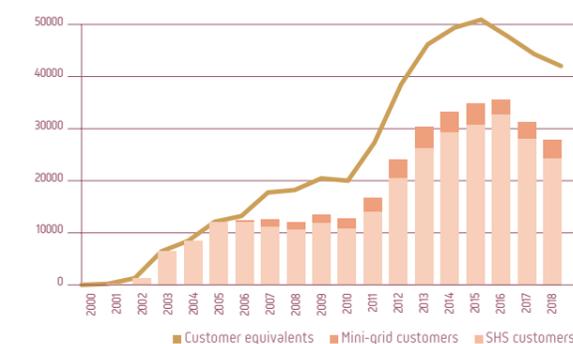
- Improving financial sustainability
- Expanding the customer base
- Realising an adequate payment rate for our services
- Minimising operational and replacement costs

### Results

#### Customer base

In 2018, our customer base decreased from 31,263 to 27,737. We lost 3,526 customers mainly due to

Number of Customers 2018



grid encroachment in South Africa (NuRa). We note that as the national grids are still far from reliable, our assets continue to be used as back-

up systems. The significant loss of customers at NuRa required us to evaluate the future of the company.

Although we experienced a high customer churn in 2018, we managed to connect 2,296 new customers to partly make up for the loss of customers (not including South Africa).

#### Payment rate

Overall, the payment rate increased in 2018, but the revenue is still negatively affected by the consequences of the customer base clean-up by disconnecting services and repossessing systems of non-paying customers.

#### Revenue

Our revenue from services amounted to € 3,244,251 (2017: € 3,206,364). Income from fundraising during 2018 was € 498,658 (2017: € 1,955.024). This was mainly due to a lower level of EU grants than in 2017.

#### Opex and replacement costs

Overall our OPEX was relatively stable at € 5,734,339 (2017: € 5,711.102).

#### Operating result

The EBITDA decreased to -€ 1,991,430 as a result of the lower level of proceeds from fundraising. During 2018 there was no need to provide funding for the FRESco's operations. The FRES Board decided that it is necessary to accelerate initiatives to improve efficiency in the operations and proactively manage churn to a more acceptable level, as high churn drives up OPEX. Measures include amongst others client acceptance procedures and the introduction of mobile payments in all FRESco's.

## Review engagement PwC

In previous years, the annual accounts of the foundation were audited and PwC issued an independent auditor's report in accordance with the Standard for annual reporting 650 'Charity organisations' of the Dutch Accounting Standards Board. The foundation is a charity organisation (not-for-profit). In accordance with article 297a, subsection 1, and with article 360, subsection 3, Book 2 of the Dutch Civil Code, the foundation is not legally required to be audited. In 2018, the share of the operational activities of the FRESOs in the consolidated annual accounts increased significantly. As PwC does not audit these FRESOs, it was not possible for PwC to obtain sufficient audit evidence on the consolidated annual accounts 2018 as a whole to issue an auditor's report. Subsequently, the Board requested PwC to change the engagement into a review engagement to be undertaken in accordance with Dutch Standard 2400 'Engagements to Review Annual accounts'. This standard requires PwC to conclude whether anything has come to its attention that causes it to believe that the financial statements, taken as a whole, are not prepared in all material respects in accordance with the applicable financial reporting framework. A review of financial statements in accordance with Dutch Standard 2400 is a limited assurance engagement. PwC performed procedures, primarily consisting of making inquiries of management and others within the foundation, as appropriate, and applied analytical procedures, and evaluated the evidence obtained. The procedures performed in a review are substantially less than those performed in an audit conducted in accordance with Dutch Standards on Auditing. Accordingly, PwC did not express an audit opinion on these financial statements.

## Customer development in 2018

	NuRa	Yeelen Kura	Yeelen Ba	FRES Uganda	FRES Guinea-Bissau	FRES Total
Customer base 2017	10,420	7,480	3,345	5,238	4,780	31,263
New customers	107	463	0	1,499	227	2,296
Cancelled customers	3,874	299	294	1,034	321	5,822
Net customer growth 2018	-3,767	164	-294	465	-94	-3,526
Customer base 2018	6,653	7,644	3,051	5,703	4,686	27,737

## Short-term performance indicator

% of operating expenses current replacement and reinstallation costs covered by revenues

	2014	2015	2016	2017	2018
NuRa	102%	98%	78%	67%	98%
Yeelen Kura	122%	138%	132%	168%	153%
Yeelen Ba	51%	113%	133%	88%	90%
FRES Uganda	71%	92%	91%	103%	118%
FRES Guinea-Bissau	84%	137%	176%	137%	138%
<b>FRES consolidated</b>	<b>93%</b>	<b>111%</b>	<b>105%</b>	<b>103%</b>	<b>121%</b>

## Long-term performance indicator

% of operating expenses current and planned future replacement and installation costs covered by revenues

	2014	2015	2016	2017	2018
NuRa	87%	79%	59%	46%	63%
Yeelen Kura	69%	69%	61%	62%	63%
Yeelen Ba	39%	81%	65%	56%	51%
FRES Uganda	66%	54%	66%	70%	82%
FRES Guinea-Bissau	54%	74%	108%	98%	75%
<b>FRES consolidated</b>	<b>70%</b>	<b>71%</b>	<b>67%</b>	<b>61%</b>	<b>67%</b>

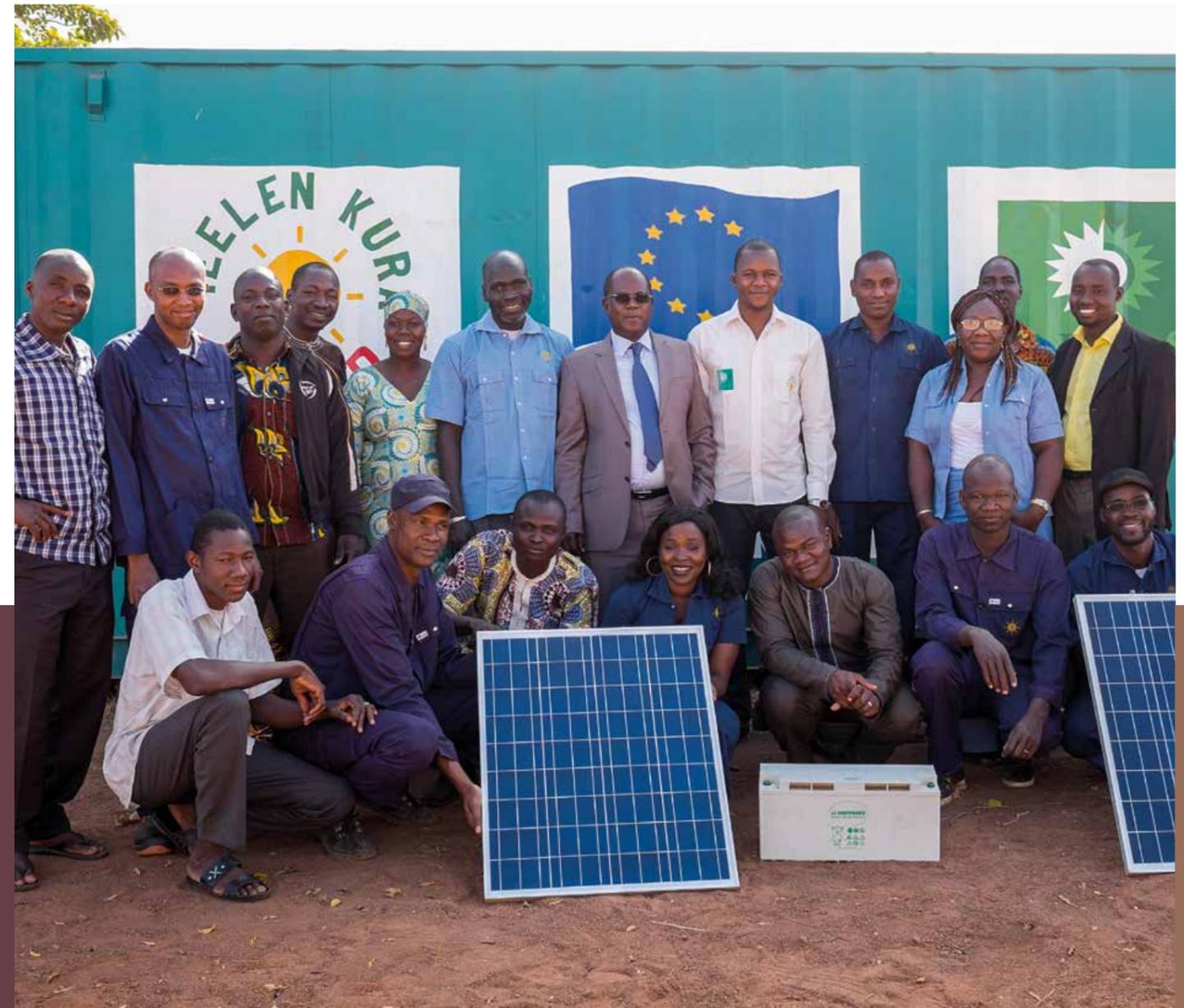
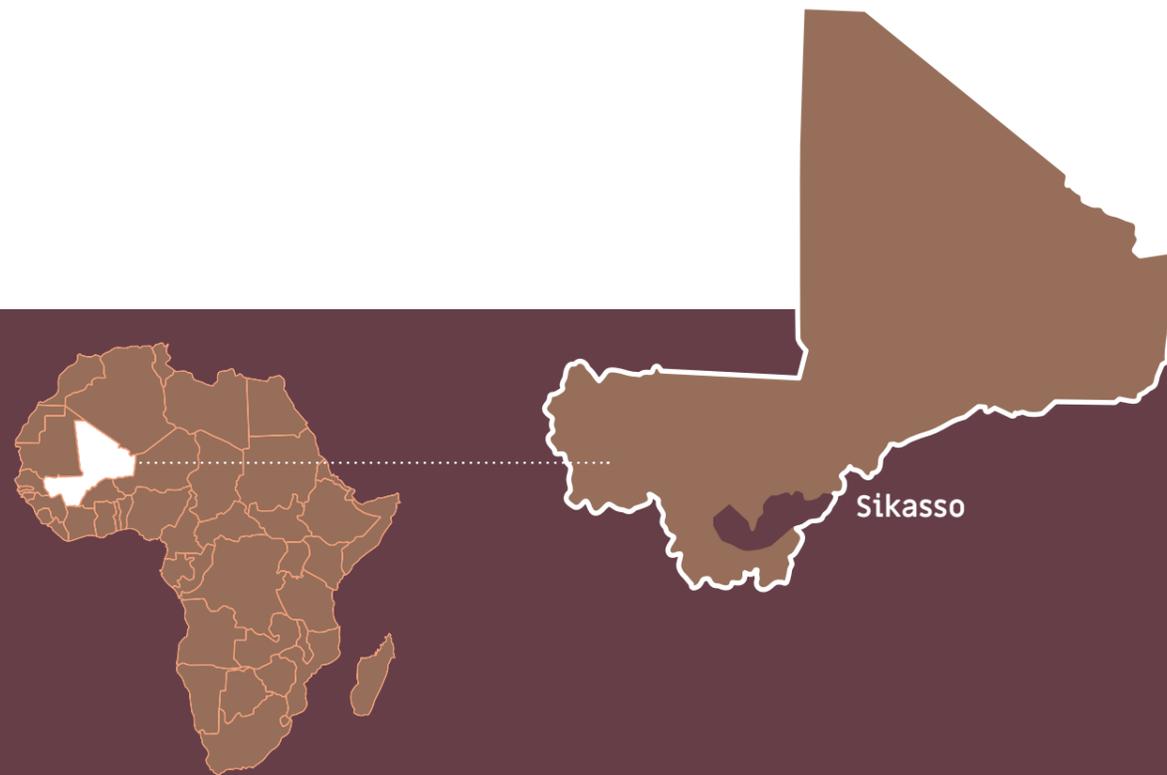
## Solar capacity per SHS customer (in Wp)



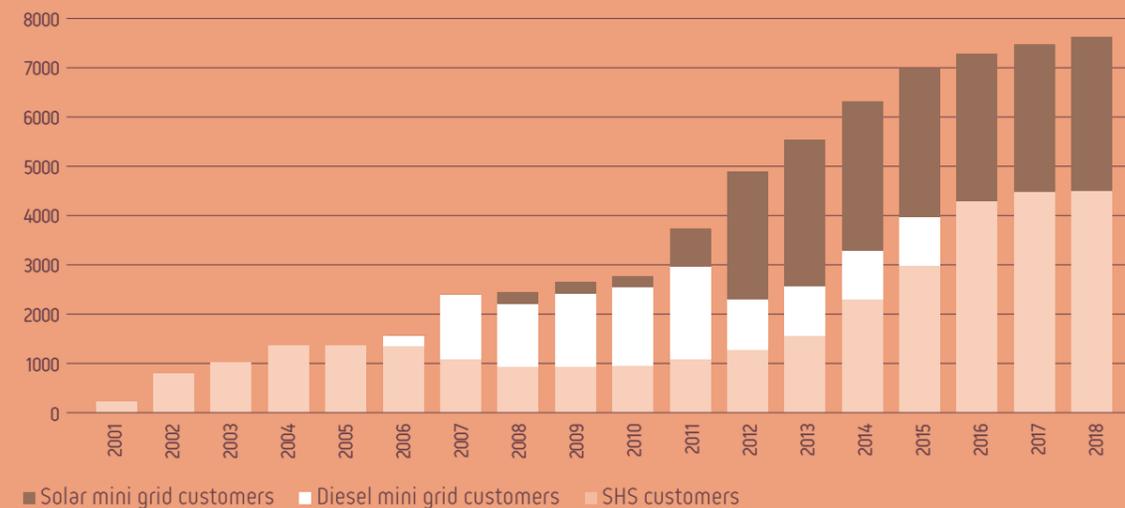
## Mini-grid generation and consumption (in MWh)



# 1.2 YEELLEN KURA MALI



Number of customers



## General information

Shareholder	100% FRES
Board of Directors	Coen de Ronde, Djibril Séméga, and Jolan Dalati
General Manager	Djibril Séméga
Governance	Local Board
Year founded	2001
Products and services	SHS, solar mini-grids, solar water pumps
Number of employees	57
Number of customers	7,644 in total of which SHS: 4,482 and solar grid: 3,162
Number of energy stores	17

## Situation

Mali has over 19 million inhabitants and is currently 182nd out of 189 on the 2018 UNDP Human Development Index. The country was long regarded as a model for African democracy until rebellion activities in the North arose and the military seized power in March 2012. In July 2013, the UN peacekeeping mission in Mali known as MINUSMA began operations on the ground, and in August 2013, presidential elections formed the start of a return to civilian rule. Although a peace agreement was signed in 2015, the Malian government has been unable to retake control of several

regions which remain in the hands of armed fighters, including some with ties to Al-Qaeda. The presidential election in Mali was held in July 2018 and reconfirmed the position of the government.

There is no generally reliable electricity service available as the coverage of the national grid is limited to 36% of the country. Although the percentage is increasing, still just 18% of the rural population in Mali has access to electricity. Opportunities for substantially improving the quality of life in the country are hindered by the political situation. Security, critical to economic recovery and poverty reduction, remains fragile.

FRES company Yeelen Kura has been active in the southern provinces of Sikasso and Ségou (bordering Burkina Faso) since 2001. The head office is located in Koutiala. Yeelen Kura ('New Light' in the local language Bambara) supplies lighting and electricity to households and small businesses via Solar Home Systems (SHS). Furthermore, in larger villages, Yeelen Kura provides customers with electricity via solar powered mini-grids with a diesel back-up.

## Products, services and rates

### Rates

In 2018, SHS customers paid an amount of 3,500 FCFA (€ 5.34) to 13,475 FCFA (€ 20.54) a month for the services of Yeelen Kura depending on the chosen service level.

*Customers of mini-grids* are charged per kWh. In 2018, the tariff remained at 250 FCFA/kWh (€ 0.38) for the solar mini-grids. These rates are insufficient to cover lifecycle costs. Although preliminary discussions and promises were encouraging, the threat of the nationalisation of five mini-grids has put the tariff negotiations with AMADER on hold.



## FRES minigrid Yorosso Koury

## Challenges

Upon the Malian government's decision in mid-June 2016, the mini-grid in Bla was effectively transferred to the national energy company EDM SA, leaving Yeelen Kura with nine solar and/or hybrid mini-grids. Eight of these nine mini-grids still remain at risk of being transferred to EDM SA today. The main challenge in 2018 was the process of potentially handing over assets claimed by the government – a process that is still ongoing. Yeelen Kura aims to both avoid damages and ensure adequate reimbursement for negative effects on the business, while continuing to provide reliable service to our customers.

In order to remain financially sustainable, Yeelen Kura needs to attract new customers. This means that following the event of the expropriation of the Bla mini-grid and potential expropriation of another eight mini-grids, new concessions and conditions for concession agreements need to be negotiated to enable future investments. This means that every new investment in Mali needs to be subject to a new authorisation contract covering the municipality where the mini-grid is to be installed and its surrounding villages. This way, we can minimise the damages that could be caused by asset transfers.

FRES Yeelen Kura resumed investments in Mali in 2018 and built a 75 kWp mini-grid in the village of Diaramana. The village was carefully chosen as not to be located in a zone threatened by the nationalisation process.

In the first quarter of 2019, we connected 300 households and businesses that will be able to benefit directly from electricity and public lighting. Investments in four other new grids are due in 2019 and 2020. With these investments, we could potentially connect another 1,100 customers who will then be able to benefit from public lighting.



## Operational highlights

### Number of customers

Yeelen Kura had 7,644 customers by the end of 2018, including 3,162 SHS customers. As for the mini-grids, Yeelen Kura had a total of 3,131 customers by the end of 2018; 150 more customers than in 2017. This is mainly due to households and small businesses being connected to the new grid in Diaramana.

### Payment rate

Priority is on creating a portfolio of well-paying customers via customer acceptance procedures and by applying strict debt monitoring and a

cancelation policy in case of non-payment. Following contractual procedures, SHS customers who do not pay their service fee are disconnected after two months, and the installation is reused for new customers. Yeelen Kura also installed pre-paid meters for mini-grid customers. Yeelen Kura achieved an average payment rate of 96% over 2018.

## Investments

Investments in 2018 totaled € 0,722 million and were related to the construction of a new minigrad in Diaramana which lies well outside the nationalization zone.

## Financial sustainability

Yeelen Kura's short-term cost coverage decreased from 168% in 2017 to 153% in 2018. Long-term cost coverage increased slightly from 62% in 2017 to 63% in 2018. Underpriced tariffs for mini-grid customers still led to insufficient revenue for long-term financial sustainability.

## Personnel

Number of employees	57
Male / female	53/4
Permanent / temporary contracts	57/0
Fulltime / part-time	57/0
Inflow / outflow men	4/4
Inflow / outflow women	1/0
Employees aged 15-24	1
Employees aged 25-34	22
Employees aged 35-54	31
Employees aged 55 or over	3
Number of men / women in MT	4/0
Number of male / female store managers	14/2
Number of male / female interns	4/2

## Workforce profile Yeelen Kura 2018

### Salary and terms of employment

In addition to salary, Yeelen Kura offers its employees pregnancy and maternity leave, pension provisions, life insurance and social security, and a compensation for working night shifts. The entry level wage of an employee in the lowest employment category is the legal minimum which was 40,000 FCFA (€ 61) at the start of 2018. All employees had at least one performance evaluation in the previous year, and no grievances were recorded.

### Health, Safety and Environment (HSE)

In 2018, sick leave totalled 117 days, mainly due to one employee being very seriously ill.

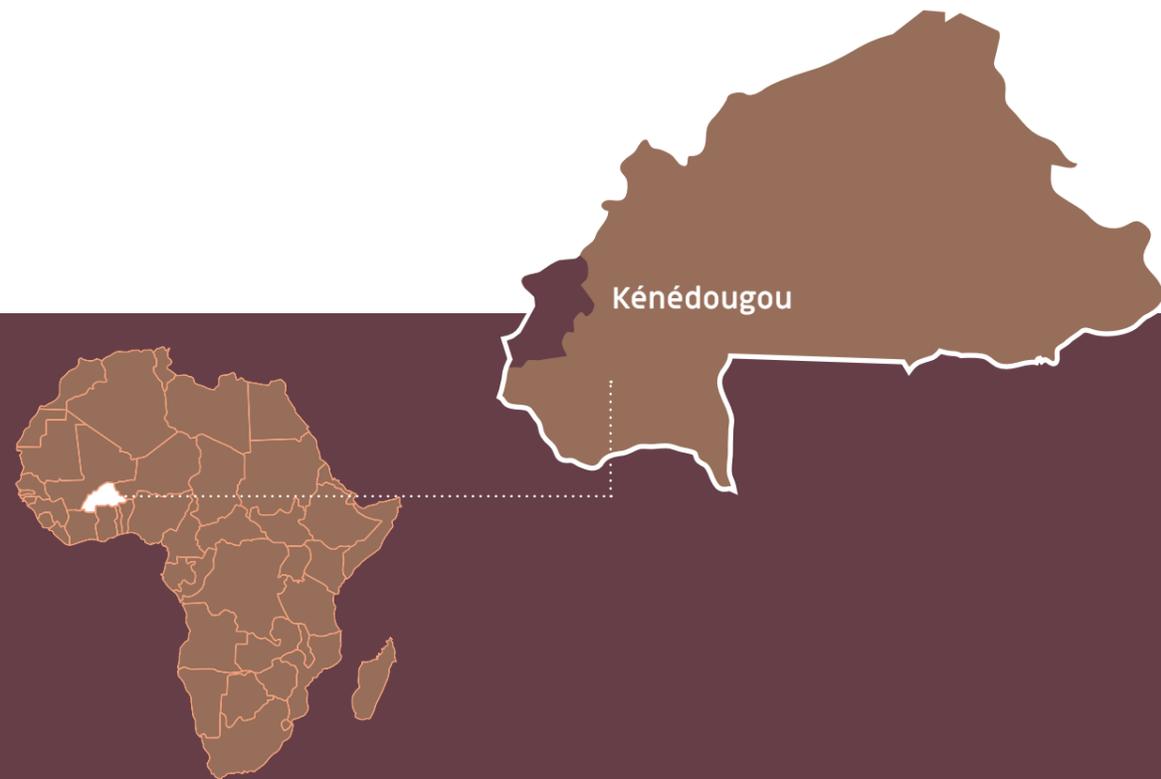
### Staff development

In 2018, five employees received a one-day training related to the new financial accounting software.

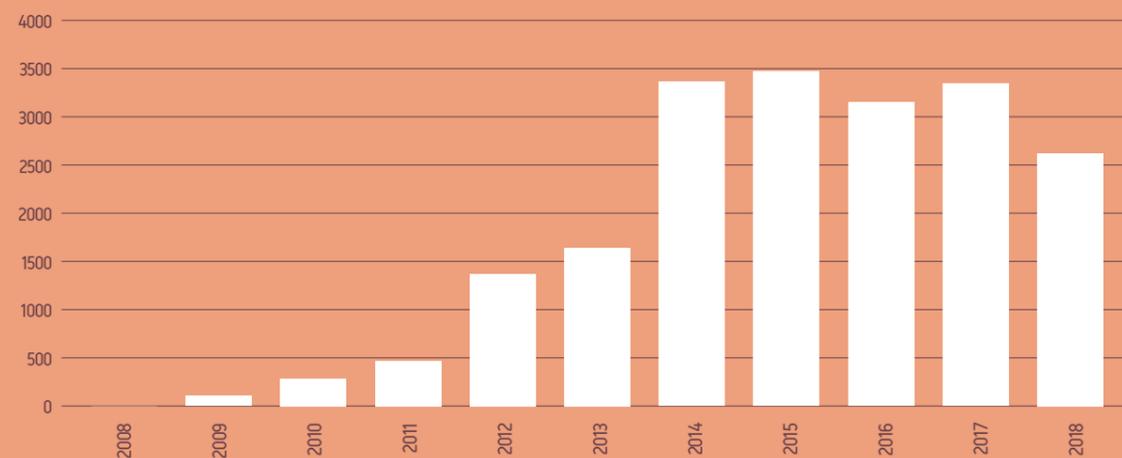
## Other information

Yeelen Kura is exploring the possibility of supplying solar water pumping services for crop irrigation and community access to water. In 2018, a pilot was started in a farmers' cooperative in the village of Nimbougou to supply a small irrigation system covering 1.5 hectares of cultivated land. The installation consists of a deep well, a solar powered water pumping station, a water storage tank and a water distribution network. It replaces the traditional hand pumps and occasional diesel-powered pumps, and enables crop irrigation throughout the year, in a sustainable manner. The project was funded by the VIVACE foundation.

# 1.3 YEELLEN BA, BURKINA FASO



Number of customers

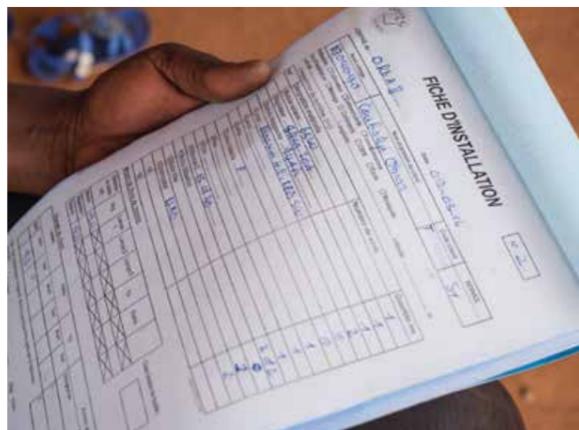


General information

Shareholder	100% FRES
Board of Directors	Coen de Ronde, Bourama Keita, and Jolan Dalati
General Manager	Bourama Keita
Governance	Local Board
Year founded	2008
Products and services	SHS
Number of employees	25
Number of customers	2,623
Number of energy stores	13

Situation

Burkina Faso is a landlocked Sub-Saharan country with more than 20 million inhabitants. The country ranks 183rd out of 189 in the 2018 UNDP Human Development Index. The economy is heavily reliant on agriculture, mainly cotton. Burkina Faso has suffered from recurring droughts and military coups and, most recently, from terrorist attacks. In December 2018, the government of Burkina Faso declared a six-month state of emergency in the entire East and Sahel regions, and in the province of Kenedougou in the Hauts Bassins region where Yeelen Ba operates.



## Extra focus on administration

Merely 4% of the rural population has access to electricity.

Yeelen Ba is active in the province of Kéné Dougou, an area with over 500,000 inhabitants. It lies just across the border from the area in Mali where Yeelen Kura is active. Yeelen Ba supplies lighting and electricity by installing SHS in households and small businesses.

### Products, services and rates

#### Rates

In 2018, Yeelen Ba provided three SHS service levels at a rate between CFA 3,845 (€ 5.86) and CFA 9,050 (€ 13.80) a month.

### Challenges

Growth of the business is the main challenge for Yeelen Ba. Additional funding for a further expansion of the customer base needs to be secured as soon as possible in order to reach an economically acceptable company size and secure services for the customers in due course.

### Operational highlights

#### Number of customers

It became clear to the newly appointed management in 2018 that there were administrative differences in our financial and

operational systems. Therefore the financial and operational figures needed to be adjusted. In order to improve insight, Yeelen Ba set up a call centre to collect all the customer complaints and ensure a better handling process. In 2018, nearly 900 complaints, largely related to power cuts and blown lamps, were handled and, by the end of December 2018, over 80% of the complaints were solved by adapting the level of service to the usage of the customer on the one hand, and replacing small materials where needed on the other. It also resulted in a customer write-off of more than 700 customers due to prolonged non-payment of service fees and a stricter application of internal procedures. At the end of 2018, the company counted 2,623 customers.

### General comment

After closure of the books over 2018 it became clear that there were a number administrative differences which were also related to prior years. The differences were corrected in the annual figures of 2018.

### Payment rate

Yeelen Ba reached a payment rate of 93% in 2018, a solid increase compared to the 85% achieved in 2017. This improvement in payment rate is due to a focus on the collecting processes and the related clean-up of the customer base.

### Investments

Investments amounted to € 56.264 and were related to general IT and transport (motorbikes, vehicles) to replace the existing aging fleet.

### Financial sustainability

The company's short-term cost coverage increased from 88% in 2017 to 90% in 2018. Yeelen Ba suffers an extensive cashflow issue which is mainly due to the low number of customers. Long-term sustainability decreased from 56% in 2017 to 51% in 2018. The company needs at least 6,000 customers and a steady payment rate of 95% to be financially sustainable.

### Personnel

Number of employees	25
Male / female	20/5
Permanent / temporary contracts	13/12
Fulltime / part-time	25/0
Inflow / outflow men	2/6
Inflow / outflow women	0/0
Employees aged 15-24	0
Employees aged 25-34	19
Employees aged 35-54	5
Employees aged 55 or over	1
Number of men / women in MT	3/1
Number of male / female store managers	11/2
Number of male / female interns	1/0

### Workforce profile Yeelen Ba 2018

#### Salary and terms of employment

Employees receive a fixed salary. The legal minimum wage in Burkina Faso was FCFA 33,139 (€ 51) a month in 2018. The salary of a fulltime employee in an operational function at Yeelen Ba was FCFA 57,000 (€ 87) a month. Yeelen Ba provides its employees with health care insurance, social security, disability insurance,

pregnancy and maternity/paternity leave, and pension provisions. All employees had at least one performance evaluation in 2018. The number of grievances was 19, with staff requesting new motorbikes among others. In general requests were granted and grievances resolved.

#### Health, Safety and Environment (HSE)

In 2018, the total number of sick days was 15, which included two motorbike accidents in the rainy season. Enforcing the compulsory use of helmets on bikes limited the gravity of the injuries.

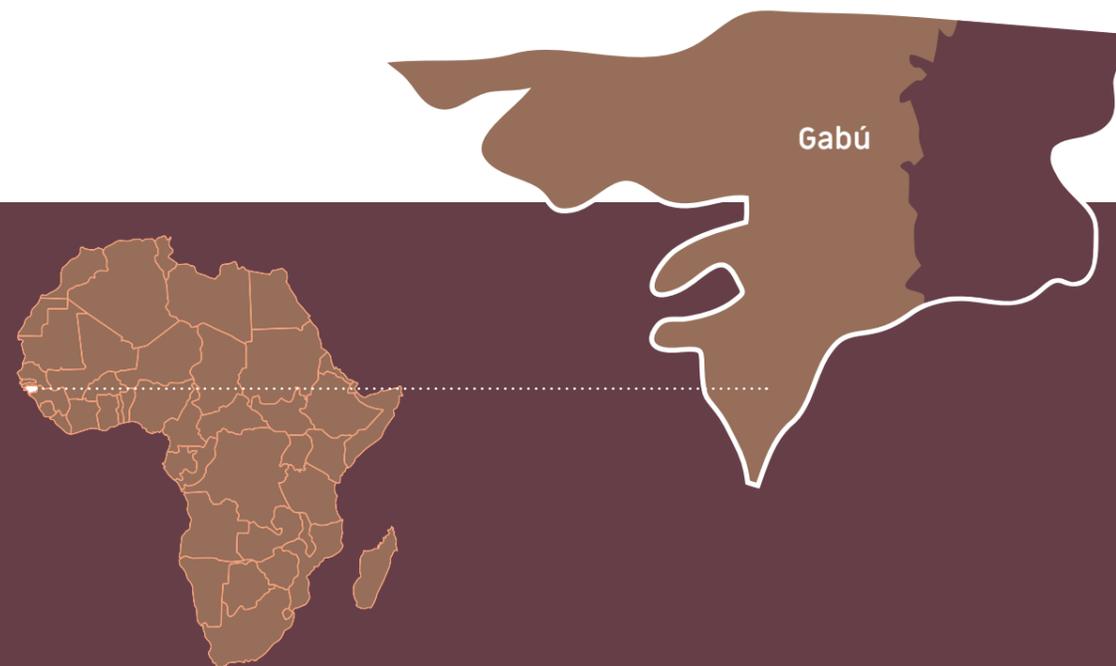
#### Staff development

Every month, a one-day staff meeting is organised by the MT to provide continuous training on how to deal with customer complaints, provide technical assistance and maintenance, and improve staff awareness with regards to health and safety procedures.

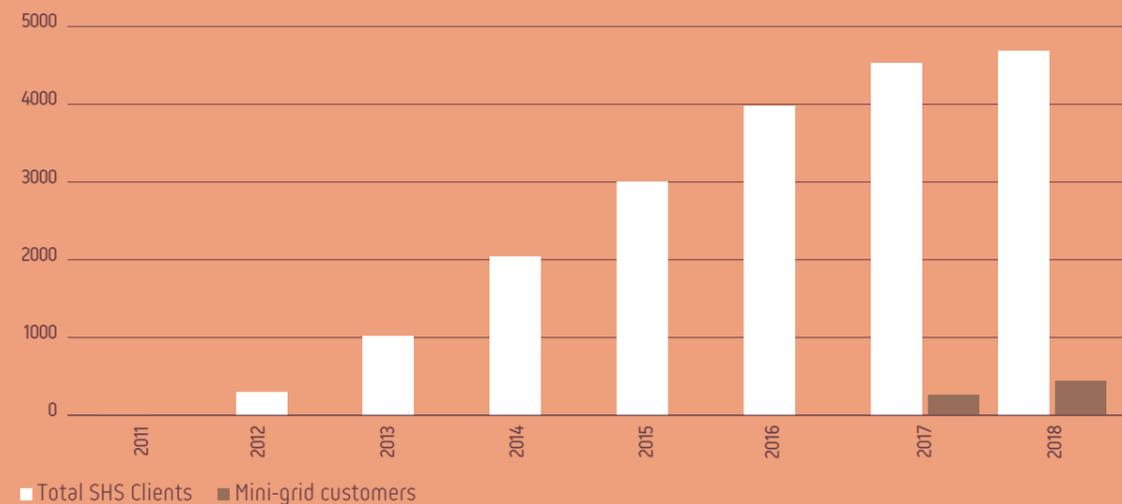
### Other information

FRES will investigate the possibilities to expand the customer base to the level needed to operate. As described above, this mainly depends on arranging new funding from third parties.

# 1.4 FRES GUINEA-BISSAU



Number of customers



General information

Shareholder	100% FRES
Board of Directors	Coen de Ronde, Archives Fernandes, Tamara Borges, Jolan Dalati
General Manager	Archives Fernandes
Governance	Local Board
Year founded	2011
Products and services	SHS, solar mini-grid
Number of employees	32
Number of customers	5,131
Number of energy stores	11

Situation

Guinea-Bissau, in West Africa, has approximately 1.8 million inhabitants of which 61.4% live in poverty due to extreme differences in income and a high level of unemployment (2010, World Bank Poverty data) With a land area of 36,125 km<sup>2</sup>, the country holds the 177th place out of 189 on the most recent UNDP Human Development Index. Although general elections took place in 2014 following a military coup in 2012, the situation in the country remains vulnerable, while donors for developing the country need continued stability to play their part.



A mere 24% of the nation's population has access to electricity. FRES Guinea-Bissau was founded in 2011 and provides SHS and mini-grid services. Its head office is in the city of Gabú in the eponymous province in the east of Guinea-Bissau, bordering on Senegal and Guinea. FRES Guinea-Bissau manages to grow at a steady pace.

## Products, services and rates

### Rates

In 2018, FRES Guinea-Bissau provided SHS services on three service levels at a monthly rate ranging from CFA 6,000 (€ 9.14) to CFA 20,000 (€ 30.44). Around 70% of the customers use the lowest service level, 29% the medium level, and 1% the high service level.

Customers of the mini-grid are charged per kWh. In 2018, the day tariff (from 10:00 to 18:59) was CFA 400 (€0.61) and the evening tariff (from 19:00 to 00:00) CFA 700 (€1.06).

## Challenges

FRES Guinea-Bissau aims to achieve a customer

base of at least 5,700 paying customers.

Other major focal areas include a further increase of the payment rate, strengthening the management team and staff, improving internal procedures and customer service, and piloting new technologies that may increase operational efficiency.

## Operational highlights

### Number of customers

FRES Guinea-Bissau was able to achieve the customer base target set under the EU Regional and OFID programmes in 2018 by adding over 600 new customers. The company also focused on improving the quality of its customer base, achieving a significant improvement on the payment rate.

## Payment rate

The 2018 payment rate was 83% which is an increase of 10% compared to 2017.

## Investments

There were no investments during 2018.

## Financial sustainability

The company increased its short-term cost coverage from 105% to 138% in 2018, while its long-term cost coverage decreased from 98% to 75%. This makes FRES Guinea-Bissau one of the best performing FRES companies.

## Personnel

Number of employees	32
Male / female	27/5
Permanent / temporary contracts	32/0
Fulltime / part-time	32/0
Inflow / outflow men	2/0
Inflow / outflow women	2/0
Employees aged 15-24	0
Employees aged 25-34	2
Employees aged 35-54	29
Employees aged 55 or over	1
Number of men / women in MT	3/0
Number of male / female store managers	10/1
Number of male / female interns	2/0

## Workforce profile FRES Guinea-Bissau 2018

### Salary and terms of employment

The 32 employees with a permanent contract are provided with retirement provisions, health care and disability/invalidity insurance. In 2018, the starting salary of a FRES Guinea-Bissau employee in an operational function was 35,000 FCFA (€ 53.35) a month. As minimum wages increase, the company will adjust its wages accordingly. FRES GB recently created a structured way to evaluate staff performance.

### Health, Safety and Environment (HSE)

In 2018, there were two accidents due to bad road conditions. There were 73 lost days due to illnesses, and zero days were lost due to accidents.

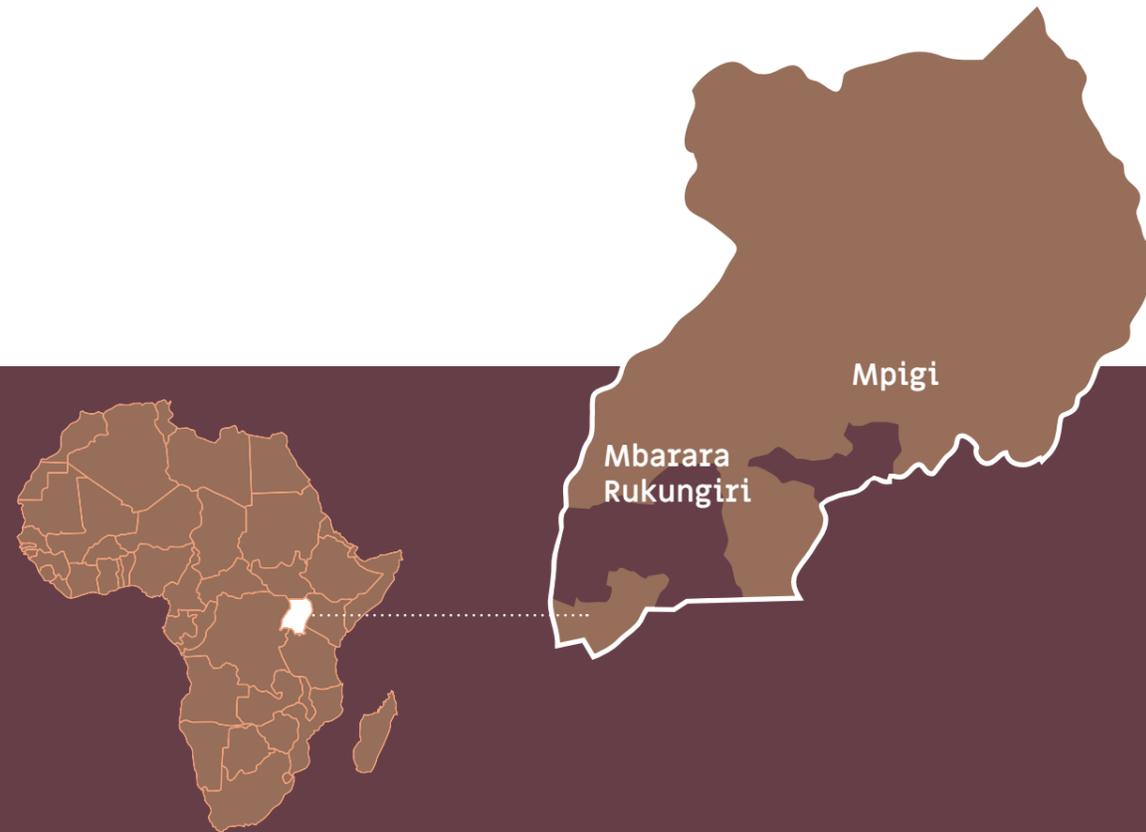
### Staff development

In 2018, 40 days were dedicated to staff development, mainly aimed at financial management and corporate finance.

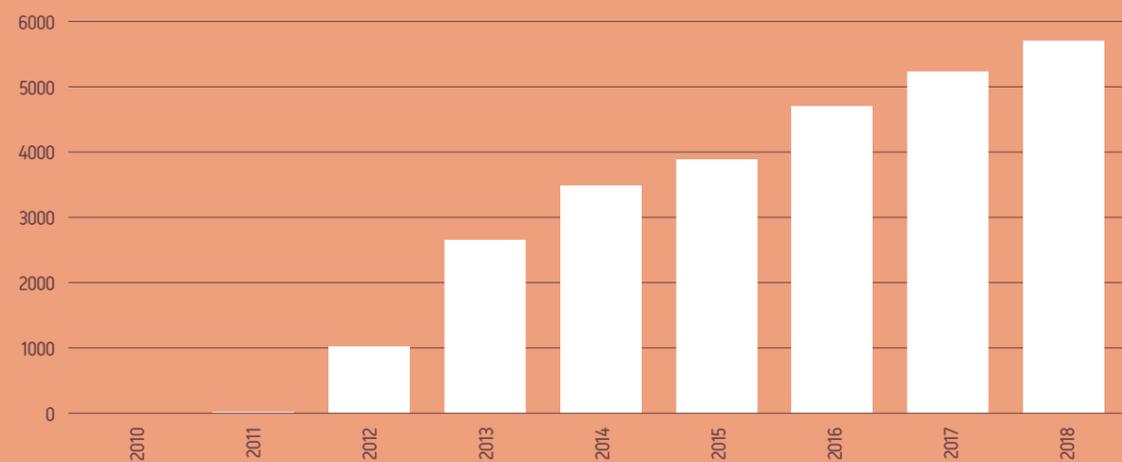
## Other information

Recently the company's headquarters moved to a new location in the city of Gabú, resulting in substantial cost reductions in rent and more suitable premises for office space, customer services, stock storage and fleet management.

# 1.5 FRES UGANDA



Number of customers



## General information

Shareholder	100% FRES
Board of Directors	Coen de Ronde, Joselyne Musiime, Tamara Borges and Jolan Dalati
General Manager	Joselyne Musiime
Governance	Local Board
Year founded	2010
Products and services	SHS
Number of employees	68
Number of customers	5,703
Number of energy stores	5

## Situation

Uganda, a country of over 240,000 km<sup>2</sup>, is situated on the equator in the southern part of Africa. The country holds the 162nd place out of 189 on the most recent UNDP Human Development Index. In 2018, the country was politically stable.

Approximately 27% of the inhabitants have access to electricity. For people living in rural areas, this is 7%, often limited to the cities and trading towns along paved roads. FRES Uganda was founded in 2010. The company delivers



SHS services to the Southwest of Uganda in ten districts, including Kgenjojo, Sembabule, Kyenjo, Rukungiri and Kyegegwa. Its head office is located in Mbarara.

## Products, services and rates

### Rates

FRES Uganda offers five service levels including relatively large systems catering to the specific demands of business customers in the concession area. The monthly SHS service fee ranges from UGX 23,000 (€ 5.51) to UGX 69,000 (€ 16.53).

## Challenges

FRES Uganda's objectives for 2018 focused on expanding the SHS customer base by 771 new customers, reinstalling 800 repossessed systems, increasing long-term cost coverage by implementing new marketing strategies to increase the scale of operations, and implementing mobile payment by customers. The company also strengthened its internal control methods to combat and prevent fraud. Following successful tests with

mobile payments in 2018, a full roll-out began in January 2019.

## Operational highlights

### Number of customers

In 2018, FRES Uganda installed 1,499 customers, while 1,034 customers left. The net result was a customer increase from 5,238 in 2017 to 5,703 in 2018. These figures show a very high churn. FRES Uganda is also encountering grid encroachment, especially in the southern parts of the operational area. This resulted in the loss of over 350 customers.

In order to improve the handling of customer complaints, all remarks and observations that come in via the toll-free access line are registered in a database by the company's call centre. Complaints were mostly caused by blown lamps & fuses and battery malfunctions.

## Payment rate

FRES Uganda's payment rate increased, from 65% in 2017 to 82% in 2018.

## Investments

The investments amounted to € 101,021 and were mainly related to installations and materials connected to local assets.

## Financial sustainability

The company saw its short-term cost coverage increase from 103% in 2017 to 118% in 2018. Its long-term financial sustainability indicator has also increased from 70% in 2017 to 82% in 2018. There is room for further improvement, including by reducing churn numbers.

## Personnel

Number of employees	68
Male / female	51/17
Permanent / temporary contracts	49/19
Fulltime / part-time	68/0
Inflow / outflow men	15/9
Inflow / outflow women	2/4
Employees aged 15-24	1
Employees aged 25-34	56
Employees aged 35-54	11
Employees aged 55 or over	0
Number of men / women in MT	4/2
Number of male / female store managers	3/2
Number of male / female interns	18/4

By the end of December 2018, FRES Uganda employed 68 people directly (49 staff members with permanent contracts, as in 2017, plus 19 seasonal workers, involved in a special sales campaign) and 116 indirectly, on a commission basis.

## Workforce profile FRES Uganda 2018

### Salary and terms of employment

In addition to a permanent salary, FRES Uganda offers its employees health insurance,

pregnancy leave, pension provisions, retirement provisions and life insurance. The entry-level wage of an employee at FRES Uganda is UGX 450,000 (€ 108) a month. The government of Uganda does not have a statutory minimum wage. Debt collection employees were motivated via performance bonuses, and all employees had at least one performance evaluation in 2018.

### Health, Safety and Environment (HSE)

The company reported 44 injuries and a total of 201 sick days in 2018, of which 62 days were related to accidents and 139 days to regular illness. This is 24 days less than in 2017. Most accidents were due to bad road conditions and poor driving skills.

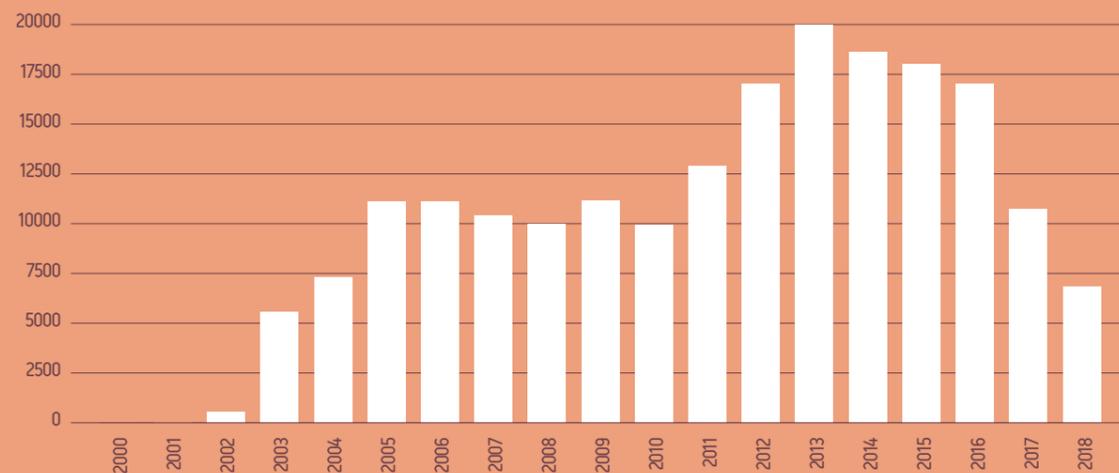
### Staff development

In 2018 FRES Uganda organised both in-house and outsourced defensive driving training to improve the quality of the staff's driving skills. Other courses involved management training and specific training related to the company's financial system. FRES Uganda also welcomed a new Finance Manager in 2018.

# 1.6 NURA, SOUTH AFRICA



Number of customers



## General information

Shareholder	80% Vattenfall, 20% REESET
Board of Directors	Coen de Ronde (Vattenfall), Bart Blokland (REESET)
General Manager	Michelle Makoni
Governance	Local Board
Year founded	2001
Products and services	SHS
Number of employees	45
Number of customers	6,653
Number of energy stores	3
Number of service agents	5

## Situation

South Africa (1,219,912 km<sup>2</sup>) has 56.52 million inhabitants, of which 55.5% live in poverty. There are extreme differences in income and there is a high level of unemployment (2014, Poverty DataWorld Bank). The country is 113th out of 189 on the most recent UNDP Human Development Index. The political situation in the country is generally stable, but overall the supply of basic services has been lagging behind.

Of South Africa's inhabitants 84.4% has access to electricity in cities and 84% in rural areas. NuRa supplies electricity to households and



small businesses and operates in Kwazulu-Natal, one of the least developed provinces in the country.

The national grid has expanded significantly into the South African countryside in the past years. In 2018, NuRa lost over 3,800 customers due to this trend. Grid encroachment and the downsizing of the company's customer base resulted in the restructuring of the company and its management team. The many customers who continued using both the grid and an SHS system because of limited reliability of the national grid have slowed down the downsizing process. As a result of this trend, discussions with management about future strategic options were started in 2018.

## Products, services and rates

### Rates

Tariffs increased slightly in 2018, namely between ZAR 125 (€7.84) and ZAR 387 (€ 24.28) incl. VAT, depending on the customer's chosen service level.

### Customer care

Customer satisfaction was measured through normal operational procedures, the call centre and job cards. In 2018 there were 37% fewer complaints than in 2017. Outstanding complaints decreased to 38 in 2017. Overall, it can be said that NuRa improved its internal efficiency in 2018 via an upgraded maintenance plan and a more efficient technical team. Nearly all complaints were resolved in less than two weeks.

### Challenges

The main challenge is the ongoing grid encroachment and the rising number of illegal connections in our concession area. The current lack of a clear government strategy for solar powered electricity in rural areas is also a point of concern and puts substantial pressure on the company's future.

## Operational highlights

### Number of customers

NuRa cancelled services to 3,767 non-paying customers. This resulted in a customer base with 6,000 customers in early 2019. The company's actual customer base per 31 December 2018 was 6,653.

### Payment rate

NuRa shows a positive trend in its payment rate since the company's restructuring. The average payment rate in 2018 was 76%, which is 20% more than the first half of 2017, before the restructuring process.

### Investments

In view of the precarious situation of the company, it was decided not to participate in DoE tenders for new installations in 2018. The company's first priority is to focus on providing

existing, paying customers with proper and efficient services. The DoE paid the last outstanding invoices to NuRa to an amount of ZAR 9,235,275 (€ 582,016). This allows NuRa to cover its negative cashflow.

## Financial sustainability

NuRa's short-term cost coverage increased from 67% in 2017 to 98% in 2018. Its long-term cost coverage increased from 46% to 63%.

## Personnel

Number of employees	45
Male / female	29/16
Permanent / temporary contracts	45/0
Fulltime / part-time	45/0
Inflow / outflow men	0/5
Inflow / outflow women	0/2
Employees aged 15-24	1
Employees aged 25-34	29
Employees aged 35-54	15
Employees aged 55 or over	0
Number of men / women in MT	2/2
Number of male / female store managers	0/3
Number of male / female interns	0/0

As a result of grid encroachment, the organisation was downsized from 52 to 45 FTEs in 2018, and smaller energy stores were converted into satellite stores with less personnel. On 31 December 2018, NuRa employed 45 people directly and 45 indirectly, on a commission basis.

## Workforce profile FRES NuRa 2018

### Salary and terms of employment

In addition to salaries, NuRa offers its employees pension provisions and life insurance, disability/invalidity insurance

(technicians only), maternity leave and retirement provisions. A NuRa employee in an operational function starts at ZAR 4,739.26 (€ 297.34) a month, a sum equal to the legal minimum wage level in South Africa. Depending on the position or contract, contributions for a car and/or phone are available. Employees are also motivated via performance bonuses. All employees had at least one performance evaluation in 2018 but some were evaluated more frequently depending on their function. There was one official complaint filed about salary reviews and annual bonuses.

### Health, Safety and Environment (HSE)

The total number of days lost due to illnesses was 96, 60 more than in 2017. The increase was due to downtime of an unfit Operations Manager. In 2018, three days were lost due to sickness and one day to a work-related accident.

### Staff development

In 2018, staff benefited from technical and safety training, in accordance with SEESA Skill Development programme.

# 1.7 FRES, THE NETHERLANDS



## General information

**FRES NL is the headquarter for all FRES operations. Its activities in 2018 included:**

- Fundraising
- Stakeholder management
- Governance of FRES companies
- Organisational support
- Financial supervision
- Risk management
- Procurement

## Operational highlights

In 2018, FRES the Netherlands concentrated on the aforementioned tasks as well as on streamlining FRES' organisational structure, relocating its offices, organising and hosting the annual company week, and digitising the main part of the FRES NL files.

## Personnel

Caroline Nijland resigned in 2018 and was succeeded by Coen de Ronde as Management Director. FRES NL works with a small team of paid employees.

- Willem Post – Human Resources Advisor, Netherlands (since July 2012)
- Martijn Schootstra – Technical Advisor, Netherlands (since Q4 2018)

The FRES Board expresses its deepest appreciation and thanks for all efforts made in support of all other volunteers who help to ensure the continuity of FRES' operations.

## Operational costs

Financially, FRES NL is treated as a cost center. Its operations must be carried out efficiently

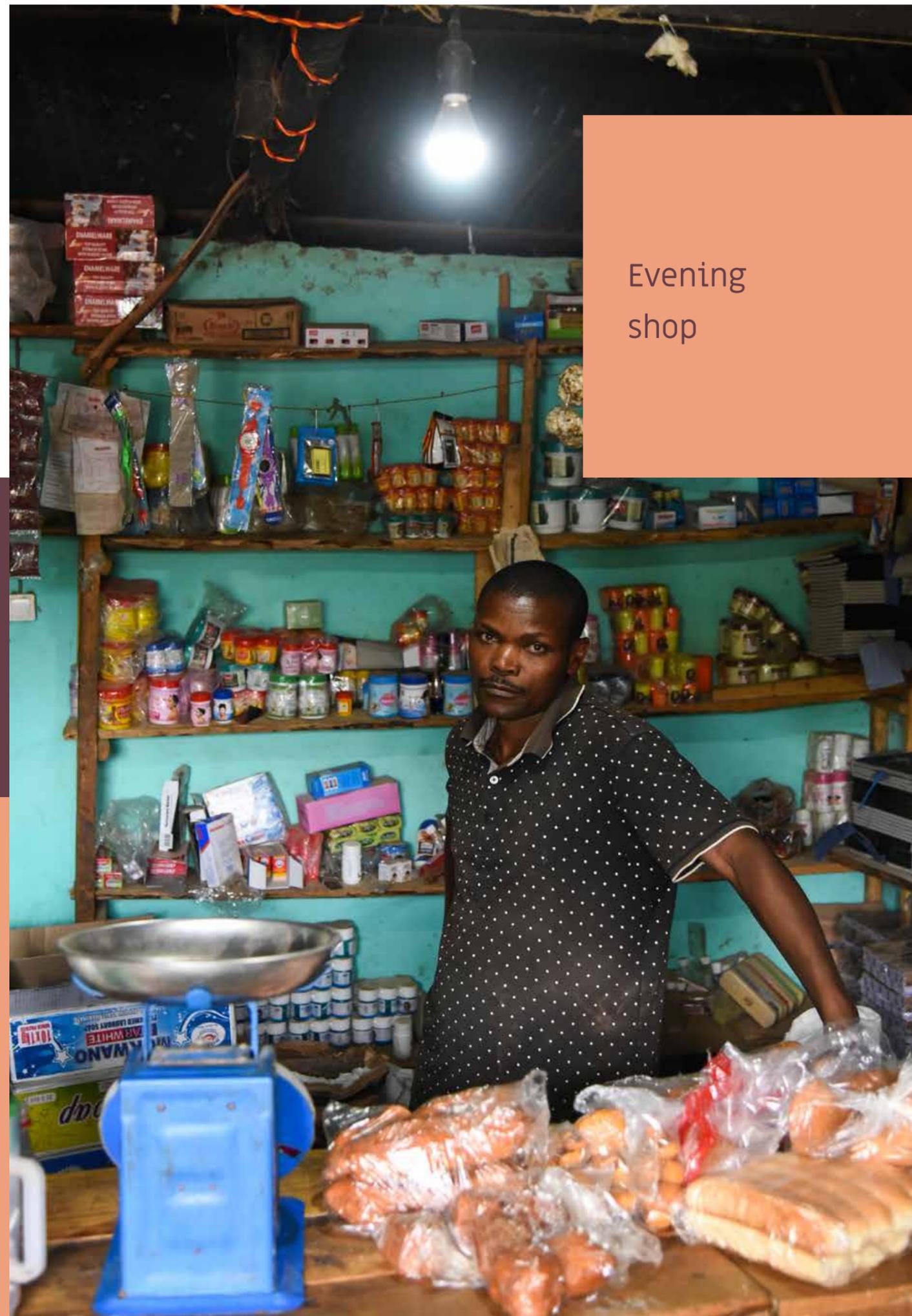


In addition, a number of experts volunteer their efforts upon request. The added value of the latter remains extremely important to all FRES' activities. In 2018, the following experts worked on specialist tasks for FRES on a pro bono basis:

and effectively to limit costs while also ensuring the quality of its operations.

The movement of the FRES offices in September 2018 resulted in a better quality of operations and an improved working environment for the FRES staff and visiting colleagues from the FRESco's.

	31-12-17	31-12-18
Number of employees	5	6
Male / Female ratio	0/5	2/4
Fulltime / Part-time	1/4	2/4
Number of FTEs	4	5
Average sick leave	1%	0.6%
Average age	45	42
Number of freelancers	1	2



Evening shop

## 2.1 Our vision, mission and strategy

### Our vision

In our vision, the social and economic development in rural Africa is impossible without basic access to electricity.

In 2000, the member states of the United Nations agreed to make major progress in the field of poverty, education, gender equality, health and environmental sustainability with the Millennium Goals set for 2015. In 2015, the UN re-defined the global agenda with the launch of the Sustainable Development Goals. Access to affordable and clean electricity, since long recognised as an essential tool to reduce poverty, was officially recognised as a global goal for 2030. In 2013, 1.2 billion people – 20% of the world population – had no access to electricity. For this reason, the UN declared 2014–2024 the decade of ‘Sustainable energy for all’, aiming to mobilise stakeholders with three objectives: providing universal access, doubling the rate of global energy efficiency improvement, and doubling the share of renewable energy in the global energy mix. At the start of 2018, 185 states had signed and ratified the Paris Agreement (an agreement within the United Nations Framework Convention on Climate Change).

FRES helps achieve these international goals by providing people in rural Africa with affordable electricity in a sustainable way, preferably generated via solar energy. Through the provision of electricity, FRES contributes to fighting poverty by increasing employment and improving living conditions. FRES companies also create direct and indirect employment. Access to electricity means the opportunity to expand or start up companies; allows health centres to refrigerate vaccines, and women to give birth under improved conditions; and gives schools and their pupils access to proper lighting. The use of solar energy to produce electricity also means less indoor air pollution, reduced fire hazard, and less damage to the environment.

#### The sun as energy source

FRES views electricity generation via solar energy as the best way to provide rural areas in Africa with an affordable and sustainable electricity solution. We do so with individual solar power systems (Solar Home Systems) and village power systems (solar mini-grids).

#### Solar Home Systems (SHS)

FRES companies work with Solar Home

Systems because it enables the provision of reliable electricity in rural areas with sparsely populated communities. A standard SHS delivers sufficient electricity to power several lamps and/or power sockets for a radio, small ventilator, mobile phone charger or television.

#### Solar mini-grids

In Mali and Guinea-Bissau, FRES built local solar power plants that provide electricity to local inhabitants via mini-grids. In some cases, the solar power plants replaced polluting diesel generators. A mini-grid is a small electricity network, which can connect customers within a radius of a few kilometres. If customers have higher energy demands, for instance for business usage, a solar mini-grid can also provide a suitable solution. Because we operate in rural areas where access to water can be limited, we started an experiment in which we test solar powered water pumps in order to find out if this would add to the FRES proposition for our customers. The first small-scale trials look promising.

### Our Mission

FRES primarily stimulates rural electrification in developing countries by establishing small-scale, semi-commercial electricity companies in areas that have no access to a national or regional electricity grid. After obtaining a concession, FRES applies a market-based approach. FRES is a small multinational foundation with full subsidiaries in developing countries that actively expand rural electrification.

### Our Strategy

Our strategy is aimed at acquiring and maintaining concessions in rural environments where the economic and social structure is such that a long-term investment is viable.

It is also important that we invest in areas that are not eligible for a country’s national grid for a strategic period. We finance the corresponding investments from our own funds and through subsidies from institutions like the EU, OFID and the World Bank. In most cases, we have to pre and or co-financed these investments. The rural population is usually unable to self-finance investments in mini-grids and the corresponding connections or Solar Home Systems.

To ensure long-term success, we set up local companies in which we aim to employ as much local management and staff as we can. We consider this as a way forward to safeguard investments, quality of service and reasonable rates, while also developing the local staff. It is our goal to make the FRES companies financially sustainable in their daily operations and, eventually, self-reliant, so they can finance their own investments. This would mean that, in the long run, the companies would no longer need donor financing for replacing or acquiring new assets.

Our small head office in Amsterdam has a key role in developing and supporting the FRES initiatives. Its first task is to ensure funding of the operations. The other tasks are related to the central procurement of assets and supporting local management in expanding FRES companies. The office is also responsible for business development (such as investigating new FRES initiatives).

## FRES Guinea - Bissau battery testing



## 2.2 Our business model

We use a fee-for-service concept – a standardised commercial business model that can easily be fine-tuned, replicated and rolled-out in all countries in which customers pay a monthly fee for access to electricity. FRES companies own, install and maintain the installed SHS and take care of all necessary investments. Customer benefits of the fee-for-service concept include:

- **Affordability:** no initial capital investment and a cost-effective payment structure for the customer
- **Ensured maintenance and replacement guarantees;** no unexpected expenses for repairs or replacements
- **Ease of use:** customers do not have to install the system themselves
- **Easier access to hard-to-find, expensive new technologies** such as efficient lamps

Our SHS customers can choose between service levels depending on the number of lamps and power sockets they require, and the affordability of the associated monthly fee. Customers of mini-grids pay a standard fixed fee for the connection as well as an amount per kWh of consumed power. The costs of the provided services for customers are mostly on par with or lower than the traditional alternatives (mostly kerosene, candles or car batteries). Local energy shops are set up for customer service needs and payments.

In order to ensure that the rates can be set as low as possible, operational excellence is a priority to FRES and its local companies. The companies strive for increasing market penetration and optimising logistics, costs and customer retention. Every year, we evaluate the performance of our companies in order to learn and adjust our multi-year business plans.

### Different service levels

Level	SHS	Battery capacity	Sockets	LED lamps
S1	80 Wp	90 Ah	1 x 25 W	2 x 5 W
S2	80 Wp	90 Ah	1 x 25 W	3 x 5 W
S3	160 Wp	150 Ah	1 x 60 W	5 x 5 W
S4	240 Wp	300 Ah	2 x 60 W	6 x 5 W

## 2.3 Our fundraising activities

FRES is a non-profit foundation. We need external financing for our investments. We attract funding by cooperating closely with our sponsors and building close relationships with governments and multilateral international organisations. Additionally, we strive to establish relationships with business donors. We look for parties that match in terms of policy, objectives and work sphere. We only submit subsidy proposals if conditions match our strategic objectives to prevent that our policy becomes subsidy-driven.

There are a number of corporate donors and sponsors that support us in kind (services or goods) or with funding as well. Although private donations are welcome, FRES has chosen not to pursue an active private donor policy.

### Subsidies

FRES currently has running subsidy contracts valid until 2022. Under these contracts € 7.3 million is available for the expansion of operations by the end of 2018. In terms of further expansion, FRES aims to acquire € 13.1 million in new subsidies as of 2019 for growth initiatives in existing countries as well as in a new country.



In 2018, FRES continued the implementation of its existing subsidy programmes: The projects subsidised by the EU Regional and EU Fragile States programmes with € 9.9 million to scale up SHS and mini-grid activities in four countries are being rolled out with some delays on which we only had little influence. We hope to get an extension of two years for both programmes.

### Business donations

In 2018, FRES received a business donation from Alliander, which covered part of FRES

NL expenses and the salary of the Managing Director. This long-standing commitment ended in January 2019.

### Private donations

FRES received much appreciated donations from private donors and donations from Nuon customers who donated the customer points they saved as members of the Nuon Exclusive Programme to FRES. The money donated by private donors in 2017 will be used in accordance with their requirements. Should FRES receive a complaint from a private donor,

we aim to react within one working day. We did not receive any complaints in 2018.

### Project evaluations

Mid-term and final project evaluations are carried out by external parties. Useful recommendations from each project evaluation are implemented in the respective company as well as in other FRES companies.

## 2.4 Our corporate social responsibility

### People

Sustainability is in our DNA. We provide people living in rural areas with sustainable electricity but also offer our staff structural jobs and career opportunities. In principle, we employ local management and employees, and practice good employment policies within our companies. The percentage of women in the staff of all our companies is 20%. The percentage of women in management functions is 24%.

### Planet

Apart from attention to environmental aspects within our own operations, we require suppliers to process their packaging and transport in accordance with ISO certification 14001 or EMAS, and request packaging with recyclable products and in accordance with strict environmental standards, optimised by size and weight. We also aim to extend the lifecycle of batteries, among others by restoring battery capacity, thus diminishing the cost of batteries whilst reducing their environmental impact.

Although limited in size, FRES' activities contribute to global efforts to safeguard the climate. Our solar systems replace carbon intensive fuel sources such as kerosene and diesel – the main fuel types used for light and

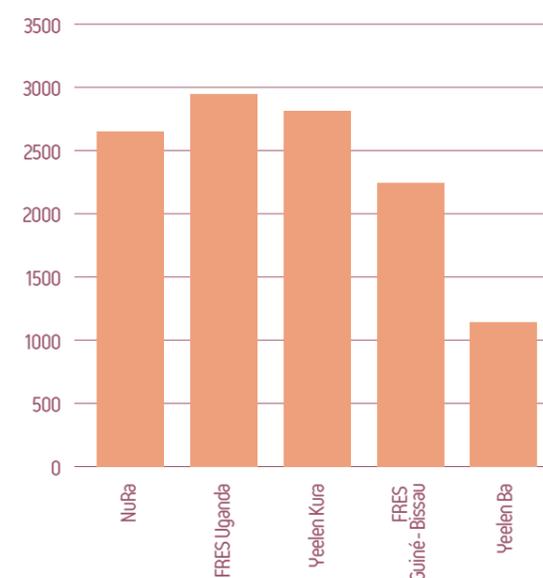


power demand in the absence of clean energy sources in Sub-Saharan Africa.

### Profit

We are a non-profit organisation. Our companies are directed towards financial sustainability to ensure services and avoid long term external funding. Expenses are kept to a minimum. To protect our revenue stream, our companies must be competitive in the market, offering customers better and cheaper services than other legally available alternatives. Any profits our companies generate, are reinvested locally to support expansion when relevant and finance future replacements of the assets without subsidies.

CO<sub>2</sub> emission savings FRES companies 2018



Training by FRES Board member Wim Sinke.

## 2.5 Governance

### General

Our organisational structure can be found in appendix 1. In 2018, FRES updated its governance guide, which lays down the principles of governance to be applied within FRES. In addition, it provides a common understanding of how FRES is organised and how it conducts its business. The guide forms the basis for the articles of association of our companies.

### FRES Board

In 2018, FRES Amsterdam changed its governance structure by merging the Board and Supervisory Board into a one-tier Board. The current Board of FRES consists of three Executive and four Non-Executive members. The current Executive Board members are: Wim Plaizier, Serge Leijten and Paul Gaalman. Wim Plaizier joined FRES as Chairman on 7 June 2018, replacing Annemarie Goedmakers. Serge Leijten rejoined the Board as of 1 September 2018. The current Non-Executive Board members are Peter Smink, Wim Sinke, Lidwien Schils, Sophie Dingenen and Paul Hol.

The FRES Executive Board meets with the Managing Director of FRES Amsterdam office once a month. In addition, there is a quarterly

full Board meeting. Throughout 2018 there were 16 Board meetings of which four joint Executive/ Non-Executive meetings. Points discussed included:

- The annual accounts and annual report 2017
- Performance of the FRES organisation in 2018 through monthly, quarterly and specific reports
- Benchmarks between FRES companies
- Investment proposals for the expansion of activities
- Personnel issues
- The Business Plan 2019-2023 and annual plan/budget 2019
- The restructuring of management and the Supervisory Board

FRES Board members do not receive any remuneration for their work. Their expenses are compensated under the condition that they are in line with the compensation policy set by the FRES Board to prevent excessive expenses. In 2018, costs incurred by board members only comprised travel related expenses.

### Wijffels Code

FRES endorses the Wijffels Code, a Dutch code for the good governance of charities.

The accountability declaration (see appendix 4) states how we shape the three principles of this code: separation of the supervisory, managerial and executive functions; optimal use of funds; and optimal relationships with interested parties. An overview of the Board members, and their additional functions, is listed in appendix 1.

### Monitoring and evaluation

FRES' policy goals, priorities and conditions are recorded in business plans. They serve as the basis for the annual plans and budgets for the FRESco's and FRES the Netherlands. The implementation of plans is monitored through monthly reporting, benchmarking and operational- / financial performance reviews. Goals and priorities are prioritised when and where necessary.

The local management of each FRESco conducts monthly progress meetings with the members of their Board of Directors via teleconferences. Twice a year a physical Board meeting is held with each FRES company. Our Executive Board members visit the FRESco's regularly. In addition, our Regional operations managers from the Amsterdam office visit the FRESco's when needed to provide support or review specific topics.

At least once a year the General Managers of the FRES companies attend the FRES Company Week in the Netherlands to evaluate business results and discuss future strategy and business plans.

Operational excellence is a core objective for our companies. In order to achieve this, we aim for effective and efficient local operations to manage operational costs and maximise revenues by connecting more customers in order to ensure growth and a healthy cash flow.

Our planning and control cycle is performed under supervision from the Executive Board. We have a multi-year business plan and a budget for the coming year on the central level as well within our local companies. We use these plans for evaluating the performance of our entire organisation. The main items in evaluating the local companies are (i) payment rate; (ii) operating and (long-term) replacement costs; (iii) customer retention/growth; and (iv) financial sustainability. We also conduct Operational Reviews using performance records from our local companies. A typical operational review team consists of a FRES Executive Board member, a General Manager from another FRESco, the Director of FRES Amsterdam and/or a Regional Operations Manager not involved in the company under review. We also continuously aim to improve control mechanisms to minimise fraud within the FRES companies.

PwC reviews the FRES consolidated financials and issues a review report. All local companies are audited annually by an auditor in accordance with the applicable local laws. The independent reports of the local auditors are reviewed by PwC. PwC also conducts specific audits upon request from the Executive Board. Moreover, PwC performs specified procedures on the costs charged against the regulations of our funding institutes such as the EU, the World Bank and OFID, each of which can also conduct its own audits of our activities.

## 2.6 Risk management

In order to be able to operate effectively and efficiently, FRES is always focused on opportunities for and threats to the organisation.

### Uncertainty with regard to the COVID-19 measures

Late in 2019 news emerged from China about the COVID-19 virus (the “Coronavirus” or the “COVID-19”). The situation at year end, was that a limited number of cases of an unknown virus had been reported to the World Health Organisation. In the first few months of 2020 the virus had spread globally and since then its negative impact has gained momentum.

In April 2020, the number of registered cases of COVID-19 in the African countries where FRES operates is relatively low compared to Europe. Nevertheless, business continuity measures have been taken and communicated to the employees by the FRESco’s, allowing employees to work from home (where possible) and to set up replacement schemes in the event of an eventual quarantine. In case of expansion of the number of cases of COVID-19 and restrictions on daily life, the impact for the FRESco’s is expected to be a:

- Decline in payment rates, resulting in less liquidity and higher credit risk for the companies;

- Decrease in installing new systems at new customers and reclaiming systems from former customers;
- Decrease in delivery and construction of new assets, like mini grids, solar home systems and batteries.

The Netherlands are at the time in an intelligent lockdown. Business continuity measures have been taken and communicated to the employees, allowing the foundation to provide the necessary access for employees to work from home and to set up a replacement scheme in the event of quarantine. The travel policy was also amended; international travel to the FRESco’s was restricted.

Based on the facts and circumstances known at this moment and the possible scenarios about how the COVID-19 virus and resulting government measures in the various countries could evolve, the Board has determined that the use of the going concern assumption is warranted, but that there is a material uncertainty resulting from COVID-19 that may cast significant doubt upon the group’s ability to continue as a going concern and, therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business.

The foundation has sufficient reserves available, partly in cash at banks. The securities are impacted by the currently lower market prices. However, these investments are for the longer term and the Board expects the financial markets to recover eventually.

The Board will continue to monitor the situation closely and take necessary precautions and/or actions where and when needed.

### Strengths and weaknesses, opportunities and threats

FRES regularly monitors and evaluates its strengths, weaknesses, opportunities and threats as we aim to manage internal and external risks. Apart from the solid opportunities for FRES to successfully contribute to rural electrification, there are also risks and threats involved. FRES is very aware of these facts and aims to benefit from opportunities while mitigating risks as much as possible. Currently our SWOT looks as follows:

#### Strengths

- Long-term experience in electrification of rural areas in Africa
- Extensive & sound research methods
- A proper network in the international development and solar energy sector
- A competent team with committed Board members
- A standardised, sustainable and easily reproducible business model
- Relevant experience in acquiring subsidies
- A number of strong partners in the Netherlands
- Solid business plans for our operations
- Experience in negotiating terms and conditions for concessions and rate structures with governments
- Centralised procurement activities
- Experience in the field of mini-grids in Africa

#### Opportunities

- Worldwide international commitment (e.g., the UN 2014–2024 ‘Decade of Sustainable Energy for All’, the Sustainable Development Goals, and the Paris Climate Agreement)
- The interest of international donor agencies and social investors in solar solutions for rural electrification in Sub-Saharan Africa
- 1.2 billion people in Africa that still have no access to electricity at all
- African governments prioritise solar powered rural electrification; national grids are usually to expensive
- Technical developments in solar power drive down costs of generating and storing electricity
- Possibilities for improvements in processes; mobile payment, prepaid metering, remote system control

#### Weaknesses

- High dependence on subsidies to fund initiatives
- Companies in different countries with different local conditions
- Lack of transparency in African national policies, operating permits and grid expansion planning
- Lengthy procurement procedures for international tenders to acquire assets
- Low margins as rates are driven by regulations and kept low by local authorities
- Occurrence of payment arrears as our customers depend highly on local harvests
- Insufficient customer retention due to non-payment which drives up operational costs

#### Threats

- Risky and lengthy procedures involved with donor agreements
- Political instability and security risks
- Long, bureaucratic and sometimes unpredictable governmental procedures
- Threats of nationalisation

- Unplanned or illegal encroachment of grid connections
- Increasing competition in the solar systems market
- Insufficient tariff levels for mini-grids
- Fraud and inadequate legal opportunities to address fraud
- Increasing transport costs
- HIV and other serious health risks

### Utilising opportunities, countering threats and fighting weaknesses

Identifying and controlling risks is one of the responsibilities of the FRES Board. To utilise opportunities and counter the impact of threats, we have formulated a number of general strategies:

- We try to secure good relations with our stakeholders via a dedicated strategy for each type of stakeholder (donor, volunteer, staff, customer, etc.)
- We focus on expanding in countries where we are already active by increasing the scale of the existing companies to reduce unit costs, starting in other countries only after thorough investigation
- We create scale benefits by connecting customers in clusters
- We improve our customer care services as we believe that satisfied customers are a prerequisite for increased payment rates.
- We use proven technology to avoid operational and investment risks
- We centralise purchasing activities (i.e. solar systems) when relevant
- We invest in IT for our companies that is interchangeable and standardised
- We minimise our expenses to ensure that our services remain affordable to our customers.
- We work toward establishing a robust database management system that can act as a harmonised data inflow and outflow centre



- covering all financial and non-financial indicators provided by FRES companies
- We maintain an adequately implemented HSE (Health, Safety and Environment) policy in all companies
  - We have a FRES Code of Conduct in place which includes direct access to our Executive Board members

### Financial sustainability

FRES companies must achieve financial sustainability by generating sufficient income and driving down operational and replacement costs, also in the medium and long term. In FRES' business model, financial sustainability is based on economies of scale (number of customers), the effective collection of payments from customers, and the ability to minimise the costs of operations and replacements. Together, FRES and its local companies have set key performance indicators (KPIs) which are monitored via monthly reports. The performance of FRES companies is assessed by payment rate; operating and replacement costs; customer retention/growth; and financial sustainability.

### Enhanced monitoring

Currently our companies use various different operational and financial systems. We are aware that in due time we need to further harmonise our systems in order to improve efficiency and drive down system-related costs. In 2017 and 2018, we established a data management system in FRES Amsterdam as the central point for FRES-wide data management. We believe that reliable data is a key factor for controlling our operations.

### Payment arrears

An acceptable payment rate is a major challenge for all FRES companies. After a successful

pilot, we are in the process of implementing mobile payment in Uganda. The results show that it is possible to introduce this in our other companies as well. We employ pre-paid meters for day/night mini-grid tariffs in Guinea-Bissau. The third prototype of the Cobrador device was tested in Mali and Guinea-Bissau, and would enable FRES companies to disconnect non-paying customers remotely.

### Political instability and threats of terrorism

Developments in West Africa show that political stability is a major factor. Political unrest in Mali, Guinea-Bissau and Burkina Faso continues to influence the economies of these countries and impacts both customer growth and their ability to pay fees. It has consequences for our employees as well. As the safety of FRES employees is our highest priority, we have an Emergency Response Plan for crisis management in place within our companies, and we are constantly assessing whether we are doing everything we can to counter any risks to our local operations.

### Fuel prices

FRES aims for solar powered plants that operate as reliably as possible. We use diesel only as a back-up when needed. Demand Side Management (DSM) policies, for example via load shedding or differentiated pricing, were applied during 2018.

### Rates for solar mini-grids

Rates for Yeelen Kura's solar mini-grids are just sufficient to cover operational expenses, but insufficient to accumulate the financial reserve for the replacement of key mini-grid components in the long term. Yeelen Kura continues to work with Mali's Rural

Electrification Agency (AMADER) to increase rates but has not yet succeeded in reaching financially sustainable levels. In general there is hardly any opportunity for increasing rates due to governmental procedures and slow economic development in the countries in which we operate.

### Fraud prevention

Local FRES companies in Africa face incidents of fraud. In principle, we try to prevent and combat fraud and aim to make it unrewarding. In 2018, we established and implemented an anti-fraud policy. Improving our control mechanisms continues to be a focal point. As internet-related fraud is intensifying, we also assessed our FRES NL procurement and payment procedures.

### Asset management

Since 2009, the management of FRES-owned funds that are available for a longer time period has been allocated to a professional asset manager (ING Bank). The objective for our asset manager is to achieve optimal effectiveness within a moderately defensive investment profile, while respecting the ethical and social boundaries set by FRES. We have an asset management agreement with ING Bank that includes our investment policy. The policy excludes investments in activities that are associated with a number of specified themes such as corruption, environmental offenses, weapons, the violation of social laws and codes or human rights, child labour, tobacco, and alcohol.

Under the asset management agreement, the investment horizon is four to eight years. The portfolio distribution that belongs to this risk profile in general is: 50-70% of the assets are solidly profitable, 30-50% is invested in shares,



and up to 10% of the funds remain liquid. To control the risks, the asset manager works in accordance with a structured investment process. Funds are invested across a selection of sectors and regions, and the portfolio is continuously screened on the established sustainability criteria.

The asset manager issues quarterly reports on the development of the investments. He or she accounts for the results of the portfolio to one of the Executive Board members three times a year, measures the results of the portfolio, compares them to various benchmarks, and analyses performance. The reports are sent to all Executive members of the FRES Board. The results are discussed in the Executive Board at least once a year or when needed. The FRES Board decides if and when the investment policy should be adjusted.

### Continuity reserve

FRES maintains a continuity reserve of € 250,000 which can be used in case the activities of FRES should suddenly stop (either partly or completely) for whatever reason. The reserved amount covers proper completion of the then needed activities of the Amsterdam office.

## 2.7 Partners

During the years FRES has cooperated with a number of partners:

**2002** | The Directorate of Minerals and Energy (DME) of the **South African government** signed a first agreement with NuRa in 2002.

**2004** | FRES was founded by **Nuon** in 2004. In 2006, a five-year agreement stipulated that Nuon would make an annual contribution to FRES and make an employee available. In December 2008, Nuon entered a public-private partnership with FRES and the Dutch Government to support the millennium objectives in Africa for the period 2008–2015. Currently **Vattenfall NL** (formerly known as Nuon) still supports FRES by offering facilities and access to knowledge when and where needed. **Vattenfall NL** and FRES extended their partnership agreement for another four years until 31 December 2019.

**2006** | The **Mali government** entered into a first agreement with Yeelen Kura via AMADER in 2006.

**2006** | The cooperation between **PwC** and FRES was further developed in 2012 based on a study of the socio-economic impact of the activities in the FRES countries. PwC is also our accountant.

**2007** | **The European Union** subsidised the start-up of an electricity company in Burkina Faso in cooperation with Nuon, Yeelen Kura and two local partners. The cooperation programme implied the allocation of a subsidy within the framework of the ACP-EU Energy Facility and ran until July 2015. Within the same programme, a subsidy was approved for a new FRES company in Guinea-Bissau in December 2010. In 2014, FRES and the EU reinforced their cooperation by signing two new subsidy contracts. These contracts support FRES in four countries with a combined subsidy value of € 9.9 million for four years.

**2010** | **The Government of Guinea-Bissau** supported FRES in its application for an EU subsidy. This led to the start-up of FRES Guinea-Bissau in 2012.

**2010** | We received subsidies via the rural electrification agencies in Mali and Uganda supported by the **World Bank** for the FRES company in Uganda and the construction of solar mini-grids in Mali.

**2010** | In 2010, FRES became a member of **Partos**, the Dutch association for NGOs working in international development. They represent 120 Dutch development organisations active in the

field of poverty reduction, humanitarian aid, human rights, and sustainable development.

**2011** | **The Government of Uganda**, through its rural electrification agency (REA), provided a subsidy from the Energy for Rural Transformation (ERT) programme to FRES Uganda. The scheme disburses consumer subsidies through PV companies to provide financing for acquiring solar powered electricity.

**2011** | **PUM**, which sends senior experts to companies and organisations in developing countries and upcoming markets for a period of two to three weeks, entered a cooperation agreement with FRES in 2011. In 2017 the agreement was extended for another two years, covering eight further assignments.

**2011** | As of August 2011, **ING Bank** has been supporting FRES by not charging fees for money transfers, both national and international, which has reduced expenses considerably.

**2011** | **DOEN Foundation** granted a subsidy of € 0.9 million for Uganda in 2011 for a period of three years.

**2011** | In 2011, FRES signed an agreement with **Alliander**, formalising the cooperation in sharing expertise and knowledge. The partnership took further shape in 2012, when Alliander took over the annual contribution of € 75,000 for office costs and the salary of the Director of Business Development from Nuon for a period of four years. In 2015 an expert assisted FRES in the investigation of fraud allegations at one of our FRESco's. **Alliander** and FRES extended their partnership agreement until 1 February 2019.

**2012** | Together with its local partner, the NGO **Daridibó** in Guinea-Bissau, FRES successfully requested a subsidy of € 2.5 million from the ACP EU Energy Facility Programme. An agreement

for cooperation and exchange of expertise and support was signed in 2012.

**2013** | FRES signed a Letter of Intent (LOI) with the **Government of Cameroon** via the Ministry of Energy for implementing FRES activities.

**2014** | **UNIDO** expressed its intention of working with FRES with the objective to realise a mini-grid in Guinea-Bissau. The cooperation depends on FRES securing funding from ECREEE.

**2015** | FRES started a cooperation with two Dutch technical universities **TU Delft** and **TU Eindhoven** in which FRES will provide research projects for Bachelor's or Master's programmes.

**2015** | Together with the local organisation **Centre for Appropriate Technology (CAT)** in Cameroon, FRES carried out detailed market research in the target villages of Northwest Cameroon.

**2015** | **EEP** granted a subsidy of € 0.6 million for FRES Uganda in 2015 over a period of two years. In 2017 the contract was concluded with all targets achieved as planned.

**2015** | **OFID** granted a subsidy of € 0.45 million for FRES Guinea-Bissau in 2015 over a period of three years.

**2018** | During 2018 FRES and Strategy Development Partners started a partnership. The consultancy group assists FRES on a pro bono basis in developing a targeted strategy to leverage abilities, positions and assets.

## 2.8 Stakeholder management

### Policy, strategy and objectives

Apart from communication for acquiring funds, FRES communicates with stakeholders to safeguard its reputation, increase support and facilitate knowledge transfer. Marketing activities from our companies directed at our customers are supported by FRES NL when needed. FRES NL uses several communication tools:

- In case of newsworthy matters, press releases are sent to the media
- We use our website ([www.fres.nl](http://www.fres.nl)), a LinkedIn account (<https://www.linkedin.com/company/fres-foundation-rural-energy-services-/>) and a twitter account ([https://twitter.com/FRES\\_NL](https://twitter.com/FRES_NL)) for spreading general information on all relevant FRES activities
- We report/discuss the progress of projects during one-on-one meetings with our donors

### Annual Company Week

FRES organised its Annual Company Week in May 2018 at **Vattenfall** headquarters in Amsterdam. During the event, the FRES Executive Board and General Managers of our companies discussed developments, results and strategy, and set the targets and objectives for 2019–2023. Our annual stakeholders' meeting took place during the same week.



03

Financial Report 2018



**CONSOLIDATED BALANCE AS AT DECEMBER 31, 2018**  
(after appropriation of results)

	December 31, 2018 €	December 31, 2017 €
<b>Assets</b>		
<b>1. Fixed Assets</b>		
1.1 Property, plant and equipment	5,744,722	6,008,820
	5,744,722	6,008,820
<b>2. Current Assets</b>		
2.1 Receivables	1,049,840	1,366,608
2.2 Inventory	62,392	379,619
2.3 Securities	5,163,865	5,374,651
2.4 Cash and cash equivalents	3,349,939	4,569,738
	9,626,036	11,690,616
<b>Total</b>	<b>15,370,758</b>	<b>17,699,436</b>
<b>Equity and liabilities</b>		
<b>3. Reserves</b>		
3.1 Continuity reserve FRES Netherlands	250,000	250,000
3.2 Reserve for pre-financing future investments FRES companies	3,000,000	3,000,000
3.3 Reserve for future projects	10,101,944	12,203,475
3.4 Reserve financing assets	18,625	2,668
3.5 Reserve currency difference	67,416-	94,739-
	13,303,153	15,361,404
<b>4. Funds</b>		
4.1 Fund Donation Nuon	-	-
	-	-
<b>5. Current liabilities</b>		
5.1 Payables and other accruals	2,067,605	2,338,032
	2,067,605	2,338,032
<b>Total</b>	<b>15,370,758</b>	<b>17,699,436</b>

**CONSOLIDATED STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 31 DECEMBER 2018**

	Actual 2018 €	Actual 2017 €	Budget 2018* €
<b>6. Income</b>			
<b>Income from fundraising</b>	<b>498,658</b>	<b>1,955,024</b>	<b>828,269</b>
Income from our own fundraising - private persons	106,988	8,728	8,728
Income from our own fundraising - companies	163,000	221,541	221,541
Income from subsidies from governments	228,670	1,724,755	598,000
<b>Income from fee for services</b>	<b>3,244,251</b>	<b>3,206,364</b>	<b>2,249,000</b>
Other income (FRES companies)	3,244,251	3,206,364	2,249,000
<b>Sum of the income</b>	<b>3,742,909</b>	<b>5,161,388</b>	<b>3,077,269</b>
<b>7. Expenses spent on objectives</b>			
<b>Expenses for regular company activities</b>	<b>3,552,541</b>	<b>2,868,427</b>	<b>1,260,000</b>
Yeelen Kura, Mali	664,969	647,934	400,000
NuRa, South Africa	47,116	55,996	50,000
Yeelen Ba, Burkina Faso	996,764	481,916	240,000
FRES Uganda, Uganda	1,317,810	756,427	370,000
FRES Guinea-Bissau, Guinea-Bissau	525,882	926,154	200,000
<b>Expenses for company expansion</b>	<b>1,718,441</b>	<b>2,037,128</b>	<b>2,850,000</b>
Yeelen Kura, Mali	1,349,618	872,676	2,400,000
Yeelen Ba, Burkina Faso	64,263	-	-
FRES Uganda, Uganda	124,133	507,453	300,000
FRES Guinea-Bissau, Guinea-Bissau	179,167	631,947	150,000
FRES Cameroon, Cameroon	1,260	25,052	-
<b>Expenses for replacements</b>	<b>7,742</b>	<b>99,917</b>	<b>450,000</b>
Expenses Yeelen Kura replacements	-	6,000	150,000
Expenses Guinea-Bissau replacements	-	-	100,000
Expenses Uganda replacements	-	-	100,000
Expenses Yeelen Ba replacements	7,742	93,917	100,000
<b>Expenses for new initiatives</b>	<b>5,566</b>	<b>2,917</b>	<b>500,000</b>
New countries	5,566	2,917	500,000
<b>Subtotal</b>	<b>5,284,290</b>	<b>5,008,389</b>	<b>5,060,000</b>

**CONSOLIDATED STATEMENT OF INCOME AND EXPENDITURE  
FOR THE YEAR ENDED 31 DECEMBER 2018 (CONTINUED)**

	Actual 2018 €	Actual 2017 €	Budget 2018* €
<b>Subtotal</b>	<b>5,284,290</b>	<b>5,008,389</b>	<b>5,060,000</b>
<b>FRES service costs spent on objectives</b>	<b>329,723</b>	<b>589,515</b>	<b>532,070</b>
Direct support existing companies	258,166	307,136	308,601
Direct support expansion companies	65,344	267,769	220,277
Direct support new initiatives	6,213	14,610	3,192
<b>Total spent on objectives</b>	<b>5,614,013</b>	<b>5,597,904</b>	<b>5,592,070</b>
<b>FRES service costs management &amp; administration</b>	<b>120,326</b>	<b>113,198</b>	<b>158,930</b>
Direct costs	16,692	6,467	42,911
Indirect costs and costs from investments	103,634	106,731	116,019
<b>Sum of the expenses</b>	<b>5,734,339</b>	<b>5,711,102</b>	<b>5,751,000</b>
<b>Financial income and expenses</b>	<b>193,518-</b>	<b>180,618</b>	<b>180,618</b>
<b>Release negative goodwill</b>	<b>99,373</b>	<b>867,040</b>	<b>-</b>
<b>Result</b>	<b>2,085,574-</b>	<b>497,944</b>	<b>2,493,113-</b>

The budget of 2018 that is stated in the annual account of 2017 included the budget of entities that are not consolidated in the annual accounts. The budget that is stated above excludes the income and expenses from regular company activities of NuRa, South Africa.

	Actual 2018 €	Actual 2017 €	Budget 2018* €
<b>The result of 2018 is appropriated as follows:</b>			
Reserve for future projects	2,101,531-	582,312	2,493,113-
Reserve financing assets	15,957	1,070	
Fund donation Nuon	-	85,438-	
<b>Total</b>	<b>2,085,574-</b>	<b>497,944</b>	<b>2,493,113-</b>

**CONSOLIDATED CASH FLOW STATEMENT FOR THE YEAR  
ENDED 31 DECEMBER 2018**

	December 31, 2018 €	December 31, 2017 €
Income from private persons, companies, institutions and governments	4,270,463	5,371,220
Payments to suppliers, employees and projects	-4,427,163	-5,568,419
<b>Cash generated from operating activities</b>	<b>156,700-</b>	<b>197,199-</b>
Received interest, realised result investments and balance deposits and withdrawals investments	193,518-	180,618
<b>Cash flow from operational activities</b>	<b>350,218-</b>	<b>16,581-</b>
Investments in property, plant and equipment	882,125-	26,952
Consideration paid on acquisition Yeelen Ba	-	2-
<b>Cash flow from investment activities</b>	<b>882,125-</b>	<b>26,950</b>
<b>Cash flow from financing activities</b>	<b>-</b>	<b>-</b>
Cash flow	1,232,344-	10,369
Exchange rate and conversion differences	12,544	110,062
<b>Net cash flow</b>	<b>1,219,799-</b>	<b>120,431</b>
Cash as on January 1	4,569,738	4,437,930
Net cash flow	1,219,799-	120,431
Cash acquired in acquisition Yeelen Ba	-	11,377
<b>Cash as on December 31</b>	<b>3,349,939</b>	<b>4,569,738</b>

# NOTES TO THE CONSOLIDATED ANNUAL ACCOUNTS

## General notes

### Activities

Stichting Rural Energy Services (“FRES”) was founded in 2004 and is registered at the Chamber of Commerce in Amsterdam with number 34201011. The foundation is located at Plantage Middenlaan 2G in Amsterdam. The activities of FRES and its group companies consist of realising sustainable rural electrification in developing countries, especially through the placement and management of autonomous solar energy systems.

Additionally, FRES aims to participate in subsidiaries and partnerships that perform activities which benefit the goals of the foundation.

### ANBI

In 2007 FRES was designated as a ANBI (Public Benefit Organisation). FRES complies with the ANBI requirements and publishes various data on the internet.

### Group structure

In 2018 the group includes four operating companies: Yeelen Kura S.A., FRES Uganda Limited, FRES Guinea-Bissau and Yeelen Ba SA. FRES is the 100% owner of these companies.

### Judgments, estimates and uncertainties

In applying the principles and policies for preparing the financial statements, the board of FRES makes different estimates and judgments that may be essential to the amounts disclosed in the financial statements. If it is necessary in order to provide the true and fair view, the nature of these estimates and judgments, including assumptions related to the uncertainties, is disclosed in the notes to the relevant financial statement items.

### Consolidation

Intercompany transactions, intercompany results and intercompany balances among group companies and other consolidated entities are eliminated, insofar as the results were being realised through transactions with third parties outside the group. Unrealised losses on intercompany transactions are also eliminated unless such losses qualify as impairment. Accounting principles of group companies and other consolidated entities have been changed where necessary to align them to the prevailing group accounting policies.

The consolidation includes the financial information of FRES, its group companies and other entities in which it exercises control or where it is responsible for the overall management. Group companies are entities in which FRES exercises direct control based on ownership of more than one half of the voting rights or statutory rules. Potential voting rights that can be directly exercised on the balance sheet date are also taken into account. Within this policy, the companies below are included in the consolidation of FRES:

	Statutory seat	Share in the issued capital
SSD Yeelen Kura S.A.	Mali	100%
FRES Uganda Ltd.	Uganda	100%
SSD FRES Guinea-Bissau S.A	GNB	100%
SSD Yeelen Ba	Burkina Faso	100%

The participation in Yeelen Kura S.A. was obtained at the end of 2008 and is a 100% subsidiary of FRES since.

FRES Uganda Limited was founded in 2010 as a 100% subsidiary of FRES.

FRES Guinea-Bissau S.A. was founded in 2011 as a 100% subsidiary of FRES.

Yeelen Ba S.A is a 100% subsidiary of FRES since the 4th of January 2017. An asset valuation was performed in respect with this acquisition in 2017.

In addition to the aforementioned subsidiaries, FRES has interests in the entities mentioned below. These entities are currently not consolidated as they are, separately and together, of insignificant importance.

	Statutory seat	Share in the issued capital
SSD-FRES Benin S.A.	Benin	100%
FRES Cameroon	Cameroon	100%

SSD-FRES Benin was founded in 2010 as a 100% subsidiary of FRES to be able to lay claim to a concession area and exemption from taxes. No activities have taken place in Benin during 2018.

FRES Cameroon was founded in 2015 as a 100% subsidiary of FRES to be able to lay claim to a concession area and exemption from taxes. In 2016 negotiations with the government of Cameroon were still going on regarding securing the authorisation for operation and exemption from taxes. As a consequence, no operational activities took place in Cameroon. As per 11 April 2017 FRES has decided to halt the process of setting up its operations in Cameroon and to officially withdraw from any application procedure that is pending with the Ministry of Energy and the Rural Electrification Agency. This means that the operations as contemplated in Cameroon under the EU Contract will no longer take place

As FRES is not a shareholder of the company NuRa nor has control over this company. NuRa activities are not consolidated and therefore the balance sheet and the statement of income and

expenditure of this company are not included in the annual accounts. Expenses incurred by FRES Netherlands in support of the nonconsolidated companies are included in the consolidated annual accounts.

### Related parties

All legal entities that can be controlled, jointly controlled or significantly influenced are considered to be a related party. In addition, board members, other key management of FRES and close relatives are regarded as related parties. Transactions with related parties are disclosed in the notes insofar as they are not transacted under normal market conditions. The nature, extent and other information is disclosed if this is necessary in order to provide the required insight.

### Acquisition of group companies

Identifiable assets acquired and liabilities assumed in a business combination are recognised in the consolidated financial statements from the acquisition date, being the moment that control can be exercised over the acquired company. The acquisition price consists of the cash consideration, or equivalent, agreed for acquiring the company plus any directly attributable expenses. If the acquisition price exceeds the net amount of the fair value of the identifiable assets and liabilities, the excess is capitalised as goodwill under intangible assets. If the acquisition price is lower than the net amount of the fair value of the identifiable assets and liabilities, the difference (i.e. negative goodwill) is disclosed under accruals. During 2018 no acquisitions took place.

### Accounting policies for the cash flow statement

The cash flow statement has been prepared using the direct method. The cash items disclosed in the cash flow statement consist

of cash. Cash flows denominated in foreign currencies have been converted at an average estimated exchange rate following Euro foreign exchange reference rates. Exchange differences affecting cash items are shown separately in the cash flow statement.

Interest paid and received, dividends received and income taxes are included under cash from operating activities. Dividends paid are included as cash used in financing activities. The purchase consideration paid for the acquired group company is included as cash used in investing activities insofar as it was settled in cash.

## General principles for preparing the consolidated annual accounts

### General principles

The annual accounts have been prepared in accordance with the revised Standard for annual reporting 650 for 'Charity organisations', as issued by the Dutch Accounting standards Board and applicable for the financial year starting as of January 1, 2018. The objective of this Standard is to provide insight into the expenses of the organisation and the utilisation of funds in relation to the objectives for which the funds were collected. FRES did not apply for early adoption of the revised Standard 650.

Assets and liabilities are generally valued at historical cost, production cost or at fair value at the time of acquisition. If no specific valuation principle has been stated, valuation is at historical cost. In the balance sheet, statement of income and expenditure and the cash flow statement, references are made to the notes.

### Prior-year comparison

The accounting policies have been consistently applied to all the years presented. During the

year 2018 and up to the date of this annual report there were no policy changes.

### Functional currency

Items included in the annual accounts of the individual group companies are measured using the currency of the primary economic environment in which the respective group company operates (the functional currency). The consolidated annual accounts are presented in Euros, which is the functional and presentation currency of FRES.

### Foreign exchange

Monetary assets and liabilities denominated in foreign currencies are converted into the functional currency at the exchange rate prevailing at the balance sheet date. Foreign currency transactions in the reporting period are converted into the functional currency using the exchange rate prevailing at the dates of the transactions.

Conversion differences on non-monetary assets held at cost are recognised using the exchange rate prevailing at the dates of the transactions.

Assets and liabilities of consolidated subsidiaries with a functional currency different from the presentation currency are converted at the exchange rate prevailing at the balance sheet date. Revenues and expenses are converted at the average exchange rates during the financial year. Any resulting exchange differences are directly charged to the group equity for translation differences.

### Financial instruments

Securities included in current assets are stated at fair value, if these are related to securities held for trading or if they relate to equity instruments not held for trading. All other on-balance financial instruments are carried at (amortised) cost.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. If no fair value can be readily and reliably established, fair value is approximated by deriving it from the fair value of components or of a comparable financial instrument, or by approximating fair value using valuation models and valuation techniques.

### Criteria for no longer recognizing assets & liabilities

An asset or liability included in the balance sheet remains recognized in the balance sheet when a transaction does not lead to a significant change in the economic reality with regard to this balance sheet item. For such transactions no results are recorded. An important change in the economic reality is assessed on the basis of the economic benefits and risks that are likely to occur in practice.

An asset or liability item included in the balance sheet is derecognized from the balance sheet when a transaction results in all or substantially all rights to economic benefits and all or substantially all risks related to the asset or liability item being transferred to a third party.

## Principles for the valuation of assets and liabilities

### Property, plant and equipment

Property, plant and equipment are stated at historical cost, minus cumulative depreciation and, if applicable, impairment losses. Depreciation is based on the estimated useful lives of tangible fixed assets, and is calculated based on a fixed percentage of the historical cost, taking into account the possible residual value. Depreciation occurs from the tangible fixed assets' moment of implementation.

Investment subsidies are deducted from the historical cost or manufacturing price of the assets to which the subsidies relate.

No provision for major repairs to buildings has been formed for future repairs. When they occur, the costs of repair will be included in the results.

### Financial assets

The issued loans to subsidiaries and other receivables are initially measured at fair value, and subsequently valued at amortised cost, which equals the nominal value, minus impairment losses.

### Impairment of fixed assets

At each balance sheet date, the foundation tests whether there are any indications of assets being subject to impairment. If any such indications exist, the recoverable amount of the asset is determined. If this proves to be impossible, the recoverable amount of the cash generating unit to which the asset belongs is identified.

An impairment occurs when the carrying amount of an asset is higher than the realisable value. The realisable value is the higher of the fair value less cost to sell and the value in use. An impairment loss is directly recognised in the statement of income and expenditure, while the carrying amount of the asset concerned is concurrently reduced.

### Receivables

Receivables are initially included at fair value and subsequently measured at amortised cost, which equals the nominal value, minus a provision for impairment for receivables. The provision is determined based on the individual evaluation of the receivables.

### Inventory

Inventories (stocks) are valued at historical price based on the FIFO method (first in, first

out) or lower realisable value. The historical cost consists of all costs relating to the acquisition and the costs incurred in order to bring the inventory to its current location and current condition. The realizable value is the estimated sales price less directly attributable sales costs. In determining the realisable value the obsolescence of the inventories is taken into account.

#### **Securities**

Securities that are held for trading are valued at fair value in the initial processing. Changes in the actual value are recognised directly in the statement of income and expenditure. Bought, interest-bearing bonds that will be held to maturity are valued at amortised cost.

Transaction costs are included in the statement of income and expenditure if they are related to securities, which were carried at actual value, are processed directly in the statement of income and expenditure.

#### **Cash and cash equivalents**

Cash and cash equivalents are stated at nominal value and are at free disposal of the foundation, unless stated otherwise.

#### **Reserves and funds**

The reserve financing asset matches the property, plant and equipment of FRES Netherlands. For a more detailed disclosure of the reserves and funds, we refer to the notes on equity.

#### **Negative goodwill**

Negative goodwill resulting from acquisitions and calculated in accordance with section "Acquisition of group companies" is released in the statement of income and expenditure based on the weighted average of the remaining life of the acquired amortisable assets. Insofar as the negative goodwill exceeds the fair value of the

non-monetary assets identified, the surplus is recognised directly in the income statement.

#### **Other assets and/or liabilities**

The remaining assets and liabilities are valued at amortised cost, which is usually equal to the nominal value.

## **Principles for result determination**

#### **Result**

Profit or loss is determined by income from our own fundraising activities and other income, minus the incurred expenses on the objectives. Donations are accounted for in the year in which these were received. Proceeds from inheritances are recognised in the year in which the size is reliably determined.

Operating expenses for which a contribution in kind is received are accounted for in gross if and insofar as they can be quantified.

#### **Subsidies**

Operating subsidies are recorded as income in the statement of income and expenditure in the year in which the subsidized costs were incurred or income was lost or when there was a subsidized operation deficit. Income is recognized when it is probable that it will be received.

Subsidies related to investments in tangible fixed assets are deducted from the asset to which they relate and recorded in the statement of income and expenditure as part of the amortization costs.

#### **Exchange differences**

Exchange differences arising upon the settlement or conversion of monetary items are processed in the statement of income and expenditure in the period that they occur, unless they are hedged.

#### **Depreciation of property, plant and equipment**

Property, plant and equipment are depreciated over their estimated useful lives as from the inception of their use. Land is not depreciated.

#### **Financial income and expenses**

Interest paid and received is processed on a time-weighted basis, taking account of the effective interest rate of the assets and liabilities concerned. When processing the paid interest, the transaction costs on loans received as part of the calculation of effective interest are taken into account.

Dividends receivable from associates not carried at net asset value and securities are recognised as soon as FRES acquires the right to them.

Changes in the value of financial assets and liabilities that are held for trading are recognised directly in the statement of income and expenditure.

#### **Taxes**

The foundation is not obliged to pay income tax and VAT as reiterated in 2017 by the tax authorities. The foundation obtained and has maintained the ANBI status since 2007.

## **Financial instruments and risk management**

#### **Market risk**

##### *Currency risk*

FRES mainly operates in Africa and in the European Union.

The currency risk for FRES largely concerns positions and transactions of our subsidiary FRES Uganda in Uganda Shilling (UGX). The currencies of Mali, Burkina Faso and Guinea-Bissau have a fixed exchange rate to the euro. The currency risk is not hedged.

##### *Price risk*

FRES incurs risk regarding the valuation of securities within current assets. The foundation manages market risk by stratifying the portfolio and imposing limits.

##### *Interest rate and cash flow risk*

FRES incurs limited interest rate and cash flow risk as the foundation does not have long-term interest-bearing receivables or long-term interest-bearing liabilities (including borrowings).

##### **Credit risk**

FRES incurs credit risk as customers pay a fee-for-service on a monthly basis. The payment period may differ per country and generally ranges between 30 and 60 days. FRES is improving payment rates and fee collection by enabling mobile payment. In addition, FRES is implementing proven technology with regard to prepayment systems

##### **Liquidity risk**

FRES incurs only limited liquidity risk. FRES has sufficient funds freely available and there is no need for bank overdrafts. The EBITDA and cash flow from our operations were at a level that FRES Netherlands did not have to provide funding for the current operations in the FRESco's.

# NOTES TO THE CONSOLIDATED BALANCE SHEET ITEMS

## 1. Fixed assets

### 1.1 Property, plant and equipment

	Installations and materials FRES Guinea-Bissau	Installations and materials FRES Uganda	Land and buildings Yeelen Kura	Installations and materials Yeelen Kura	Installations and materials Yeelen Ba	Furniture Office	Computers, software and office equipment	Total
Historical cost	- 2,698,477	503,220	8,280,850	1,227,935	-	25,086	12,735,568	
Accumulated depreciation and impairments	- 1,254,048	145,408	4,327,321	977,553	-	22,418	6,726,748	
<b>Balance as on 1/1/2018</b>	<b>- 1,444,429</b>	<b>357,812</b>	<b>3,953,529</b>	<b>250,382</b>	<b>-</b>	<b>2,668</b>	<b>6,008,820</b>	
<b>Movements</b>								
Investments/disposal	- 86,242	70,761	651,072	56,264	10,840	6,946	882,124	
Exchange differences	- 14,779	-	-	-	-	-	14,779	
Depreciation	- 322,886	19,890	772,148	44,249	362	1,467	1,161,002	
<b>Total movements</b>	<b>- 221,865-</b>	<b>50,871</b>	<b>121,076-</b>	<b>12,015</b>	<b>10,478</b>	<b>5,479</b>	<b>264,099-</b>	
Historical cost	- 2,799,498	573,981	8,931,922	1,284,199	10,840	32,032	12,337,432	
Accumulated depreciation and impairments	- 1,576,934	165,298	5,099,469	1,021,802	362	23,885	6,865,586	
<b>Balance as on 31/12/2018</b>	<b>- 1,222,564</b>	<b>408,683</b>	<b>3,832,453</b>	<b>262,397</b>	<b>10,478</b>	<b>8,147</b>	<b>5,744,722</b>	

### 1.2 Depreciation percentages

Motor vehicle	20
Motor cycles	20-33
Computer and accessories	7-25
Furniture and fittings	10-20
Land and buildings	4
Solar panels	5
Solar regulators	10
Solar batteries	33

The investments during 2018 mainly consist of the acquisition of a minigrid in Yeelen Kura.

The installations and materials of FRES Guinea-Bissau are fully compensated by received grants and subsidies. Therefore, the historical cost is nil.

## 2. Current assets

### 2.1 Receivables

	31/12/18	31/12/17
Receivables FRES	156,667	0
Receivables Yeelen Kura	420,098	371,389
Receivables FRES Uganda	58,233	235,068
Receivables FRES Guinea-Bissau	84,772	110,605
Receivables Yeelen Ba	176,210	165,408
Prepayments FRES	2,669	3,203
Prepayments FRES Uganda	7,135	2,405
Prepayments FRES Guinea-Bissau	60,784	22,138
Other receivables and accrued income FRES	6,272	16,387
Other receivables and accrued income Yeelen Kura	13,778	65,196
Other receivables and accrued income Uganda	1,273	7,379
Other receivables and accrued income FRES Guinea-Bissau	8,527	6,509
Other receivables and accrued income Yeelen Ba	53,422	360,921
<b>Total</b>	<b>1,049,839</b>	<b>1,366,608</b>

The fair value of the receivables approaches their book value, given the short-term character (less than one year) and the fact that provisions for recoverability have been established where necessary.

The receivables of the FRES companies are from regular company activities such as debtors and other receivables.

### 2.2 Securities

	31/12/18	31/12/17
Shares	2,603,106	2,810,087
Bonds	2,541,476	2,541,165
Increased coupon interest bonds	19,283	23,399
<b>Total</b>	<b>5,163,865</b>	<b>5,374,651</b>

All the securities mentioned above are quoted and are freely available to the foundation.

The investment activities are executed by ING and monitored by the FRES Board. FRES and ING agreed upon a defensive investment

profile. This profile also excludes activities connected to alcohol, fur, gambling, nuclear industries, child labour, pornography, tobacco, weapons, or misconduct regarding the environment, (social) laws / codes and human rights.

The return on the securities amounted to -3,1% in 2018 (3,6% in 2017). The FRES Board evaluated the investment policy in 2018 and decided not to make any changes to the existing investment policy.

## 2.3 Cash and cash equivalents

	31/12/18	31/12/17
ING Bank	131,924	110,435
ING Bank, investment account	210,596	183,785
ING Bank, saving account	2,745,218	4,101,842
Bank credits Yeelen Kura	167,311	-
Bank credits FRES Uganda	56,532	60,756
Bank credits FRES Guinea-Bissau	22,173	15,616
Bank credits Yeelen Ba	16,017	76,394
Other	167	20,582
<b>Total</b>	<b>3,349,939</b>	<b>4,569,738</b>

Cash and other cash equivalents generally are freely available unless stated otherwise and are being utilised for the operational activities and the objectives of FRES. The amount of ING Bank saving account includes a guarantee of € 1,036,927 for a project and is therefore not freely available. The decrease in 2018 in comparison to 2017 is amongst others due to investments in property, plant and equipment in at our subsidiaries in Mali, Burkina, Guinea-Bissau and Uganda.

## 3. Reserves

### 3.1 Continuity reserve FRES Netherlands

This continuity reserve is intended to cover cost of laying-off people, office costs, delayed payments. Additions are taken into account when necessary and are submitted for approval to the FRES Board. With this reserve, it is possible to shoulder the non-variable part of the expenses of FRES Netherlands for a period of six months.

	31/12/18	31/12/17
Balance as on Jan 1	250,000	250,000
Appropriation of results	-	-
<b>Balance as on Dec 31</b>	<b>250,000</b>	<b>250,000</b>

### 3.2 Reserve for pre-financing future investments FRES Companies

This reserve is intended to ensure that FRES maintains a minimum reserve of own funds that can be used to pre-finance new, future investments, when awaiting first payments by the sponsors. It will only be used for projects where there are signed agreements with sponsors.

	31/12/18	31/12/17
Balance as on Jan 1	3,000,000	3,000,000
Appropriation of results	-	-
<b>Balance as on Dec 31</b>	<b>3,000,000</b>	<b>3,000,000</b>

### 3.3 Reserve for future projects

This reserve is based on the appropriation of results and is for the benefit of new projects that have not yet been planned and committed.

	31/12/18	31/12/17
Balance as on Jan 1	12,203,474	11,621,162
Appropriation of results	2,101,531	582,312
<b>Balance as on Dec 31</b>	<b>10,101,943</b>	<b>12,203,474</b>

### 3.4 Reserve financing assets

This reserve is based on the Standard for annual reporting 650 for 'Charity organisations' and equals the total book value of the property, plant and equipment of FRES Netherlands. Because this Standard is not applicable to Yeelen Kura, FRES Uganda, Yeelen Ba and FRES Guinea-Bissau, the amount of tangible fixed assets of these companies has not been included in the reserve.

	31/12/18	31/12/17
Balance as on Jan 1	2,668	1,598
Appropriation of results	15,957	1,070
<b>Balance as on Dec 31</b>	<b>18,625</b>	<b>2,668</b>

## 3.5 Currency difference

	31/12/18	31/12/17
Balance as on Jan 1	94,740	32,182
Change during the year	27,324	62,558
<b>Balance as on Dec 31</b>	<b>67,416</b>	<b>94,740</b>

This currency difference relates to the exchange differences between Uganda's shillings (UGX) and euro.

## 4. Funds

	31/12/18	31/12/17
Balance as on Jan 1	-	85,438
Appropriation of results	-	85,438
<b>Balance as on Dec 31</b>	<b>-</b>	<b>-</b>

### 4.1 Funds Donation Nuon

This fund relates to the part of the original donation of € 10,000,000 by N.V. Nuon Energy in 2008 that has not yet been invested.

## 5. Payables and other accruals

All payables and other accruals mentioned below fall due in less than one year. The fair value of the payables and other accruals approximates the book value due to their short-term character. The financial obligations towards FRES companies are funds that FRES holds for FRES Companies to pay for future replacement investments.

	31/12/18	31/12/17
Creditors FRES NL	48,655	18,983
Other payables:		
Yeelen Kura	444,298	733,153
FRES Uganda	192,443	266,611
FRES Guinea-Bissau	7,557	15,060
Yeelen Ba	82,249	162,675
FRES	1,193,030	942,803
Negative goodwill		
Yeelen Ba	99,373	198,747
<b>Total</b>	<b>2,067,605</b>	<b>2,338,032</b>

## COMMITMENTS AND CONTINGENCIES NOT INCLUDED IN THE BALANCE SHEET

There is an annual rent obligation for our Amsterdam office, which moved from Amstel 49, to Plantage Middenlaan 2G in Amsterdam, at an amount of € 15,600.

## NOTES TO THE CONSOLIDATED STATEMENT OF INCOME AND EXPENDITURE

### General

The donations relate to income from own fundraising activities.

## 6. Income and expenses

### 6.1 Income

	2018	2017
<b>Income from own fundraising – private persons</b>		
Donation Christmas gift employees Nuon	-	6,965
Private donations	106,988	1,763
<b>Total</b>	<b>106,988</b>	<b>8,728</b>

### Income from own fundraising - companies

The donations from companies can be specified as follows:

	2018	2017
Payroll costs Alliander for Director Business Development	92,000	120,000
Alliander office expenses	70,000	80,000
Nuon savings campaign	-	5,541
Other donations	1,000	16,000
<b>Total</b>	<b>163,000</b>	<b>221,541</b>

### Subsidies from governments

	2018	2017
EU Regional	228,670	1,408,559
EEP Uganda	-	139,533
OFID Guinea-Bissau	-	176,663
<b>Total</b>	<b>228,670</b>	<b>1,724,755</b>

### Specification from the EU Regional subsidy

	2018	2017
EU Regional Mali	-	478,910
EU Regional Uganda	-	366,225
EU Regional Guinea-Bissau	228,670	211,284
EU Regional Cameroon	-	352,140
<b>Total</b>	<b>228,670</b>	<b>1,408,559</b>

### Other income

	2018	2017
Yeelen Kura	1,555,331	1,403,945
FRES Uganda	845,041	827,180
FRES Guinea-Bissau	397,004	608,353
FRES Yeelen Ba	446,875	366,886
<b>Total</b>	<b>3,244,251</b>	<b>3,206,364</b>

### Percentages spent on objectives

In accordance with the Standard for annual reporting 650 for 'Charity organisations' of the Dutch Accounting Standards Board, the clarification below states several percentages.

### Percentage of expenditures spent on objectives

This percentage is calculated as follows: the total of the expenses spent on the objectives divided by the sum of the expenditures. The percentage of expenditures spent on objectives amounted to 98% in 2018 (2017: 98%). The percentage of expenditures spent on management and administration therefore amounts to 2,1%. The percentage relating to overhead costs is low because many volunteers including board members and commissioners execute their activities on a pro bono basis.

### Percentage of income spent on objectives

This percentage is calculated as follows: the total of the expenses spent on the objectives divided by the income, received in 2018. These incomes do not include transfers from reserves that were spent on activities in 2018. The percentage of income spent on objectives amounted to 150% for 2018 (2017: 113%). The percentage has increased because less income was received from the EU in 2018 and a higher amount was used from the reserves.

### Financial income and expenses

	2018	2017
Interest bank	39,051-	32,317-
Result interest bonds	4,116-	943
Dividends	113,871	100,090
Realised gains/losses shares and bonds	54,082-	27,440-
Unrealised gains/losses shares	296,672-	139,419
Unrealised gains/losses bonds	86,532	77-
<b>Total</b>	<b>193,518-</b>	<b>180,618</b>

The net return on investments in securities and cash equivalents has been accounted for under the financial income and expenses. The above-mentioned return of € -193,518 also included an amount of € -296,672 unrealised results on the investments. Cash equivalents were kept on the current account and deposit account at credit institutions with at least an "A" credit rating.

### Loans

FRES Netherlands issued several loans to FRES companies. These loans were recognised as expenses spent on objectives. The principal amount of the issued loans by FRES Netherlands is indicated below (cumulative).

	31-12-2018	31-12-2017
<b>Total</b>	<b>9,673,701</b>	<b>9,511,004</b>

### Personnel

The number of FTEs as of December 31st 2018 amounted to 5 FTE (2017: 6 FTE).

### Remuneration Board members

The remuneration of members of the Board amounted to € 0 in 2018 (2017: € 0). No loans, advances or guarantees were issued to Board members. No employment contract exists between FRES and the Board members.

## 7. Subsequent events

The Minister of Energy in Mali has announced in 2017 that Yeelen Kura needs to transfer mini-grids of 5 villages to EDM, the national operator. FRES has performed an asset valuation report and is currently still negotiating further financial details and the timeline of the transfers. As Yeelen Kura will be reimbursed for the net book value of the assets and any other losses associated with the transfer, no impairment and/or provision was recognised in 2018.

In February 2020 FRES and Vattenfall agreed to stop activities in South Africa as the national grid expanded rapidly and the customer base declined. Consequently Vattenfall sold the shares in Nura. As a result of this transaction the agreement between Vattenfall and FRES on operational management of the company was terminated as well.

In March 2020 Coen de Ronde left FRES.

During 2019 until the date of this report Serge Leijten, Lidwien Schils and Sophie Dingenen were appointed as member of the Board.

The COVID-19 outbreak is considered to be a non-adjusting event. Which is further discussed below.

## 8. Uncertainty with regards to the COVID-19 measures

Late in 2019 news emerged from China about the COVID-19 virus (the “Coronavirus” or the “COVID-19”). The situation at year end, was that a limited number of cases of an unknown virus had been reported to the World Health Organisation. In the first few months of 2020 the virus had spread globally and since then its negative impact has gained momentum.

In April 2020, the number of registered cases of COVID-19 in the African countries where FRES operates is relatively low compared to Europe. Nevertheless, business continuity measures have been taken and communicated to the employees by the FRESco’s, allowing employees to work from home (where possible) and to set up replacement schemes in the event of an eventual quarantine. In case of expansion of the number of cases of COVID-19 and restrictions on daily life, the impact for the FRESco’s is expected to be a:

- Decline in payment rates, resulting in less liquidity and higher credit risk for the companies;
- Decrease in installing new systems at new customers and reclaiming systems from former customers;
- Decrease in delivery and construction of new assets, like mini grids, solar home systems and batteries.

The Netherlands are at the time in an intelligent lockdown. Business continuity measures

have been taken and communicated to the employees, allowing the foundation to provide the necessary access for employees to work from home and to set up a replacement scheme in the event of quarantine. The travel policy was also amended; international travel to the FRESco’s was restricted.

Based on the facts and circumstances known at this moment and the possible scenarios about how the COVID-19 virus and resulting government measures in the various countries could evolve, the Board has determined that the use of the going concern assumption is warranted, but that there is a material uncertainty resulting from COVID-19 that may cast significant doubt upon the group’s ability to continue as a going concern and, therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business.

The foundation has sufficient reserves available, partly in cash at banks. The securities are impacted by the currently lower market prices. However, these investments are for the longer term and the Board expects the financial markets to recover eventually.

The Board will continue to monitor the situation closely and take necessary precautions and/or actions where and when needed.

**FOUNDATION'S BALANCE SHEET AS AT DECEMBER 31, 2018  
(after appropriation of results)**

	31-12-2018 €	31-12-2017 €
<b>Assets</b>		
<b>1. Non-current Assets</b>		
1.1 Property, plant and equipment	18,625	2,668
1.2 Financial assets	6,060,177	6,772,372
	6,078,802	6,775,040
<b>2. Current Assets</b>		
2.1 Receivables	165,608	19,590
2.2 Securities	5,163,865	5,374,651
2.3 Cash and cash equivalents	3,087,905	4,396,226
	8,417,378	9,790,467
<b>Total</b>	<b>14,496,180</b>	<b>16,565,507</b>
<b>3. Reserves</b>		
3.1 Continuity reserve FRES Netherlands	250,000	250,000
3.2 Reserve for pre-financing future investments FRES Companies	3,000,000	3,000,000
3.3 Reserve for future projects	10,101,942	12,203,474
3.4 Reserve financing assets	18,625	2,668
3.5 Reserve currency difference	-67,416	-32,183
	13,303,151	15,423,959
<b>5. Current liabilities</b>		
5.1 Payables and other accruals	1,193,029	1,141,550
<b>Total</b>	<b>14,496,180</b>	<b>16,565,507</b>

**FOUNDATION'S STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR  
ENDED DECEMBER 2018**

	Actual 2018 €	Actual 2017 €	Budget 2018* €
<b>6. Income</b>			
Income from private persons	17,096	8,728	8,728
Income from companies	163,000	221,541	221,541
Income from subsidiaries	228,670	1,724,755	598,000
<b>Sum of the income</b>	<b>408,766</b>	<b>1,955,024</b>	<b>828,269</b>
<b>7. Expenses</b>			
Spent on objectives (consolidated budget)	1,261,100	1,579,975	5,060,000
<b>FRES service costs spent on objectives</b>			
Direct support existing companies	258,166	307,136	308,601
Direct support company expansions	65,344	267,769	220,277
Direct support new initiatives	6,213	14,610	3,192
<b>Fres service costs management &amp; administration</b>			
Direct costs	16,692	6,467	42,911
Indirect costs and costs from investments	103,634	106,731	116,019
<b>Sum of the expense</b>	<b>1,711,149</b>	<b>2,282,688</b>	<b>5,751,000</b>
<b>Subtotal</b>	<b>1,302,383-</b>	<b>327,664-</b>	<b>4,922,731-</b>
<b>Financial income</b>	<b>183,840-</b>	<b>183,347</b>	<b>180,618</b>
<b>Result subsidiaries</b>			
Result subsidiary Yeelen Kura	171,689	3,010	-
Result subsidiary FRES Uganda	323,091-	90,306	-
Result subsidiary FRES Guinea-Bissau	31,887-	236,979-	-
Result subsidiary Yeelen Ba	515,436-	81,116-	-
Release negative goodwill Yeelen Ba	99,374	867,040	-
<b>Result</b>	<b>2,085,574-</b>	<b>497,944</b>	<b>4,742,113-</b>

(1) the overall budget of € 5,060,000 includes an amount of € 1,280,000 from operational companies

## NOTES TO THE BALANCE SHEET AND STATEMENT OF INCOME AND EXPENDITURE

### General principles for preparing the annual accounts

#### General principles

The foundation's stand-alone annual accounts have been prepared in accordance with the revised Standard for annual reporting 650 for 'Charity organisations', as issued by the Dutch Accounting Standards Board and is applicable as of January 1st 2018. The objective of this guideline is to provide insight into the expenses of the organisation and the utilisation of funds in relation to the objectives for which the funds were collected. The annual accounts are presented in Euros.

The principles of valuation and result determination for the foundation's stand-alone annual accounts and the consolidated annual accounts are the same.

For the principles of the valuation of assets and liabilities and the result determination, we would like to refer to the notes on the consolidated balance sheet and statement of income and expenditure.

### NOTES ON THE STATEMENT OF INCOME AND EXPENDITURE

For the other notes to the statement of income and expenditure, we refer to the notes on the consolidated statement of income and expenditure 2018.

#### Expenses

##### Spent on objectives

Destination	Existing companies					Expansion companies							Mgmt. and admin.	Total 2018	Budgeted 2018	Total 2017
	Yeelen Kura, Mali	NuRa, South Africa	Yeelen Ba, Burkina Faso	FRES Guinée-Bissau, Guinée Bissau	FRES Uganda, Uganda	Yeelen Kura, Mali	NuRa, South Africa	Yeelen Ba, Burkina Faso	FRES Guinée-Bissau, Guinée Bissau	FRES Uganda, Uganda	Cameroon	New initiatives				
<b>Expenditures</b>	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
Subsidies and contributions	105.684	47.116	42.155	96.991	61.727	533.038	-	64.263	179.167	124.133	1.260	5.566	1.261.100	5.060.000	1.579.975	
Remittances													-	-	-	
Purchases and acquisitions													-	-	-	
Outsourced work													-	-	-	
Publicity and communication	1.433	3.085	2.110	3.976	4.598	671	189	598	1.451	939	183	183	7.086	26.501	40.689	22.685
Personnel expenses	14.785	31.834	21.768	41.018	47.435	6.920	1.951	6.165	14.973	9.688	1.888	1.888	73.099	273.410	419.789	495.868
Accommodation expenses	3.376	7.269	4.971	9.366	10.832	1.580	445	1.408	3.419	2.212	431	431	16.692	62.432	95.857	40.147
Office and general expenses	4.812	10.362	7.085	13.351	15.440	2.252	635	2.007	4.874	3.153	614	614	23.794	88.995	136.641	52.041
Depreciation and interest	70-	150-	102-	193-	223-	33-	9-	29-	70-	46-	9-	9-	344-	1.287-	(1.976)	5.681-
<b>Total</b>	<b>130.020</b>	<b>99.516</b>	<b>77.986</b>	<b>164.510</b>	<b>139.809</b>	<b>544.429</b>	<b>3.211</b>	<b>74.411</b>	<b>203.813</b>	<b>140.080</b>	<b>4.367</b>	<b>8.673</b>	<b>120.327</b>	<b>1.711.149</b>	<b>5.751.000</b>	<b>2.185.033</b>
	7,6%	5,8%	4,6%	9,6%	8,2%	31,8%	0,2%	4,3%	11,9%	8,2%	0,3%	0,5%	7,0%	100%		

## FINANCIAL ASSETS

### Subsidiaries

Group companies, in which FRES exercises significant influence, generally accompanying an ownership of 20% or more of the voting rights, are stated at net asset value.

Subsidiaries with an equity deficit are valued at nil. A provision is included when FRES is fully or partially liable for the debts of the subsidiary, or has the firm intention to enable the subsidiary to pay its debts.

### Result from subsidiaries (valued at net asset value)

The result is the amount by which the carrying amount of the subsidiaries has changed since the previous financial statements as a result of the earnings achieved by the subsidiaries to the extent that this can be attributed to FRES.

## NOTES TO THE BALANCE SHEET ITEMS

### Financial assets

The movement of the investments in subsidiaries during 2018 is as follows:

	2018	2017
Balance as on Jan 1	6.772.372	5.931.362
Aquisition of Yeelen Ba	-	1.065.789
Currency difference	35.234-	-
Result subsidiaries	676.961-	224.779-
<b>Balance as on Dec 31</b>	<b>6.060.177</b>	<b>6.772.372</b>

### Other notes to the foundation's balance sheet

For the other notes, we refer to the notes on the consolidated balance sheet items 2018.

The subsidies and contributions actuals of € 1,261,100 represent the costs made by FRES NL whereas the budget of € 5,060,000 represent the consolidated costs including an amount of € 1,280,000 from operating companies.

The decrease in personnel expenses form € 495,868 (2017) to € 273,410 (2018) can be explained by hiring less external personnel in 2018.

The increase in accommodation expenses from € 40,147 (2017) to € 62,432 (2018) can be explained by more activities to support the operating companies.

The increase in office and general expenses from € 52,041 (2017) to € 88,995 (2018) can be explained by the move to the new office at Plantage Middenlaan in Amsterdam and the purchase of new furniture and equipment.

The allocation of the expenses to the direct activities, as presented in the consolidated income statement, result from an internal time allocation system.

#### Proposed appropriation of results 2018

For the proposed appropriation of the results 2018 we refer to the overview below.

	Balance as on January 1, 2018	Appropriation of results 2018	Balance as on December 31, 2018
Continuity reserve FRES Netherlands	250.000	-	250.000
Reserve for pre-financing future investments FRES Companies	3.000.000	-	3.000.000
Reserve for future projects	12.203.473	2.101.531-	10.101.942
Reserve financing assets	2.668	15.957	18.625
Fund Donation Nuon	-	-	-
<b>Total</b>	<b>15.456.141</b>	<b>2.085.574-</b>	<b>13.370.567</b>

The COVID-19 outbreak is considered to be a non-adjusting event which is further discussed in note 8 to the consolidated financial statements.

Amsterdam, June, 30, 2020

#### Board of FRES

Wim Plaizier  
Serge Leijten  
Paul Gaalman  
Lidwien Schils  
Peter Smink  
Wim Sinke  
Paul Hol  
Sophie Dingenen

## OTHER INFORMATION

#### No auditor's report included

The foundation has an idealistic objective and is a charity organisation (not-for-profit). In accordance with article 297a, subsection 1, and with article 360, subsection 3, Book 2 of the Dutch Civil Code, the annual accounts of the foundation are not audited. Consequently, no auditor's report is included.

#### Statutory arrangement concerning the appropriation of results

No provision regarding the appropriation of results has been included in the Articles of Association.

#### Adoption and approval of the annual accounts 2018

The annual accounts 2018 were adopted in a Board meeting held on June, 30, 2020.

#### Changes in the Board

During 2018 Serge Leijten and Lidwien Schils were appointed as member of the Board.

# Independent accountant's review report

To: the Board of Stichting Rural Energy Services

We have reviewed the accompanying annual accounts 2018 of Stichting Rural Energy Services, Amsterdam, which comprise the consolidated and foundation balance sheet as at 31 December 2018, the consolidated and foundation statement of income and expenditure for the year then ended, the consolidated cash flow statement and the notes, comprising a summary of accounting policies and other explanatory information.

## Responsibility of the Board

The Board is responsible for the preparation and fair presentation of these annual accounts in accordance with the Standard for annual reporting 650 'Charity organisations' of the Dutch Accounting Standards Board. Furthermore, the Board is responsible for such internal control as it determines is necessary to enable the preparation of the annual accounts that are free from material misstatement, whether due to fraud or error.

## Responsibility of the accountant

Our responsibility is to express a conclusion on the accompanying annual accounts. We conducted our review in accordance with Dutch law, including the Dutch Standard 2400 'Engagements to Review Annual accounts'. This requires that we comply with ethical requirements and that we plan and perform the review to be able to conclude whether anything has come to our attention that causes us to believe that the annual accounts are not prepared in all material respects in accordance with the applicable financial reporting framework, including the Standard for annual reporting 650 'Charity organisations' of the Dutch Accounting Standards Board.

A review of annual accounts in accordance with the Dutch Standard 2400 is a limited assurance engagement. The performed procedures consisted primarily of making inquiries of the Board and others within the foundation, as appropriate, applying analytical procedures and evaluating the evidence obtained.

The procedures performed in a review are substantially less than those performed in an audit conducted in accordance with the Dutch Standards on Auditing. Accordingly, we do not express an audit opinion.

## Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying annual accounts do not give a true and fair view of the financial position of Stichting Rural Energy Services as at 31 December 2018, and of its results for the year then ended in accordance with the Standard for annual reporting 650 'Charity organisations' of the Dutch Accounting Standards Board.

## Emphasis of uncertainty with respect to the going concern assumption

We draw attention to note 8 in the consolidated annual accounts in which the Board has described the possible impact and consequences of COVID 19 (corona-virus) as well as the measures taken and planned to deal with these events and circumstances. This note also indicates that significant uncertainties remain and that currently it is not reasonably possible to estimate the impact and consequences of COVID-19 on the going concern. These events or conditions indicate that a material uncertainty

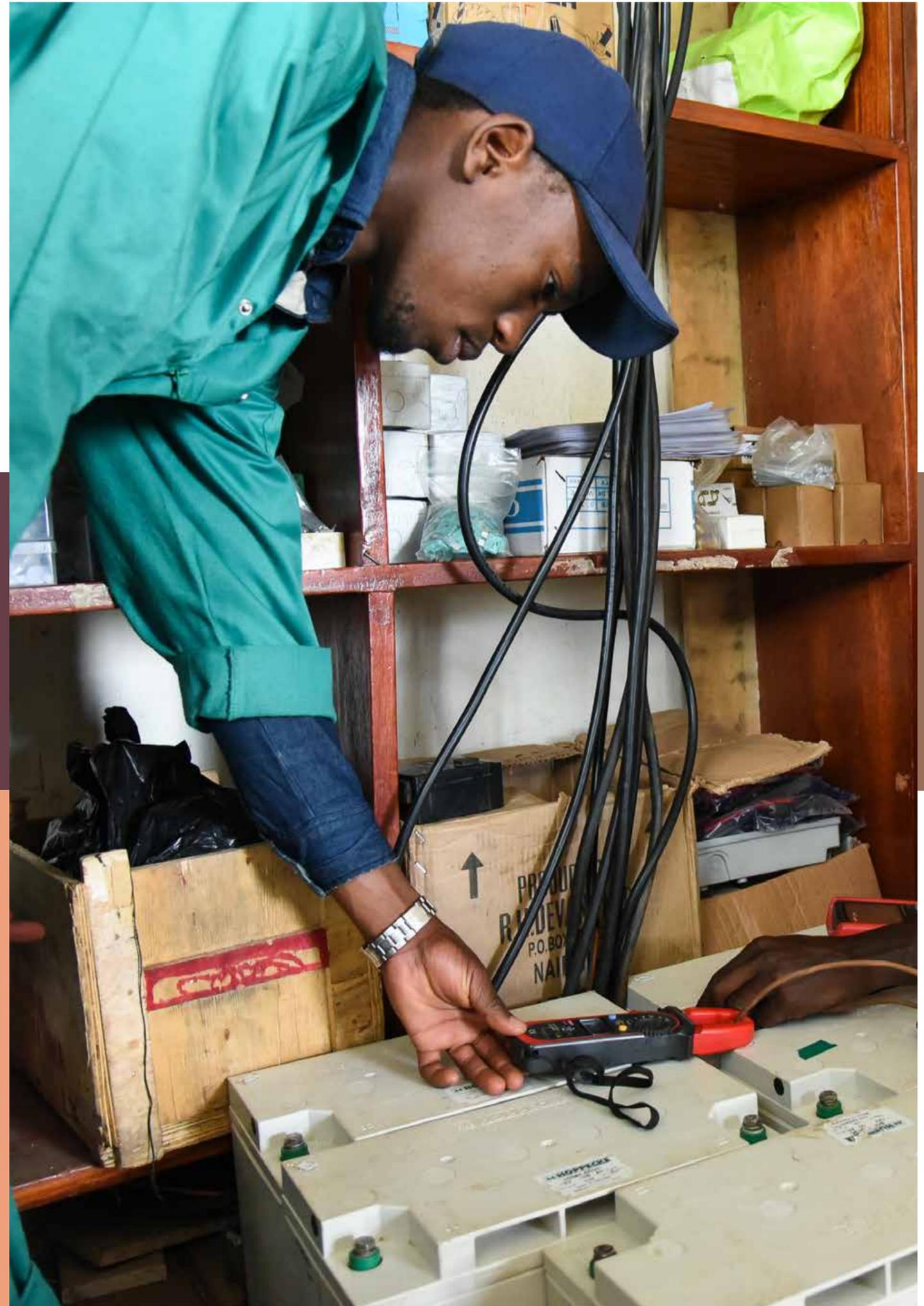
exists that may cast significant doubt on the foundation's ability to continue as a going concern. Our conclusion is not modified in respect of this matter.

*Utrecht, June, 30, 2020*

PricewaterhouseCoopers Accountants N.V.  
Original has been signed by  
K. Hofstede RA

# 04

## Outlook



## 4.1 Outlook

In 2017, FRES decided to move its strategic objective from customer growth to financial sustainability. Customer growth targets were restricted to requirements from donors as laid down in subsidy agreements and the number of customers required for an efficient performance. In 2018, the first results of this shift became visible. Basically, our daily operations in Africa, without investments, were largely self-sufficient. For the coming years our efforts will stay aimed toward achieving long-term financial sustainability in order to cover future investments as well. We remain fully committed to fulfil our investment obligations towards the current EU contracts which we entered into the past.

By the end of 2018, FRES had ongoing contracts with donors to expand at least three of its companies in 2019: FRES Guinea-Bissau, Yeelen Kura, and FRES Uganda aim to connect new customers. Yeelen Ba will focus on increasing customer retention and the redeployment of SHS parts. FRES companies have a long-term business horizon. Their ultimate goal is to become financially sustainable in order to finance future replacement investments and expand the business autonomously. We also aim to maximise efforts toward operational

excellence and lay a solid foundation for efficient, cost-effective and financially sustainable operations in our companies. In line with the Business Plan 2019-2023, the FRES companies will strive to:

- Improve marketing in order to manage customer growth without compromising existing operations
- Improve customer retention to reduce churn where possible
- Improve payment rates and fee collection by enabling mobile payment
- Improve solar system maintenance procedures and transport logistics
- Implement proven technology with regard to batteries and SHS pre-payment systems
- Reduce operational costs in general.

In general, this should lead to lower costs via enhanced effectiveness and efficiency, and mark a next step toward achieving long-term financial sustainability while expanding the customer base for our services.

### Yeelen Kura, Mali

The company hopes to be able to convince the government of Mali that the nationalisation of the five solar mini-grids that has been announced, is carried out in a way that does



not endanger the future of Yeelen Kura and will involve help to replace lost customers. Improving battery lifetime will remain on the agenda as part of operational excellence. Furthermore, in line with contracted agreements and governmental nationalisation plans, Yeelen Kura aims to expand its customer base in new areas as off 2019.

### Yeelen Ba, Burkina Faso

Yeelen Ba will continue to pursue funding for expansion opportunities. The company needs to scale up in order to become financially

sustainable. In the meantime, marketing, customer care, churn management, focus on payment rates and cost reductions are major aspects in the operational excellence programme. This should enhance the viability of the company. When funding becomes available, the company aims to expand its customer base

### FRES Guinea Bissau

The company aims to expand its customer base to achieve operational excellence. In line with contracted agreements, we aim to increase the customer base in 2019.

### FRES Uganda

FRES Uganda needs to counter the effects of grid encroachment on its business by seeking new areas where safeguarded customer growth is possible. In addition, the marketing effort should be continued so as to reduce churn and re-instalments, and drive down costs. The introduction of the mobile payment concept is well underway and the results look promising. In line with contracted agreements, we aim to limit churn and expand in new areas in 2019.

### NuRa, South Africa

The situation remains critical as grid encroachment will continue to have a negative effect on the number of customers. Cost efficiency is therefore the main issue in 2019. The NuRa strategy will be revised in 2019.

### FRES Corporate

FRES NL will continue to support improvements in effectiveness and efficiency in our African companies. We will also focus on investing in staff quality via education and training. Improvements in the use of IT will be pursued as well.

### Fundraising

Governments and international development agencies remain vital stakeholders as they provide FRES with the essential financing required for customer growth. Our customer growth targets are directly related to the contracted funding. We will engage in initiatives to seek additional funding for the coming years, not ruling out the private sector where feasible.

### Risk management

Although pre-financing large sums, at times for longer periods, is a major financial risk to FRES, it is sometimes required to cover high upfront costs for solar expansion investments. FRES will seek solutions to mitigate this risk by searching for pre-financing for initial investments from donors and local governments.

Fraud is a risk to the financial health and reputation of the FRES companies that demands a high state of alertness and immediate intervention when it occurs. In 2017, an anti-fraud policy with related measures was developed and in 2018 it was implemented by all FRES companies.

### Technology

FRES will closely study promising technical developments that have the potential to reduce the lifecycle cost of SHS. The priority will be to find solutions that reduce the financial burden of battery replacement for our companies and enable remotely controlled switching systems.

In 2018, we developed a Code of Conduct for all FRES personnel. The code can be found on our website via <https://www.fres.nl/organisation/#Code>. In 2019 we introduced it in all our operations. Complaints related to the conduct of FRES management or employees can be communicated directly to the FRES Executive Board without any management involvement via the following e mail address: [fcc@fres.nl](mailto:fcc@fres.nl). When such an email is received, the FRES Executive Board aims to take all necessary action, including but not limited to investigating the complaint.



Maintenance on our assets



## 4.2 OBJECTIVES 2019

For 2019 FRES aims to strengthen the operating performance of the FRESco's by increasing the number of customers, the payment rate, mobile payments while limiting churn. Efforts on marketing and sales will be directed to support specific targets per FRESco. On the technical side FRESco's are encouraged to optimize the use and safeguarding of assets (batteries, solar panels and minigrids). Overall we will introduce more close monitoring of operations and strengthening our staff in order to stay in

control of our activities. FRES Amsterdam will continue to support local operations and will also focus on benchmarking performance in order to drive operations. The Amsterdam office will also conduct research in the solar industry that will enable FRES to keep up with technical developments. Future revenues and Opex remain strongly driven by developments in the countries in which we operate and especially by local security situations and economic developments.

## 4.3 OPERATING ACCOUNT 2019

	Budget 2019	Budget 2018	Actual 2018
<b>Consolidated income</b>			
Income from own fund fundraising	21.000	230.269	269.988
Subsidies group companies (committed)	747.000	598.000	228.670
Subsidies group companies (non committed)	1.750.000	-	-
Income from group companies operating activities	2.570.000	2.249.000	3.248.251
Return on investments in funds	13.000	180.618	(193.498)
Transfer from own reserves and funds	3.390.000	2.454.113	1.083.887
<b>TOTAL CONSOLIDATED INCOME (excluding non-committed subsidies)</b>	<b>6.741.000</b>	<b>5.712.000</b>	<b>4.637.298</b>
<b>Non-consolidated income</b>			
Subsidies group companies-non consolidated (committed)	-	-	-
Income from group companies operating activities non-consolidated	318.000	750.000	683.991
Net cashflow from subsidiaries consolidated and non-consolidated	400.000	289.000	483.294
<b>TOTAL NON CONSOLIDATED INCOME</b>	<b>718.000</b>	<b>1.039.000</b>	<b>1.167.285</b>
<b>Sum of the income</b>	<b>7.459.000</b>	<b>6.751.000</b>	<b>5.804.583</b>

### Consolidated income

#### Income from own fund fundraising

Alliander supported FRES by paying a major part of the salary of the director of FRES Amsterdam and the office costs. This support is terminated as of 2019.

#### Subsidies group companies (committed)

The budget figures are based on the contractual agreements with the EU. Actuals follow developments within the FRESco's.

#### Subsidies (non-committed)

FRES is applying to a new grant from the Africa Enterprise Challenge Fund of US\$ 2,000,000 (€1,750,000). The outcome is not known yet.

#### Income from group companies operating activities

These revenues consist of income from our FRESco's clients by expanding the customer base and by driving payment rates to a higher level. The budget figure for 2019 is the result of an ambitious plan to drive revenues to a higher level. A transfer of assets to the government of Mali will limit growth in 2019. We aim to increase the number of SHS customers during 2019 in all countries except in Burkina Faso where we will face limited customer growth due to the lack of grants for this country for 2019.

### Income from group companies operating activities non consolidated

The income of NuRa is expected to decrease

compared to 2018 due to a significant expected loss of customers in 2019. The company was sold off in 2020.

	Budget 2019	Budget 2018	Actual 2018
<b>Expenses</b>			
Expenses for group companies' operational activities (excl depreciations and provisions)	1.262.000	1.260.000	2.573.317
Expenses for replacements and re-installations of group companies	722.000	450.000	144.196
Expenses for expansion of group companies	4.285.000	2.850.000	1.654.168
Expenses for new initiatives	-	500.000	5.566
FRES Service costs- spent on objectives	520.000	532.070	535.844
Spent on management and administration			
FRES Service costs - management and administration	160.000	158.930	160.057
<b>TOTAL CONSOLIDATED EXPENSES</b>	<b>6.949.000</b>	<b>5.751.000</b>	<b>5.073.148</b>
Expenses for group companies' operational activities non consolidated (excl depreciations and provisions)	477.000	800.000	731.435
Expenses for replacements and re-installations of group companies non consolidated	33.000	200.000	-
Expenses for expansion of group companies non consolidated	-	-	-
<b>TOTAL NON CONSOLIDATED EXPENSES</b>	<b>510.000</b>	<b>1.000.000</b>	<b>731.435</b>
<b>Sum of the expenses</b>	<b>7.459.000</b>	<b>6.751.000</b>	<b>5.804.583</b>

## Notes on expenses 2019

### Expenses for group companies' operational activities (excluding depreciation and provisions)

This concerns expenses made for operational activities in the FRESco's. During 2018 Yeelen Ba unexpectedly had to clean its customer base. This has led to high operational costs as assets were no longer fit for use. In 2019 we expect declining expenses compared to 2018 and thus the budget 2019 remains at a stable level compared to the budget 2018.

### Expenses for replacement of group companies

The actuals of 2018 were at a low level because replacements were at a low level. For 2019 we expect an increase as we plan to replace grid parts in Mali and a higher level of maintenance in all FRESco's. We also plan to spend extra on IT, automatic connection and disconnection equipment, SHS parts and systems.

### Expenses for expansion of group companies

During 2018 our capital investments were at a lower level than foreseen. The expenditures

in 2019 concern capital investments for the connection of new SHS clients mainly in Mali and Uganda. Yeelen Kura Mali plans to increase investments in new mini-grids funded by the EU and co-financed by FRES. FRES Uganda and FRES Guinea-Bissau also plan to connect new clients. Investments in Burkina Faso are remaining at a low level.

### Expenses for New Initiatives

In 2019 FRES will focus on current operations rather than investing in new initiatives.

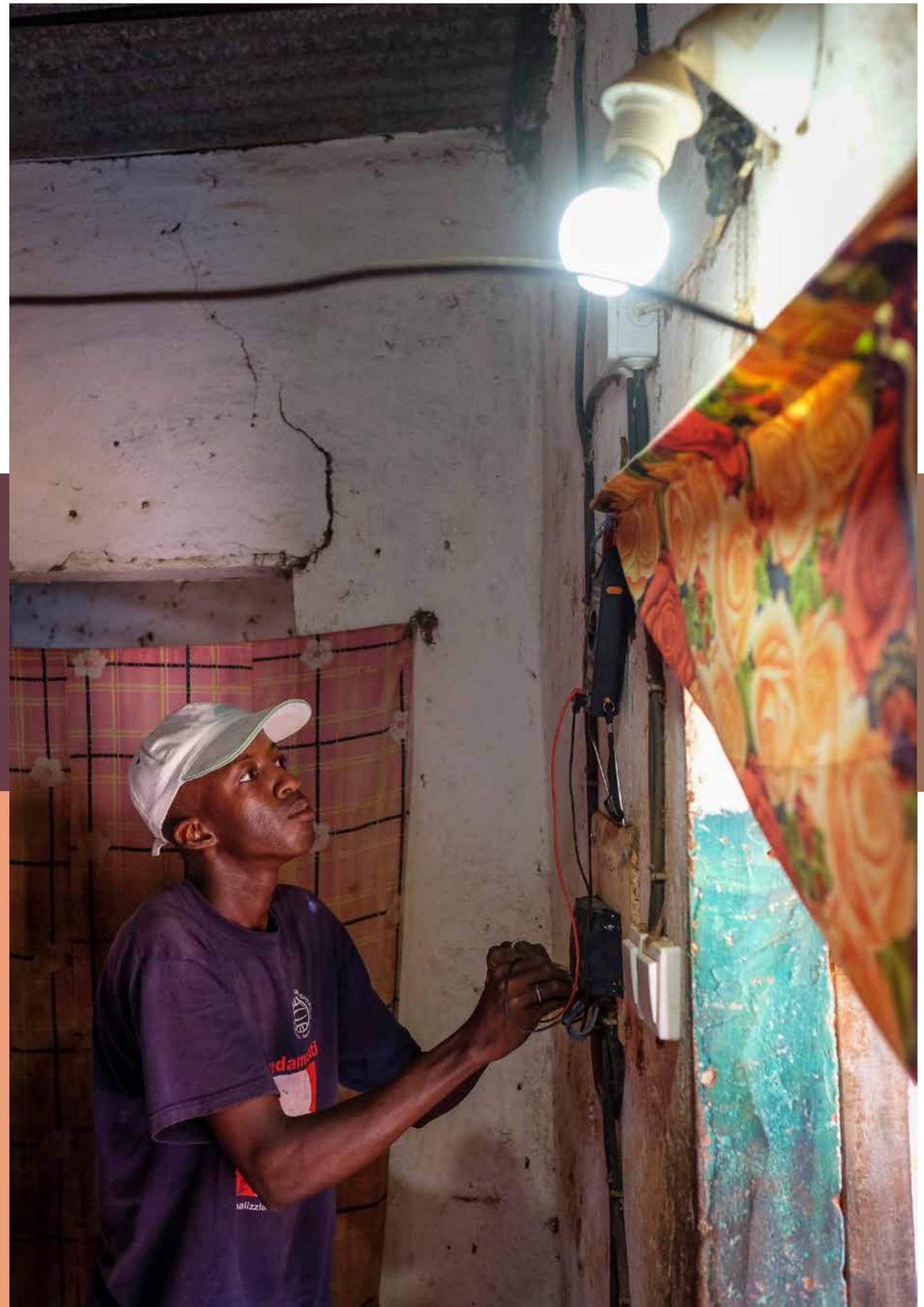
### FRES service costs

FRES budgeted service costs in 2019 will be roughly the same as 2018.

### Non consolidated expenses

This concerns our operation NURA South Africa. As operations are hampered by ongoing grid encroachment expenses are limited as much as possible but aimed at assuring adequate service levels for the remaining customers.

## Appendices

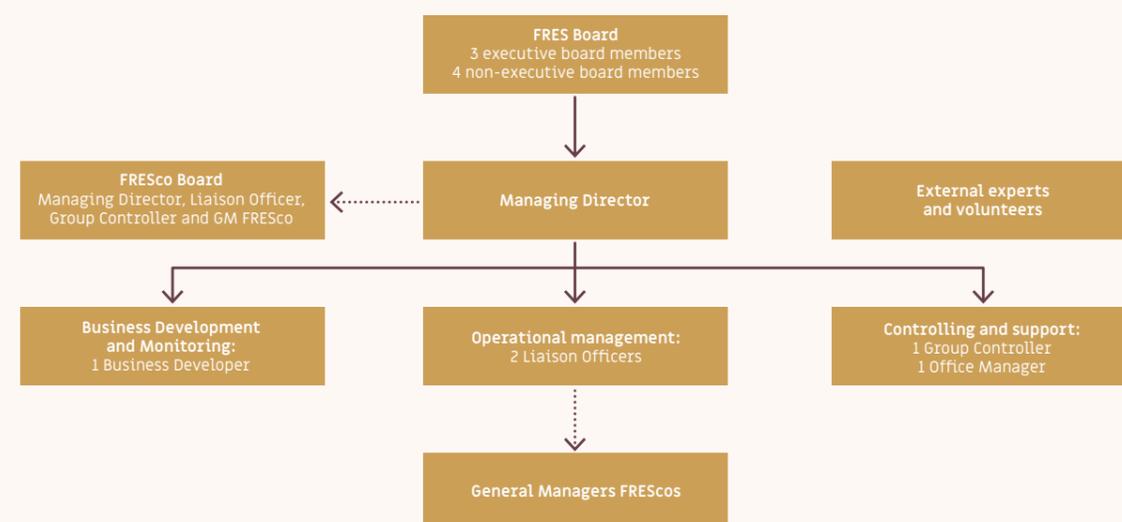


## Appendix 1: Organisation

FRES is a foundation according to Dutch law. The Dutch tax authorities have granted FRES the ANBI status. ANBI stands for: Algemeen Nut Beogende Instelling ('non-profit institution that serves the public interest').

The Board of FRES consists of the following Executive and Non-executive members. FRES. Board members are appointed for a period of five years and can be reappointed.

### Organisational structure FRES, the Netherlands



Who	Function	Additional functions	Period	Reappointment possible
Wim Plaizier	Chairman (Executive)	Chief Operations Officer African Parks Network, South Africa Board member Cappella Amsterdam, The Netherlands Non-Executive Director Omnia Holdings Ltd, South Africa	September 2023	Yes
Serge Leijten	Board member operations (Executive)	Freelance Management Consultant	September 2021	Yes
Paul Gaalman	Board member finance (Executive)	Freelance Management Consultant	September 2022	Yes
Peter Smink	Board member (Non-Executive)	CEO/CFD NV Nuon Energy Board member Swedish Chamber of Commerce in the Netherlands Member Supervisory Board Amsterdam Marketing Vice Chairman Energie-Nederland	September 2020	Yes
Wim Sinke	Board member (Non-Executive)	Manager Programme Development at ECN Solar Energy Part-time professor Photovoltaic Energy Conversion at the University of Amsterdam Board member of the TKI Urban Energy Co-chairman of the European Photovoltaic Technology Platform Visiting scientist at AMOLF (Amsterdam)	September 2022	Yes
Paul Hol	Board member (Non-Executive)	Executive Director Form International Executive Chairman Form Ghana CEO Sustainable Forestry Investments	September 2021	Yes
Lidwien Schils	Board member (Non-Executive)	General Manager Rabobank Belgium	September 2023	Yes
Sophie Dingenen	Board member (Non-Executive)	Partner Bird & Bird LLP	February 2025	Yes

## Appendix 2: Accountability statement

FRES underwrites the Code Code Wijffels and acts in accordance with this code.

### Principle 1: Separation between the functions supervision, management and execution

FRES is a foundation. In our governance we separate the functions of supervision, management and execution. The FRES Board consists of Executives and non-Executives. The Board supervises the way in which the director of FRES NL and the management of the FRES companies operate.

The Supervisory Board members of the local FRES companies in Africa are appointed by the FRES Board. They provide supervision for local General Management in each company. General management handles day to day business operations.

The annual accounts of all FRES companies are locally audited. PwC audits the consolidated accounts.

### Principle 2: Optimal spending of resources

We strive for an optimal level of resource effectiveness. There is a multi-year Business Plan which includes a more detailed budget for the first year. Our planning and control cycle has a monthly report. The monthly reports are primarily focused on a limited number of operational business items and developments.

### Principle 3: Optimal relationships with interested parties

FRES cooperates closely with governments, subsidizers, volunteers, universities and businesses. A good, open and reliable communication is extremely important to us. We want to improve international commitment to rural electrification by means of active participation in international conferences or meetings and (online and offline) publications. We also inform our stakeholders through websites and social media.

### Principle 4: Conflict of interest

for situations that could include a conflict of interest (Code Wijffels point 5.5.g) are included in our management procedures.

### Principle 5: One tier board

As of September 2018 FRES has a one tier board which currently consists of 3 Executive Board members and 5 Non-Executive Board members.

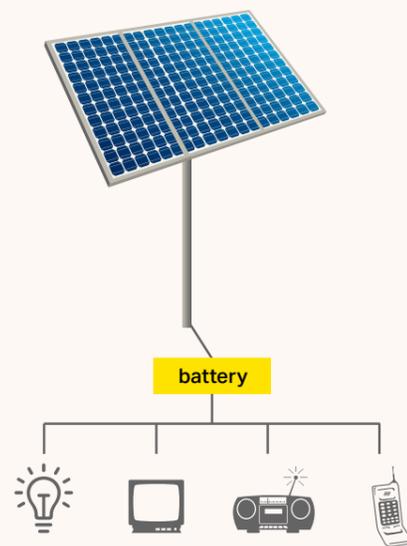
## Appendix 3: Solar Home System and solar mini-grid: how does it work?

### How does a Solar Home System (SHS) work?

An SHS consists of one or more solar panels, batteries, a regulator and several lamps and sockets. The solar panel generates power that is stored in the battery. The stored power can be utilised night and day. The regulator ensures a stable (direct) current.

#### Limits in using an SHS

- Relatively high initial investment
- The number of electrical devices that can be connected is limited
- Devices that require a lot of electrical capacity cannot be connected



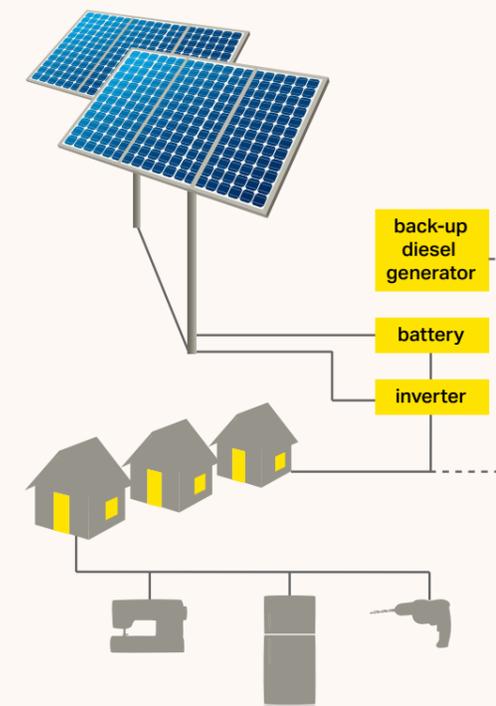
### How does a solar mini-grid work?

A solar mini-grid consists of a solar power plant and a small electricity distribution network.

A solar power plant consists of a field of solar panels and a large battery bank. Our solar power plants in Mali are modular, consisting of one or several 50 kWp solar arrays, each with over 200 solar panels covering a surface area of 400 m<sup>2</sup>. Each 50 kWp module can produce up to 73,000 kWh of electricity annually. Every individual solar panel produces low voltage direct current (DC). Their combined output results in a high voltage that is converted into 220 V alternating current (AC), similar to that delivered by the national grid in urban areas. The generated

electricity is fed into the network of distribution cables and transported to customers within a radius of a few kilometres.

One solar power plant of 50 kWp can provide approximately 250 families and companies with power. During the day, when a lot of solar electricity is produced but relatively little is used, the excess electricity that is not used by customers is stored in batteries. At night, when there is demand and the sun is not available as an energy source, the solar energy stored in the batteries is supplied to customers. The back-up diesel generator provides additional power only when required.



## Appendix 4: Terminology

**AC:** Alternating current (AC) is an electric current with periodically altering current direction. Power that is supplied to households and industries via the electricity network usually involves Alternating Current.

**DC:** Direct Current is an electric current with constant current direction. All batteries and solar panels are examples of power sources that supply DC (when loads are connected). An inverter can convert direct current (DC) into alternating current (AC).

**ANBI:** an organisation for the general benefit that is accepted as such by the Dutch Tax Authorities and is exempt from paying tax on inheritances or gifts. Moreover, private donors may deduct donations from their income tax.

**BoD:** Board of Directors that supervises a FRES company.

**Concession area:** the area for which a FRES company has permission from the relevant authorities to provide its services.

**Fee-for-service:** customers pay a monthly fee for access to light and/or electricity; the amount depends on the chosen service level, and guarantees the maintenance of the necessary technical system.

**Financial sustainability:** revenues are larger than operational and replacement costs for the foreseeable future.

**FRESco:** FRES company in Africa.

**GHG:** Greenhouse Gas. GHG is a gas in the atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect that drives climate change or global warming of the planet.

**HSE:** Health, Safety and Environment.

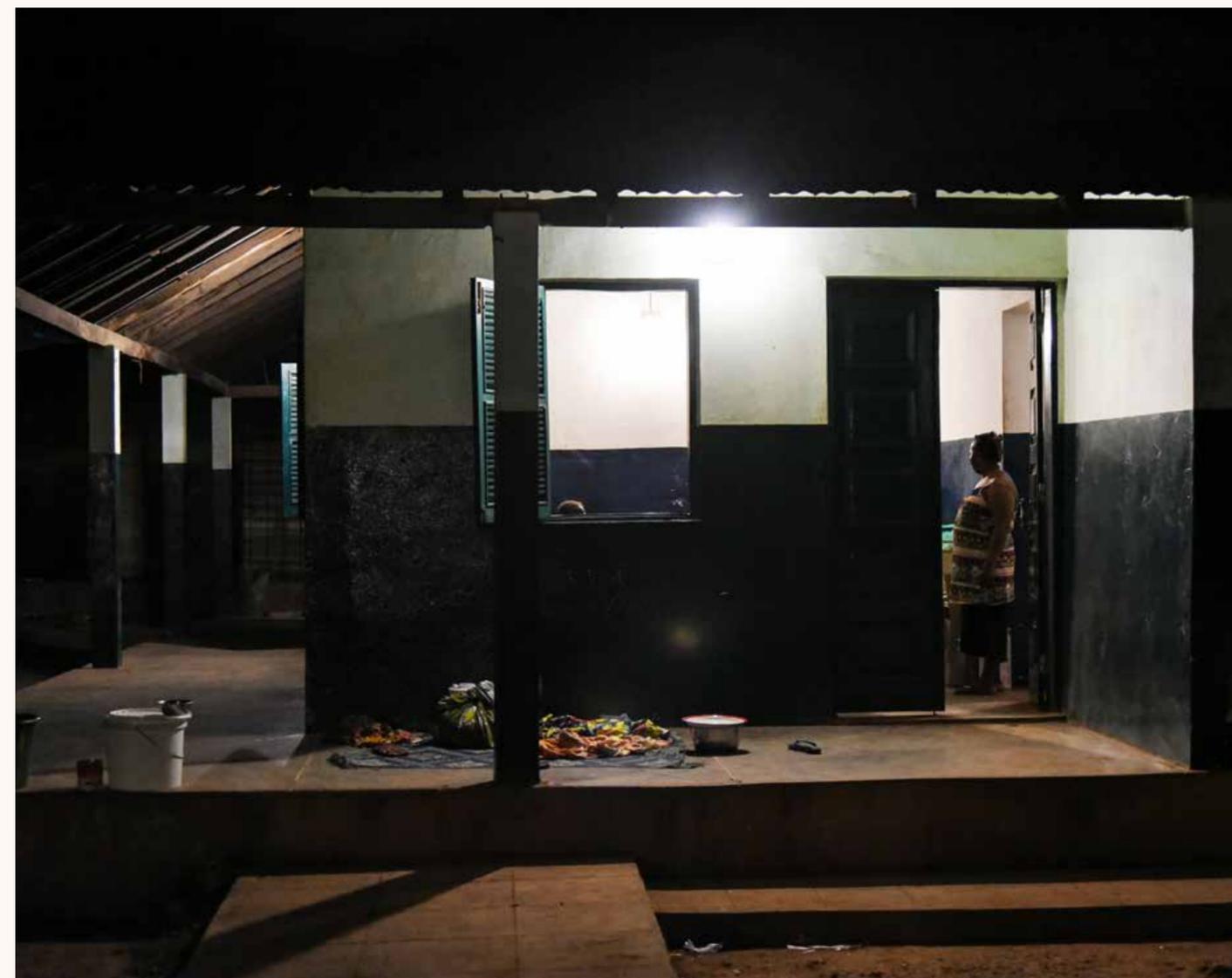
**Mini-grid:** a small electricity network which is not connected to a national grid, to which customers in the vicinity can be connected.

**Payment rate:** payments received as percentage over payments due in a certain period.

**Rural electrification:** providing rural areas with access to electricity.

**SHS:** Solar Home System.

**Stakeholder:** persons or organisations impacting FRES.



## colophon

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