

# Capital Markets Day

Zurich - January 29, 2019

## **Forward-looking information**

*Presentations given during the Landis+Gyr 2019 Capital Markets Day include forward-looking information and statements including statements concerning the outlook for our businesses. These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions, and the economic conditions of the regions and industries that are major markets for Landis+Gyr Group AG. These expectations, estimates and projections are generally identifiable by statements containing words such as “expects,” “believes,” “estimates,” “targets,” “plans,” “outlook” or similar expressions.*

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## **Market Data**

*Presentations given during the Landis+Gyr 2019 Capital Markets Day may contain estimates of market data and information derived therefrom that cannot be gathered from publications by market research institutions or any other independent sources. Such information is prepared by Landis+Gyr based on third-party sources and its own experience and internal estimates of market conditions. Although Landis+Gyr believes that its internal market observations are reliable, there can be no assurance that any of these estimates are accurate or correctly reflect its position in the industry, and such estimates have not been verified by any independent sources.*

## **Alternative Performance Measures**

*Presentations given during the Landis+Gyr 2019 Capital Markets Day may contain information regarding alternative performance measures. Definitions of these measures and reconciliations between such measures and their US GAAP counterparts if not defined in the presentation may be found on pages 38 to 44 of the Landis+Gyr Half Year Report 2018 on our website at [www.landisgyr.com/investors](http://www.landisgyr.com/investors).*

# Landis+Gyr management presenting today



**Richard Mora**  
*CEO*<sup>1</sup>  
20 years with Landis+Gyr  
Over 30 years multinational  
experience



**Jonathan Elmer**  
*CFO*<sup>1</sup>  
22 years with Landis+Gyr  
Over 30 years experience in  
financial & general management



**Prasanna Venkatesan**  
*EVP Americas*<sup>1</sup>  
12 years with Landis+Gyr  
Over 30 years technology &  
management experience



**Susanne Seitz**  
*EVP EMEA*<sup>1</sup>  
3 months with Landis+Gyr  
20 years international  
B2B experience



**Steve Jeston**  
*Head Asia-Pacific*  
23 years with Landis+Gyr  
35 years experience in energy  
management



**Bodo Zeug**  
*EVP Supply Chain Management*  
2 years with Landis+Gyr  
23 years experience in  
electronics industry



**Jyoti Mahurkar-Thombre**  
*EVP Research & Development, CTO*  
2 years with Landis+Gyr  
30 years engineering &  
management experience

# Agenda

Start	Agenda Item	Lead
09:30h	<b>Landis+Gyr Markets &amp; Strategy Update</b>	Richard Mora, CEO
	<b>Voice of the Customer</b>	Mike Lowe, SRP Executive (retired)
	<b>Americas</b>	Prasanna Venkatesan, EVP Americas
11:00h	<i>Coffee Break</i>	
11:15h	<b>Europe, Middle-East &amp; Africa</b>	Susanne Seitz, EVP EMEA
	<b>Asia-Pacific</b>	Steve Jeston, Head AP
	<b>Q&amp;A</b>	
12:30h	<i>Lunch / Product Demos</i>	
13:30h	<b>Supply Chain &amp; Operations</b>	Bodo Zeug, EVP SCM
	<b>Technology and Innovation</b>	Jyoti Mahurkar-Thombre, EVP R&D, CTO
	<b>Finance</b>	Jonathan Elmer, CFO
	<b>Wrap-Up</b>	Richard Mora, CEO
	<b>Q&amp;A</b>	
15:30h	<i>Demos / Coffee</i>	

*“Capitalizing on the evolving role  
of smart metering at the heart of  
the energy industry revolution”*

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## **Landis+Gyr Markets & Strategy Update**

*Richard Mora, CEO*

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## Global leader in smart metering solutions...



Swiss HQ with offices in 30+ countries worldwide



120 Years of service to customers as a trusted partner to utilities



Serving 3'500+ utilities worldwide



Nearly USD 1b of self-funded R&D investment since 2011



Over 90 million connected intelligent devices deployed



More than 15 million meter points under managed services



The largest installed base with 300+ million devices globally



Frost & Sullivan Global AMI Company of the Year 2017 - the 4<sup>th</sup> consecutive year

## ... serving three regional segments

Landis+Gyr Group: 1'738m Net Revenues in FY17

Asia-Pacific (8%)  
USD 138m



Americas<sup>1</sup> (56%)  
USD 972m

EMEA (36%)  
USD 627m

- North America, robust smart metering business
- EMEA, on track for return to profitability
- Asia-Pacific, positioned for long term growth

<sup>1</sup>Including Japan

## We offer flexible business models...

### Services based business model



### AMI project business model (turn key)



### Product business (book & bill)



## ...delivering multiple layers of value to utilities

### End-to-end offering

Most **comprehensive end-to-end product, solutions and services** offering in the market. **Flexible managed services model**, providing utilities any preferred level of support along the asset ownership continuum

### Global presence with local proximity

**Global reach with the world's largest smart meter installed base.** Local development centers **tailor solutions to each region's needs**

### Technology

**Technology leadership** underpinned by world class utility applications and R&D know how

**Gridstream Connect platform for Utility IoT offers next generation of grid edge intelligence**

### Trusted partner

**Proven track record and commitment to delivery** to our valued utility customers, whether that is product shipment, solutions deployments, or delivering to service level agreements

### Reliability

**Leading brand known for reliability and quality**  
**Stringent testing and quality initiatives** have been implemented

### Business value

**Decision support analytics** create actionable data for utilities to improve business value

# Industry disruption drives need for grid edge intelligence

## Traditional power grid



- Central one-way power system
- Focus on safe, reliable and affordable power

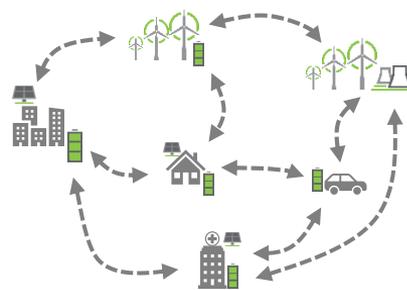


## “3-D” drivers of industry disruption

- **Decarbonization, decentralization and digitalization** disrupting the utility industry
- Rise of **distributed and intermittent resources** to be integrated
- New level of **flexibility, resilience and security** needed
- Distributed energy resources increasingly raising the game on **customer engagement** and new offerings



## Decentralized power grid



- Distributed two-way power flows
- Mobile energy resources
- Multiple energy players



## Grid edge intelligence

- **Distributed intelligence** at each endpoint (grid edge)
- Near real time **energy measurement and control**
- **Data flows** via flexible communications networks
- **Enhanced capabilities** for processing throughout the network

Grid edge intelligence is the evolution of smart metering to enable the digital energy revolution

# Three platforms for growth with attractive addressable market sizing and dynamics

## 1 | Smart metering

Smart electricity, gas and heat meters  
Communication Network  
Software and services

## 2 | Grid edge intelligence

Distribution management before the meter (on the grid)  
Behind the meter applications in home energy management

## 3 | Smart infrastructure

Multi-Utility infrastructure  
Smart street lighting Infrastructure

Addressable market 2017 USD 5.6b

USD 3.2b

USD 3.8b

CAGR 17-21

7%

19%

11%



Three growth platforms represent an addressable market of USD 12.6b  
growing at more than 11% CAGR through 2021

Sources: Company analysis, Navigant Research, Northeast Group, IHS Markit, CSIL

# Landis+Gyr has established leadership in smart metering and continues to strengthen and build its core business

*Landis+Gyr continues to strengthen core offering*

## Smart meters



Residential

Commercial



Industrial

## Communication networks



Network gateway



Network bridge

## Software & Services for data aggregation and management



Head-end systems



Meter data analytics



Meter data management

**#1 in smart meters with more than 90 million installed connected intelligent devices**

# Core smart metering business has geographic diversity that supports long-term growth



## Early stage

- Regions where smart meter penetration <20%
- Regulation for smart meter rollout: in place
- Landis+Gyr has strong local presence and is targeting upcoming tenders

Gradual rollout through the **2020s**

Gradual rollout to complete by **2027** with opportunity to build services business

Gradual rollout expected, tied to political and economic situation

Expected penetration 50% by **2023**  
Retailers looking for value-add services

Government of India has set up, and is strongly backing a framework to drive AMI



## Mass deployments

- Smart meter penetration well underway
- Distribution utilities / retailers have awarded major contracts
- Landis+Gyr well represented in the following deployments

35m rollout, expected completion in **2024**

Large-scale 15m dual fuel rollout with expected completion by **2023**

Dual fuel rollout with 53m smart meters with expected completion in **2022**

78m rollout in Japan expected to complete in **2023**



## Replacement

- 2nd wave rollouts already started moving towards grid edge intelligence
- Landis+Gyr is serving the market with next generation smart metering technology

2<sup>nd</sup> wave meter rollouts at investor-owned utilities, while municipals roll out mainly 1<sup>st</sup> wave

Completed 1<sup>st</sup> wave rollout with AMI to be upgraded through the **2020s**

2<sup>nd</sup> Wave replacement expected to start in **2019** with utilities seeking service models

**Addressable core metering market of USD 5.6b (2017) expected to grow at 7% CAGR<sup>1</sup> through 2021**

Sources: Berg Insight, Frost & Sullivan, Northeast Group, IHS Markit and company information

# Grid edge intelligence is a reality today, driving significant utility benefits

## Regulated distribution utilities



### Emerging grid edge use cases

Enable distributed energy

Improve grid resilience

## Retailers



Ensure consumer loyalty

Empower consumers

### Role of Landis+Gyr offerings

Use smart meters and grid edge devices to improve energy flows on the grid: home energy management, distributed energy resource (DER) management

Edge-level sensing can provide outage detection, fault management, and power quality monitoring

Load disaggregation and energy portals increases consumer awareness of energy and reduces high-bill complaints

Analytics at the edge for behavioral insights and customer engagement; prevents bill surprises, and enables new tariff structures

Already benefitting from utility and energy retailer investments in grid edge intelligence for advanced use cases



## Grid edge intelligence is key to operating a decentralized grid



### Application Enablement



Network manager

Device manager

Analytics



### Flexible Communications



Network gateway



Network bridge



Network node



### Intelligent End-Points



Smart meters



Line sensors



Edge intelligence cards

## Key Benefits

- Integrated data visualization and analysis
- Network and device management solutions
- 3<sup>rd</sup> party applications and development ecosystem

- Multiple communication technologies under a single network (PLC, RF-mesh, cellular)
- Bandwidth and latency tailored to use-cases
- Designed for lowest “total-cost-of-ownership”

- Securely connected sensors & controllers
- Grid edge intelligence for 2<sup>nd</sup> wave use cases
- Diverse device ecosystem: 60+ integrated devices from 20+ 3<sup>rd</sup> party suppliers

New utility IoT platform underpins complete Landis+Gyr portfolio for upcoming deployment cycles

# Smart infrastructure offers additional avenues for expansion

## Smart infrastructure use cases



Smart streetlighting solutions



Water resource usage



EV load management and charging optimization



Stock level monitoring for city-wide smart vending machines



High voltage tower lighting status monitoring



## Role of Landis+Gyr

**Continue organic growth** in smart infrastructure. **Explore inorganic avenues for growth** through M&A and partnering

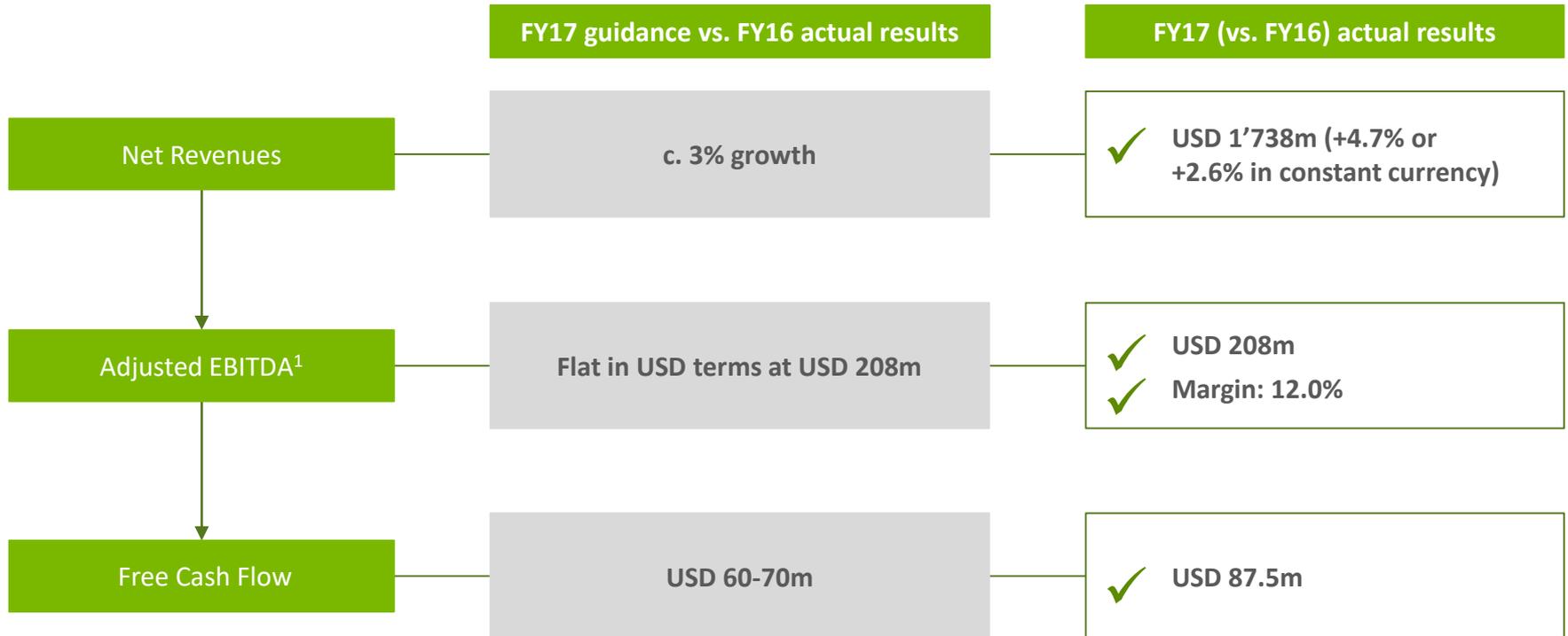
Leverage **communication and network management platforms** to further integrate sensors and devices for **use cases beyond smart metering** applications

Add further capabilities to portfolio and leverage integrated **measurement and analytics solutions**

Benefit from grid edge intelligence leadership by deploying knowhow for other **smart infrastructure applications**, potentially through inorganic market entry (M&A or partnerships)

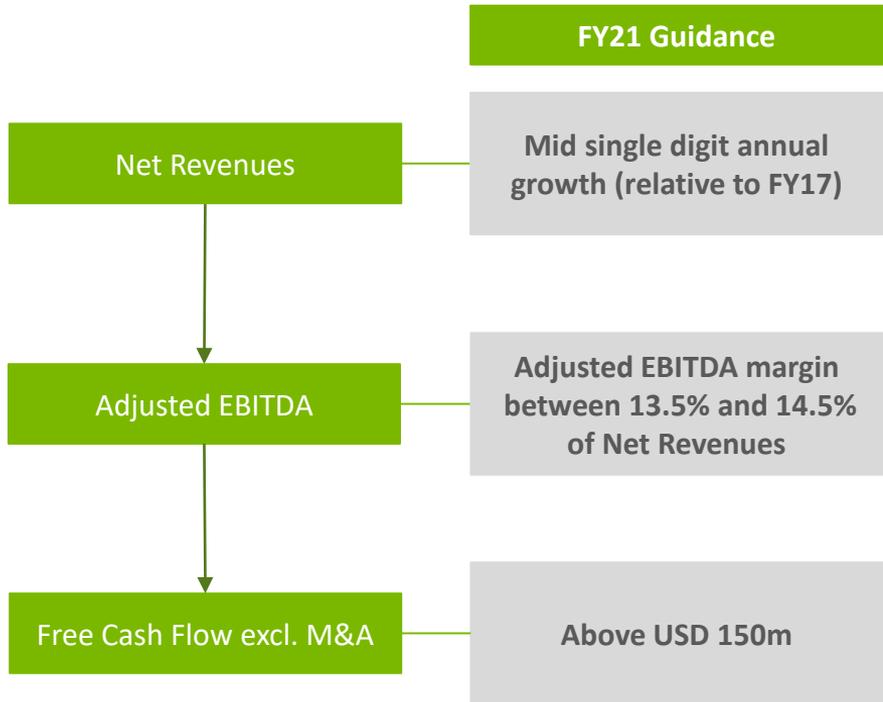
Landis+Gyr has proof points for all of these smart infrastructure use cases today

# Performance against IPO guidance | FY17



1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, EBITDA has been revised down by USD 3.8m in FY17 as all pension income and expenses other than service costs are now reported under "Other income (expense)".





## Group

- Net Revenues expected to grow based on targeted profitable smart metering opportunities
- Adjusted EBIDTA margins expected to increase to between 13.5% and 14.5% of Net Revenues as EMEA and AP return to profitability

## Americas

- Core smart metering market expected to continue to grow
- Adjusted EBITDA margins expected to remain strong

## EMEA

- Net Revenues expected to grow based on targeted profitable smart metering opportunities
- Adjusted EBITDA % expected to reach c. 10% as margin enhancement projects materialize

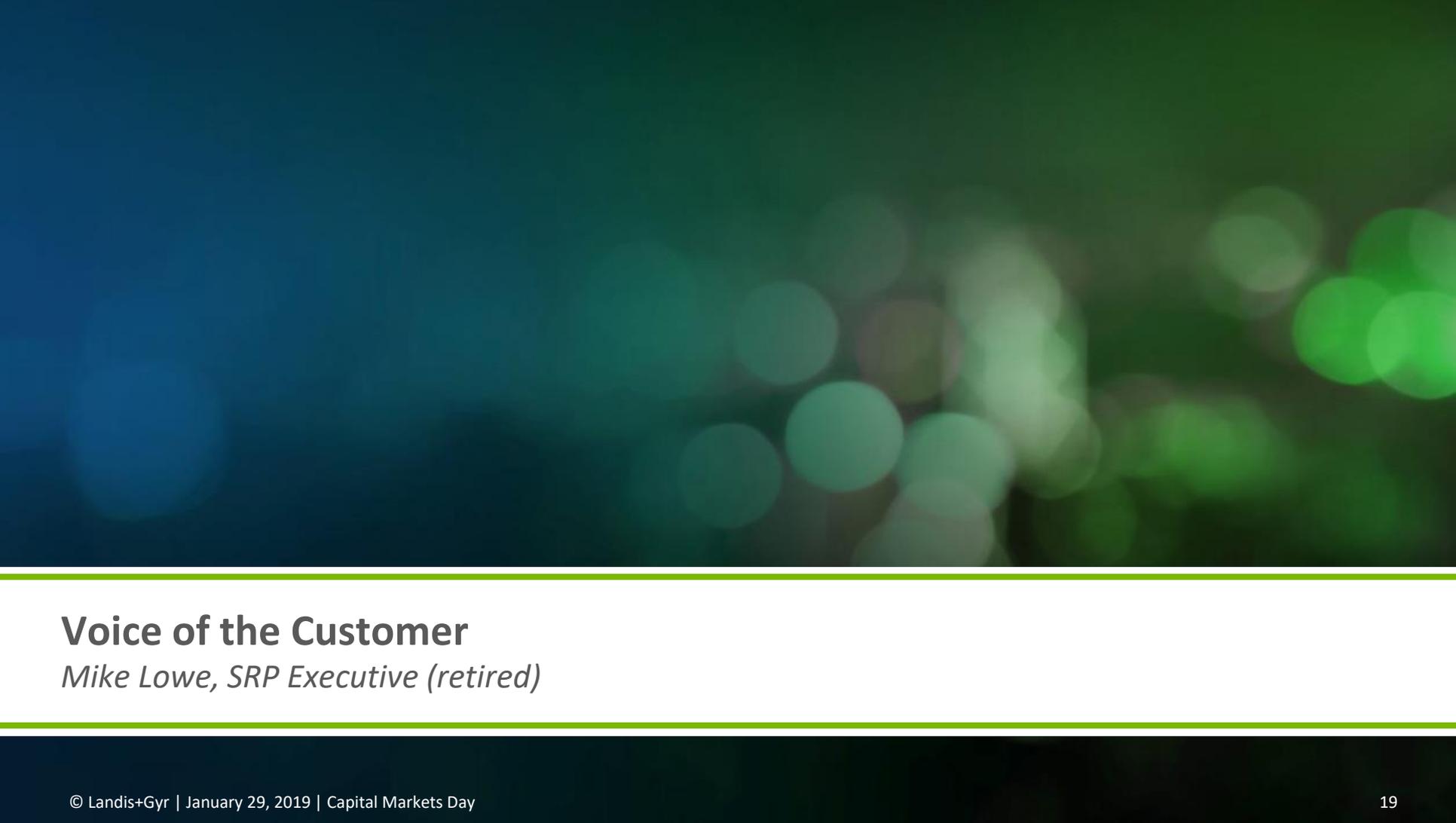
## Asia-Pacific

- Growth expected to resume as key markets in ANZ, India and SEA gather pace
- Return-to-profitability measures delivering first results

**Dividend payout of at least 75% of Free Cash Flow excl. M&A**

- Announced today a **share buy back program of up to CHF 100m** to run over a three year cycle
  - May be stopped at any time
- Landis+Gyr is undertaking this program
  - As an **opportunity to purchase our stock** which we believe is currently priced below industry multiples
  - As a means to **improve shareholder returns**
- Fully **compatible with our other ongoing uses of capital**
  - Investing for organic growth
  - Dividend policy (which remains unchanged)
  - Bolt-on M&A
- Overall **leverage-ratio remains consistent** with the IPO guidance
  - Net debt expected to remain below 1.5x Adj. EBITDA

**Share buyback fully in line with capital allocation policy**



## **Voice of the Customer**

*Mike Lowe, SRP Executive (retired)*



# Smart Meters

Leaner, Greener, and More Customer-Centric

**Michael Lowe**

Deputy General Manager &  
Chief Customer Executive  
Salt River Project  
(Retired)

# Substantial Cost Savings from Automation of Meter Reading



## Salt River Project (Tempe, Arizona, USA) Case Study:



Reduction of 5 meter readers and 1 field technician for every 50,000 smart meters deployed



**\$17 million**

annual savings at full deployment of 1 million meters

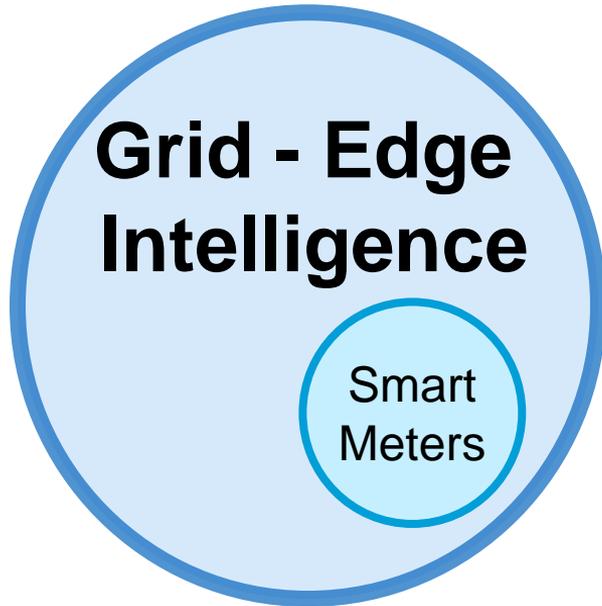


**\$140,000**

annual savings for each position eliminated

## Smart Meters Much More than Automated Reads

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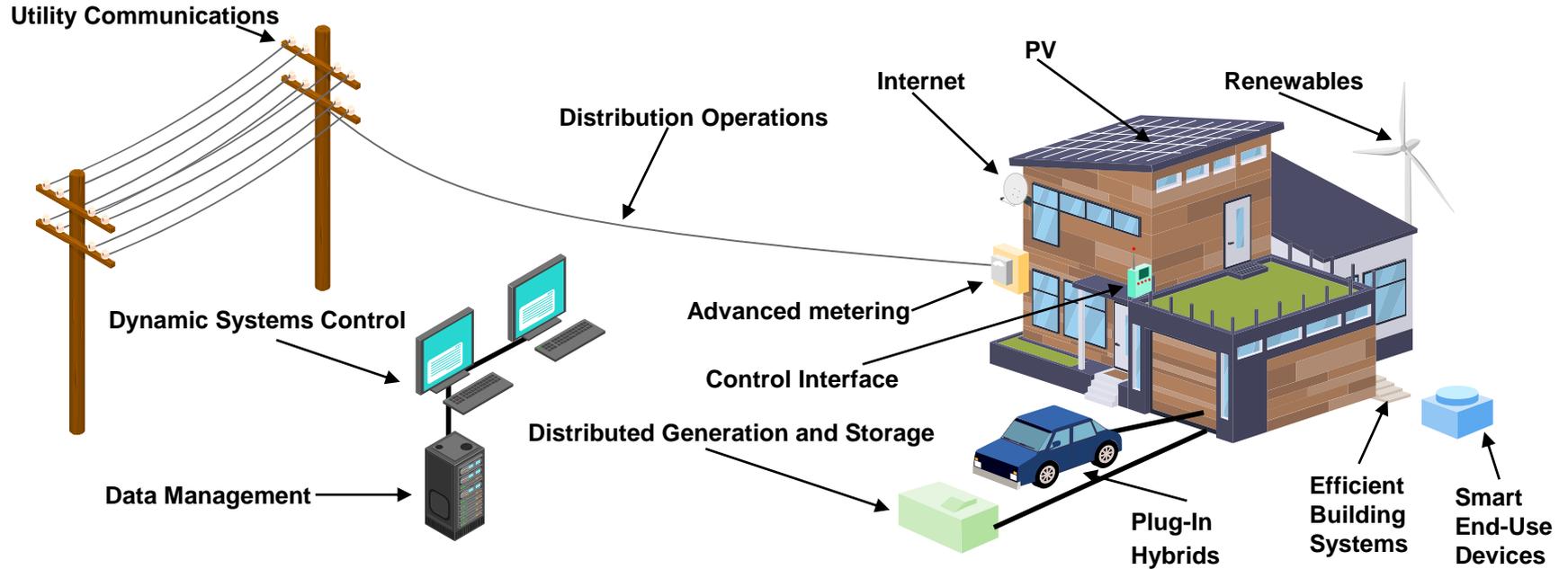
**Grid - Edge Intelligence**  
enables a revolutionary level of  
precision in management of the grid



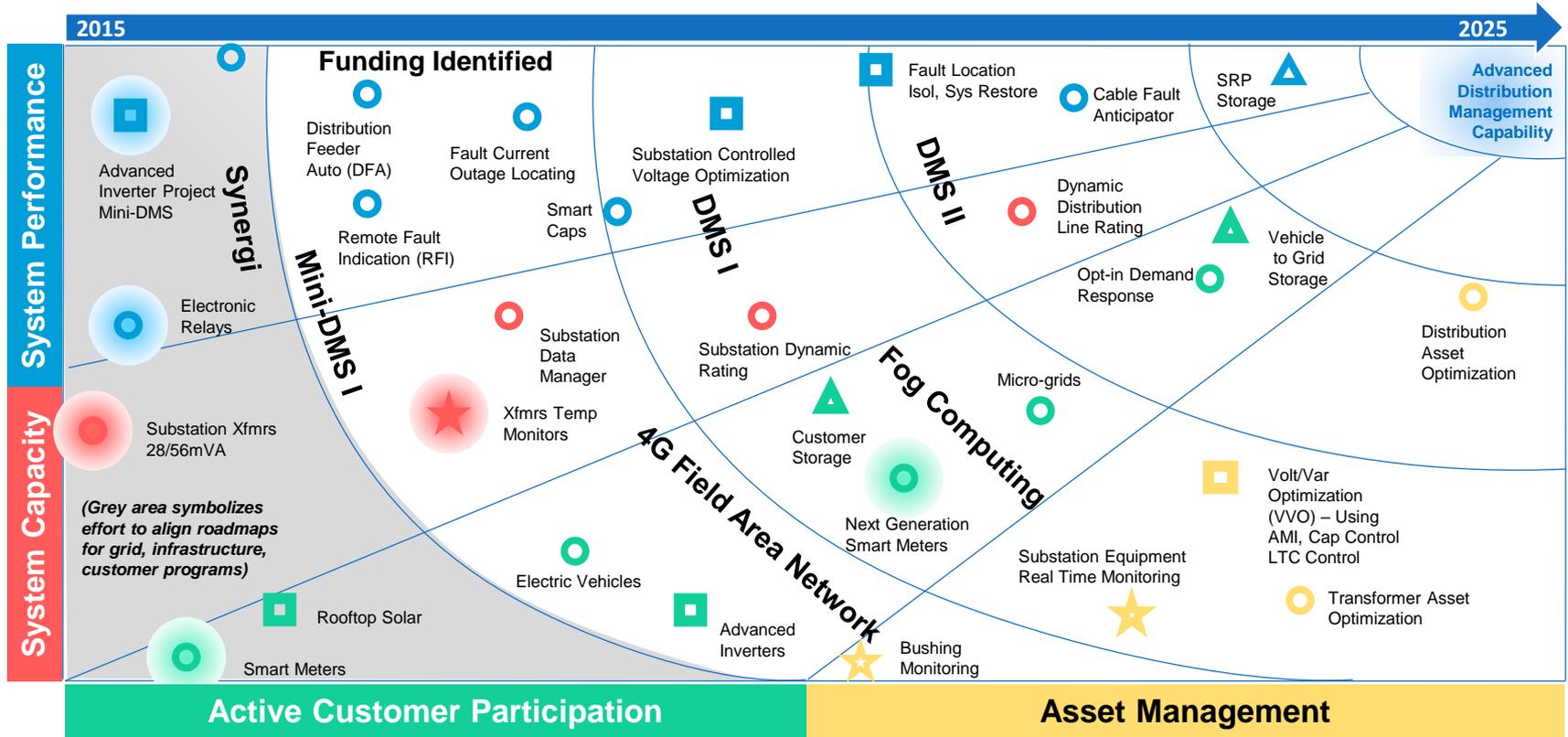
smart infrastructure in  
Homes and Businesses

# The New Eco-System

## Smart Grid Electricity Infrastructure



# Grid Modernization Plan



## Many Benefits from AMI (1/2)

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- **“Big data”**

- Daily reading of each meter results in immediate labor savings
- Interval AND scalar measurements
- Measurement of usage AND customer-generation
  - **Customers who choose their bill due date are among the most satisfied with a utility’s overall billing and payment process**

- **Remote disconnect switch**

- Avoids truck “rolls” for turn-ons / turn-offs / disconnections for non-payment
  - **SRP avoids 300,000 truck rolls per year**

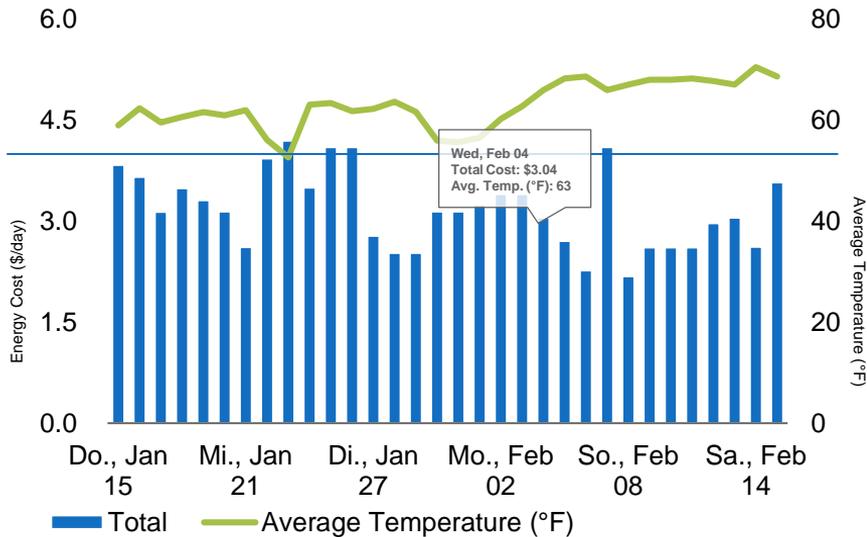
## Many Benefits from AMI (2/2)

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- **Voltage measurement**
- **Tamper detection**
- **Outage identification**
- **Support for “load shaping” to reduce cost and carbon-intensity of energy supply**

# Customers Want Help To Manage Their Usage

## Information Makes Electricity Tangible

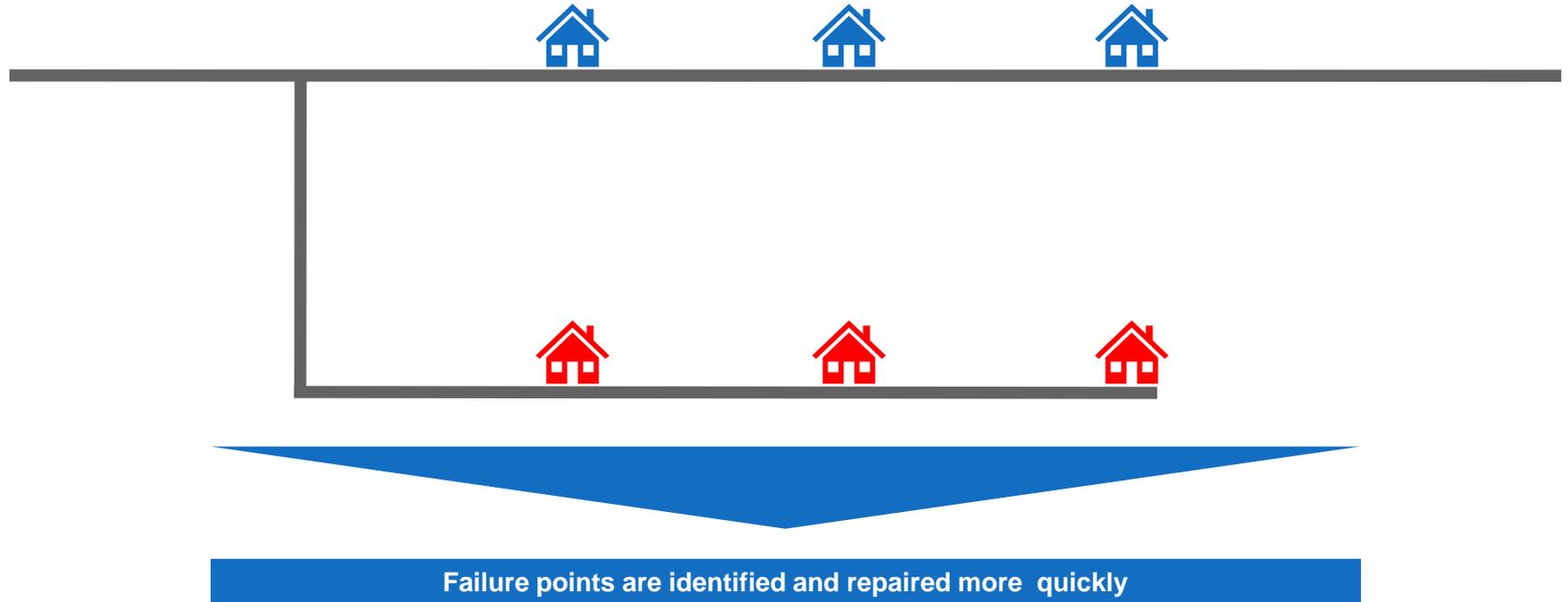


**SRP POWER** now

Bill projection for July is \$280.00 for account 5006 (based on power usage through July 27, 2017)

Slide to open

# Utilities No Longer Dependent on Customers to Report Power Outages



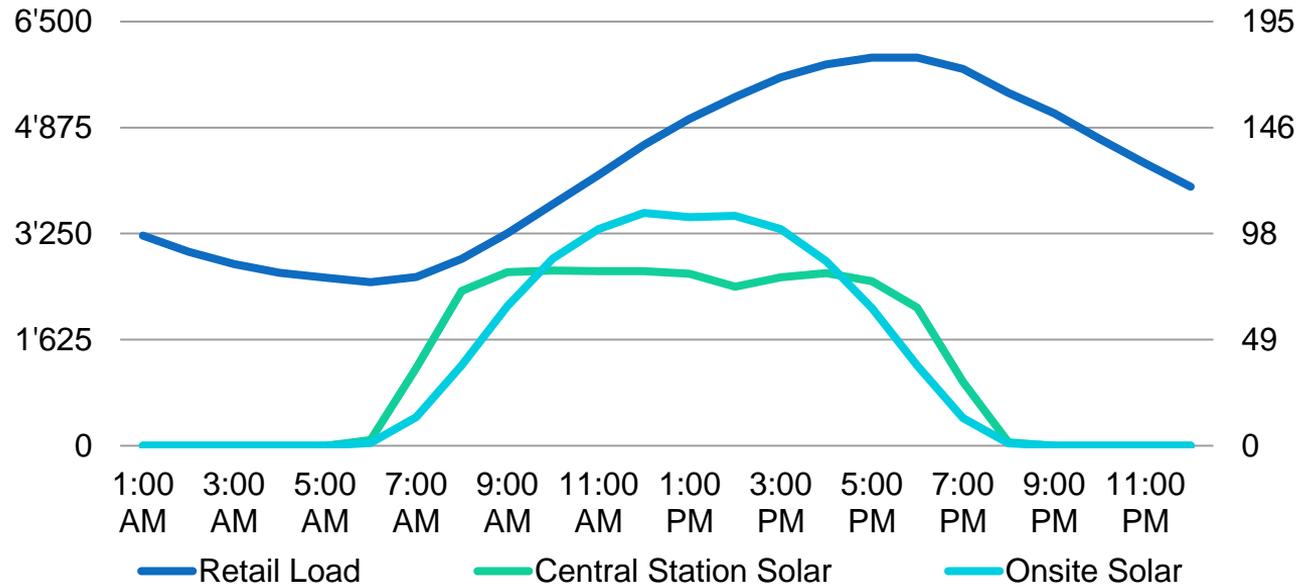
 Meter with power  Meter without power

# Need for Load Shaping in a Desert Territory

- Solar output peaks before system load

## Retail Load vs. Solar Generation

June 18, 2016

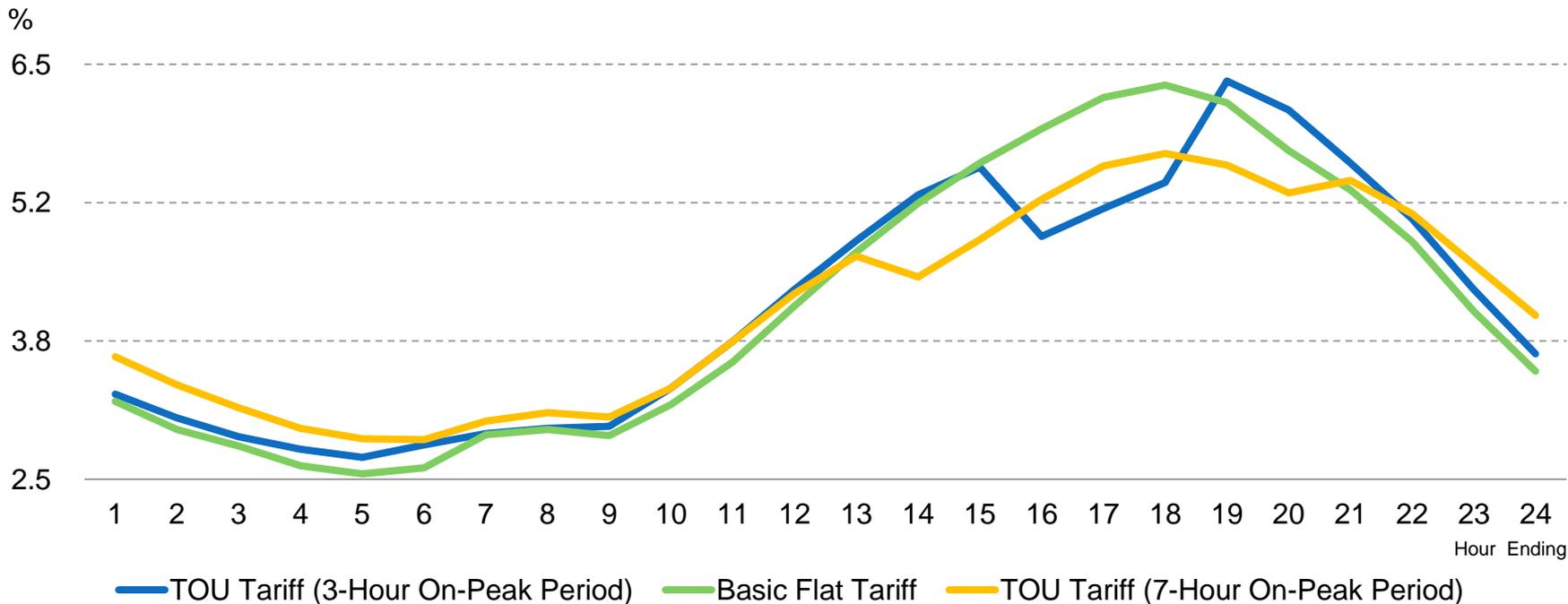


# Load Shaping Delivered by Smart Meters

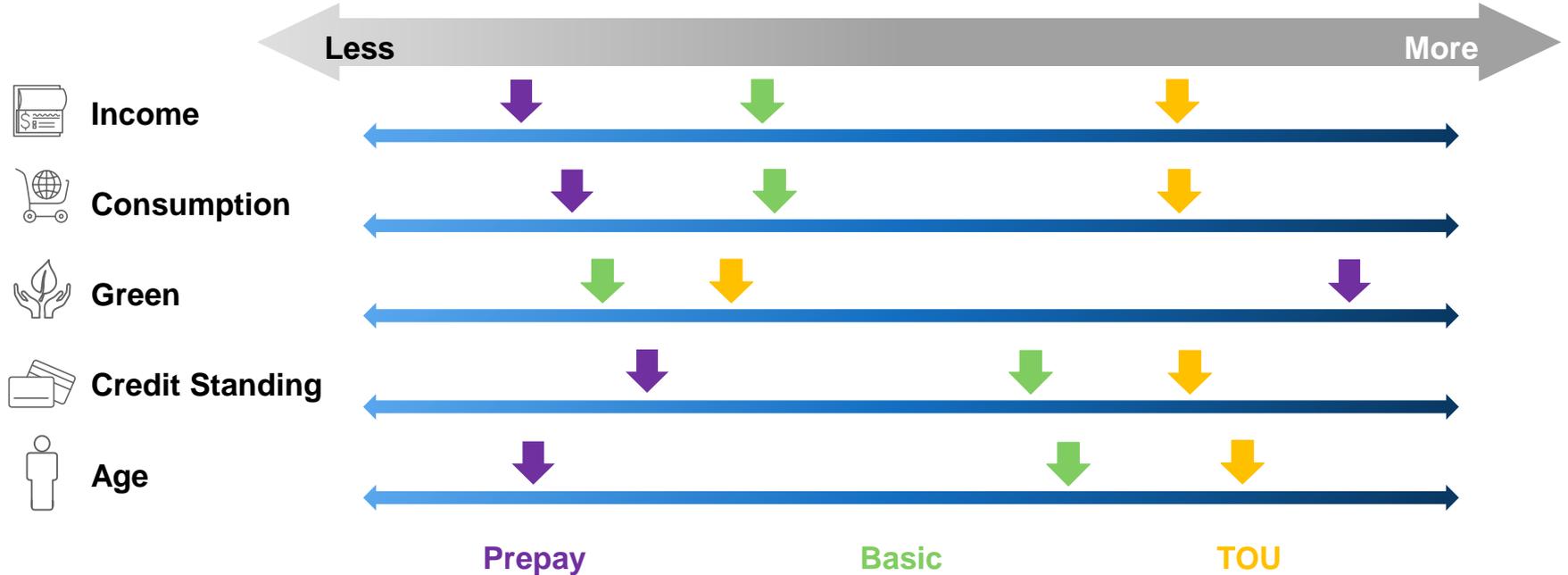


# Multiple Tariff Options on a Single Smart Meter Platform Help to Shape Load

## Percentage of Total Daily Usage

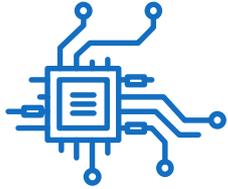


# Tariff Options Appeal to the Unique Needs of Customers



# Smart Meters Much More than Automated Reads

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A critical component in the evolution of grid edge intelligence



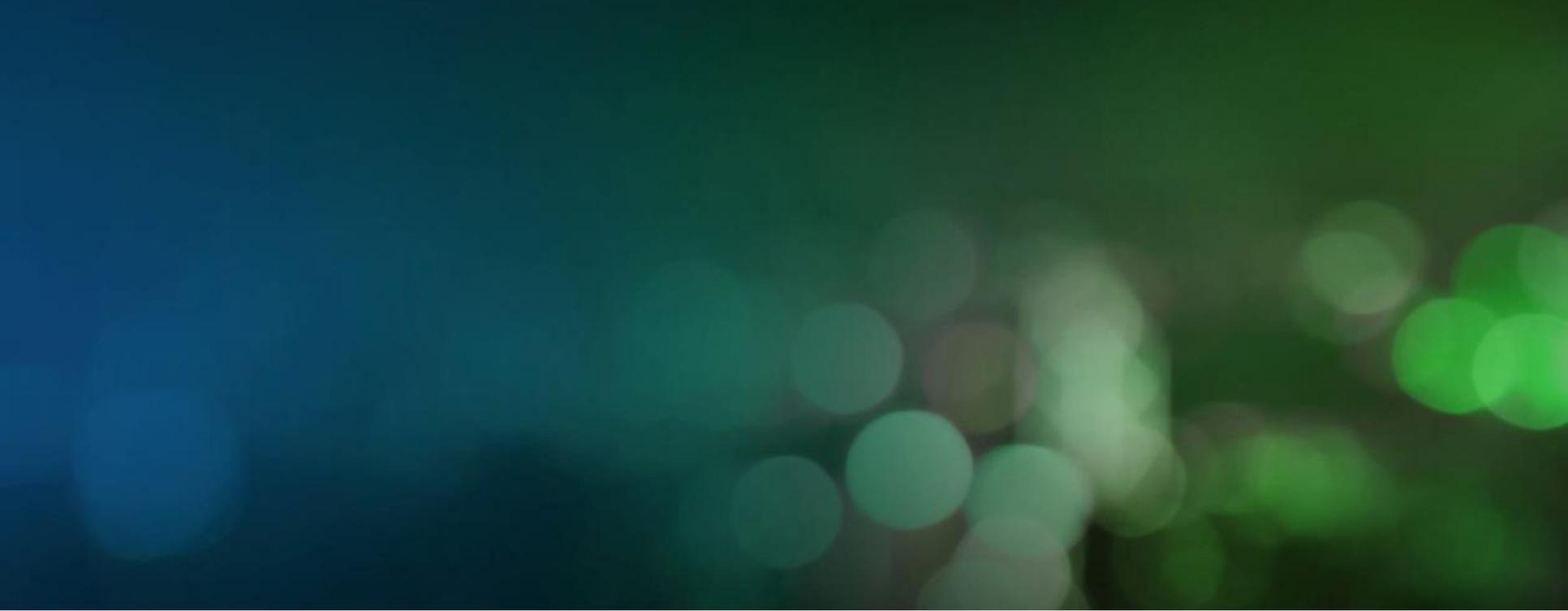
Interact with smart infrastructure in Homes and Businesses



Enable new services for customer convenience and bill control



Improve customer satisfaction



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## Americas

*Prasanna Venkatesan, EVP Americas*

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## Regional footprint

- Serving North, Central and South America as well as other territories such as Japan where ANSI metering standards prevail
- 14 utility operation centers and a regional corporate headquarters
- Manufacturing facilities in Mexico and Brazil

## Regional highlights

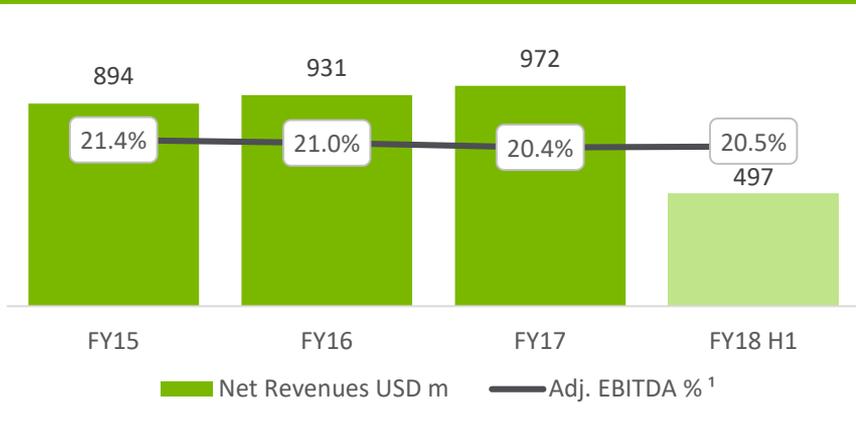
- **Leading supplier of smart metering solutions in the Americas** with over 55m connected intelligent devices deployed<sup>1</sup>, offering a comprehensive Gridstream portfolio with complete communications flexibility (RF, PLC, cellular)
- **Biggest installed base of smart electric meters in North America**
- **Largest installed base of standalone and smart electric meters in South America**
- **Deploying the world's largest utility IoT network** in Tokyo with over 20m electric endpoints installed at present<sup>2</sup> (27m at completion)
- **Excellent brand recognition**

# Americas delivers top line growth while maintaining margin

## Performance

- Sales to external customers in the Americas region rose to a new record high of USD 972m in FY17
- Strong FY18 H1 performance, the market for smart metering solutions continues to be robust in North America
- Adj. EBITDA margin maintained above 20%
- USD 1'523m committed backlog at the end of FY18 H1

## Revenues and profitability



## Committed backlog



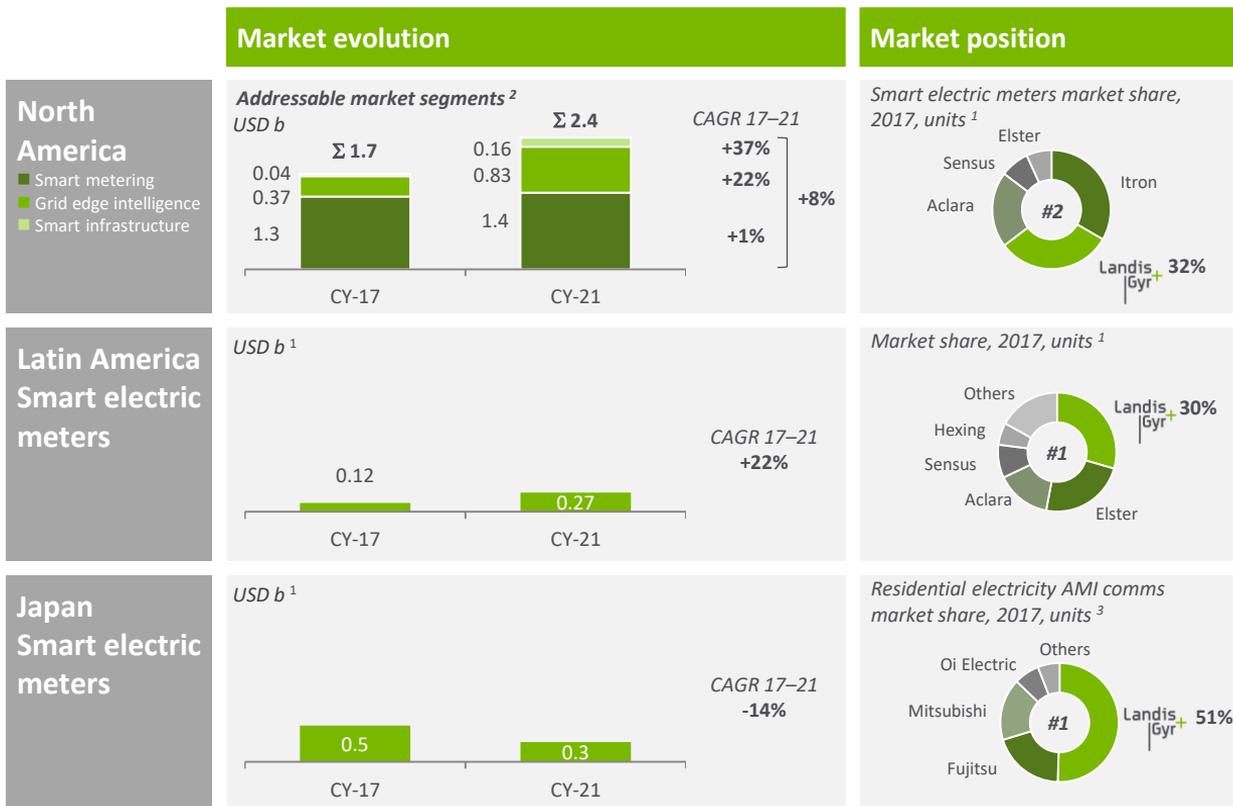
1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, Adj. EBITDA has been revised down by USD 0.6m, up by USD 0.1m, and down by USD 0.7m in FY15, FY16 and FY17 respectively as all pension income and expenses other than service costs are now reported under "Other income (expense)"

# Attractive addressable markets with trend for grid edge intelligence accelerating in North America

- North America
  - Resilient smart metering market
  - 2<sup>nd</sup> wave rollouts starting
  - Demand for grid edge intelligence

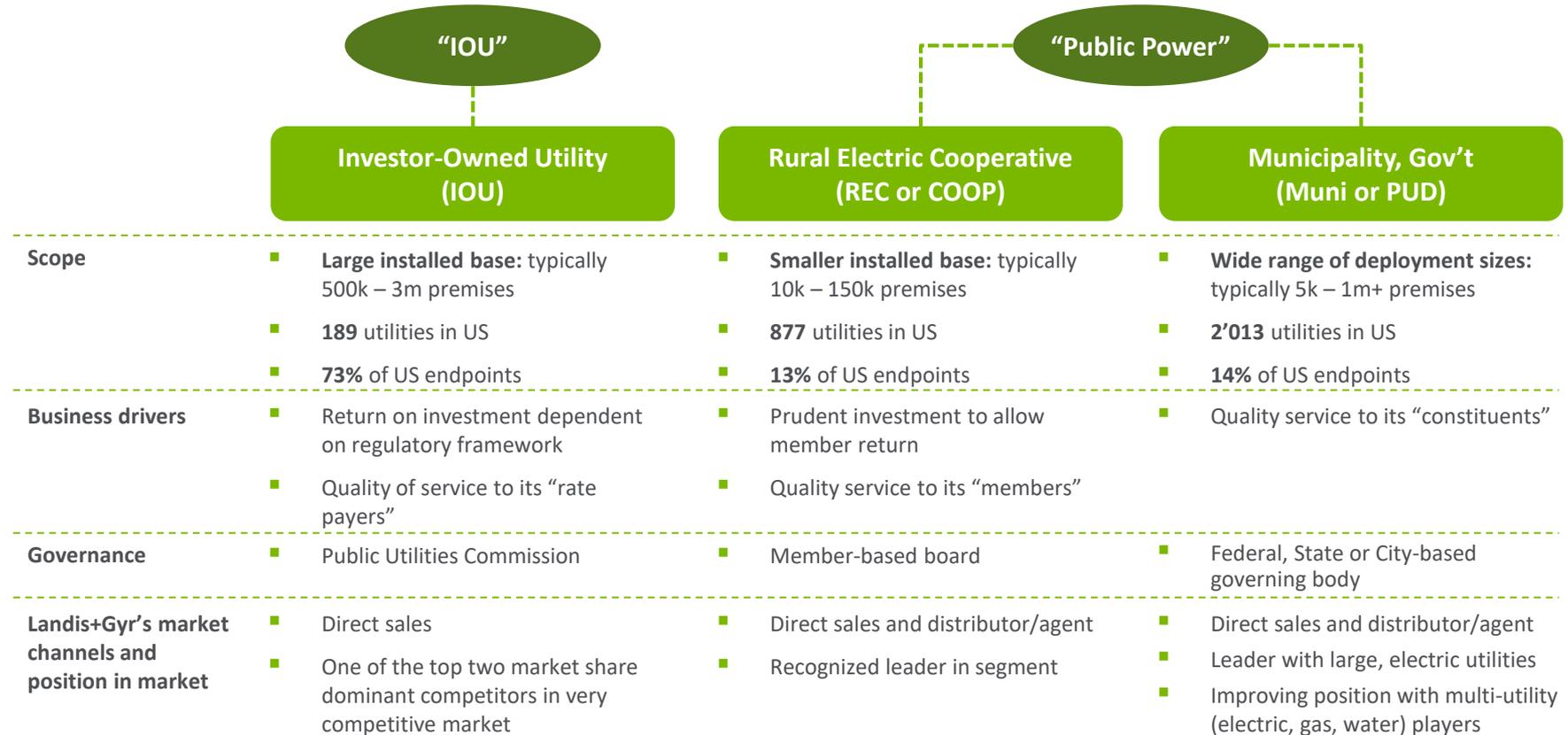
- Latin America
  - Impacted by economic situation
  - AMI pilots in Brazil

- Japan
  - 1<sup>st</sup> wave deployments winding down
  - Next generation refresh planned from 2023

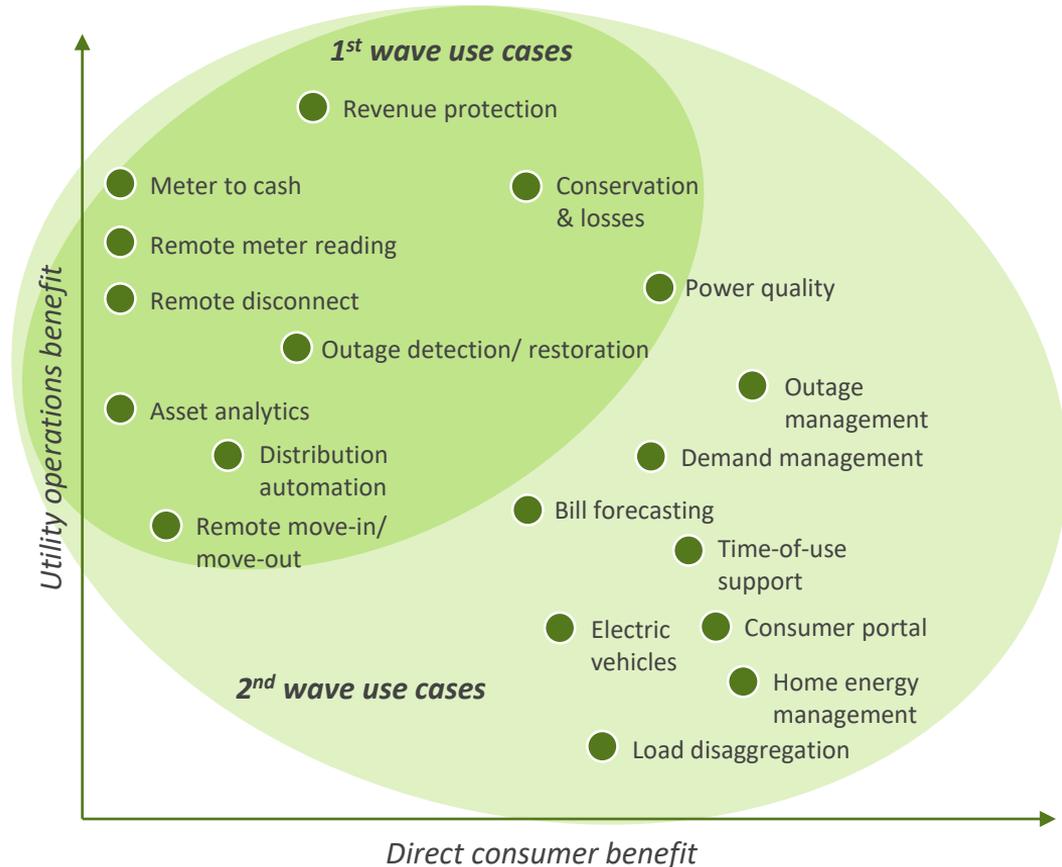


1. IHS Markit (2018)  
 2. IHS Markit (2018) and Landis+Gyr internal company estimates (2018)  
 3. Frost & Sullivan (2018)

# North America utility segmentation is diverse and drives the need for flexible offerings



- Utilities seek increased benefits in 2<sup>nd</sup> wave deployments – use cases now include direct consumer benefits in addition to operational benefits from 1<sup>st</sup> wave
- Intelligence at the grid edge is fundamental to the enablement of these 2<sup>nd</sup> wave use cases



# 2<sup>nd</sup> wave use cases driven by real utility needs today

## Regulated distribution utilities



### 2<sup>nd</sup> wave use cases

#### Enable distributed energy

#### Improve grid resilience

## Retailers



#### Ensure consumer loyalty

#### Empower consumers

### Utility “X” tender requirements (2018)

- Grid mapping
- Distributed ledgers
- Advance HEM interoperability
- Advance DER submetering
- Outage detection
- Fault detection
- Power quality
- Appliance health monitoring
- Standard load disaggregation
- Real-time load disaggregation
- Marketplace energy portals
- Flexible billing
- Demand manager
- TOU manager
- “Bill Buddy”

Clear need for grid edge intelligence opening up new market opportunities



## Key data for Landis+Gyr North America<sup>1</sup>

>35m

deployed  
smart meters

>14m

meters under  
managed services

800+

utilities served

## Market development and utility needs

- 1<sup>st</sup> wave AMI rollout with remaining utilities
- Early adopters commence 2<sup>nd</sup> wave AMI rollout
- Increased investment in grid edge intelligence: distribution automation, new consumer programs, distributed energy resources, cyber security

## How do we win

- Leading technology offering and roadmap
- Trusted partner with market leading delivery and quality
- Flexible business models
- Portfolio exceeding standards and interoperability
- Diverse suite of services offerings

## Our priorities

- Continue to win high share of AMI deals in IOU segment with grid edge intelligence and our innovative technology roadmap
- Expand our leading position in Public Power segment
- Enable utility's evolution to broader IoT solutions with grid edge intelligence
- Grow software & services offerings for recurring revenue streams

# Landis+Gyr is the North American market leader in smart metering software & managed services

## What we offer

### Managed services

- Project management
- Field management
- Tech Engineering
- Meter Read
- Network management
- IT
- Security

### Infrastructure services

NOC – Lenexa, KS



Sacramento, CA



Ashburn, VA



NOC – Rio de Janeiro



Redundant, secure data centers



High bandwidth

### SaaS

- AMI
- Distribution automation
- Meter data management
- Street light control
- Analytics
- Distributed resource integration

## Proven track record and sustainable business

- Market leadership going back over 25+ years
- 14 managed services utilities, with average contract length 22 years, average remaining contract lifetime of 6 years
- More than 14m meter points under managed service contracts, managing ~10% of the US metering population from measurement to bill
- 21m endpoints of data flowing through Landis+Gyr data centers, including 300+ utilities using SaaS

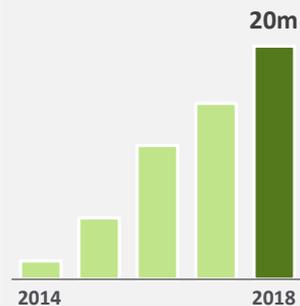
## Trusted partner for technology leadership

- Scaled software & service offerings provide overall ease of deployment and quick benefit to smaller utilities (typically Public Power) with less resources to dedicate to technology
- Solutions and software platforms that are interoperable with utility systems already in place

# Japan - Building value on the back of world's largest utility IoT project

## TEPCO success story by the numbers<sup>1</sup>

Landis+Gyr deployed endpoints



>500m

daily reads

1.3b

data packets per day

3

Multi-protocol IP networks  
RF-Mesh, PLC, Cellular

Tepco is the largest utility in Japan serving millions of homes and businesses

**TEPCO**

## Market development and utility needs

- Japan is in the midst of a energy transition as a result of the recent deregulation of the electric and gas markets
- Change in the energy mix, driven by national policy, is favoring grid edge intelligence: demand response, flexibility management, grid analytics
- Utilities with large AMI base are looking for smart infrastructure opportunities

## How do we win

- Demonstrated expertise in managing large scale infrastructure deployments
- Leading technology to reach scalability and resilience of smart infrastructure demands
- Proven agility in meeting Japan's market specific regulatory needs
- Local sales force with expertise in Japanese market

## Our priorities

- Increase "stickiness" with Tepco by expanding partnerships in IoT (vending machines, high voltage towers) and grid analytics
- Capitalize next wave of AMI opportunity in Japan, leverage existing experience
- Expand business scope and leverage experience to capture next refresh cycle

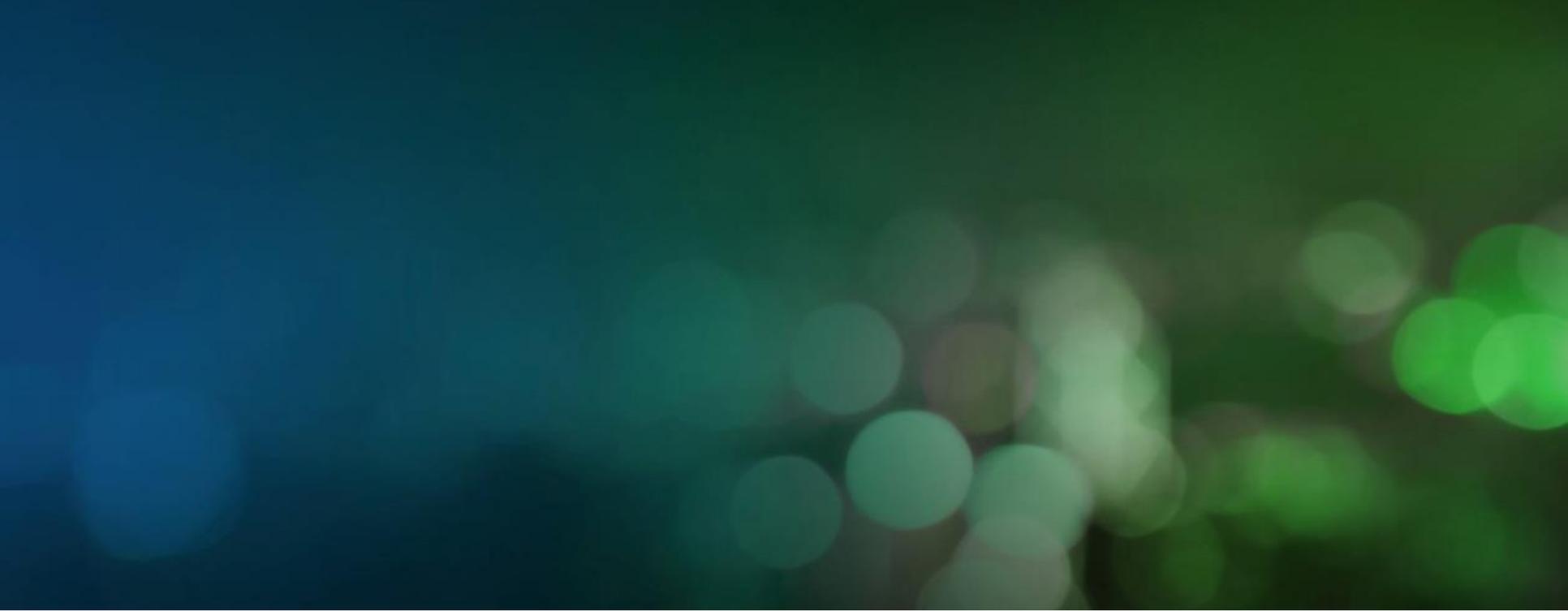
# Americas well positioned to expand our growth platforms as markets and technology evolve

## Americas well positioned for success

- Today's Landis+Gyr installed base: over 55m connected intelligent devices<sup>1</sup>
- Ranking first or second for market share in all major markets served
- The Americas region is set for further growth in smart metering, grid edge intelligence and smart infrastructure markets; built on past success and innovation today and tomorrow

## How we win

- Gridstream Connect architecture enhancing grid edge intelligence: next generation software, metrology and network platforms, enabling scalable and flexible deployments
- Diverse suite of services offerings including best-in-class managed services for utilities
- Our excellent reputation, recognized brand, and long standing relationships
- Leverage our excellent utility references from proven, deployed projects addressing smart metering and grid edge use cases to address the remaining significant 1<sup>st</sup> wave opportunities and the 2<sup>nd</sup> wave of AMI refresh
- Leverage the Tepco deployment to expand our presence in Japan for the next refresh cycle in 2023

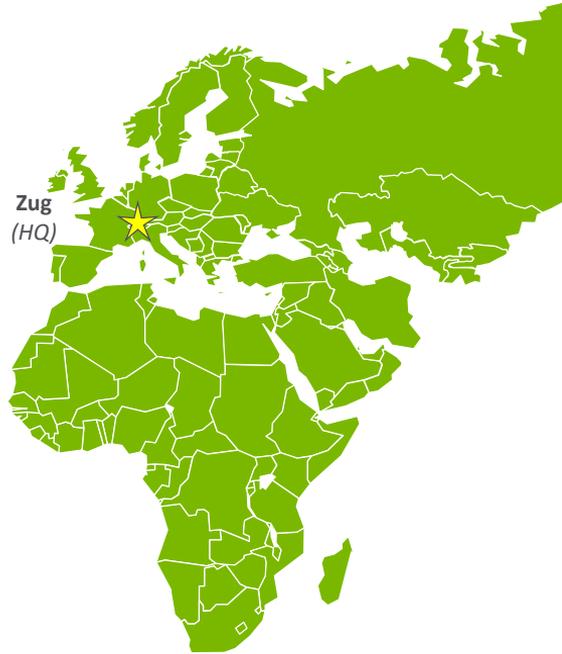


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## **EMEA**

*Susanne Seitz, EVP EMEA*

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## Regional footprint

- Dedicated sales offices in 18 countries across the Region
- Landis+Gyr technology utilized by 1300+ utilities
- 150 end-to-end smart metering solutions in the field

## Regional highlights

- **Positioned for growth with space to expand**
- **Landis+Gyr installed base: over 25m connected intelligent devices**
  - **#2 supplier of smart electric meters**
  - **#1 supplier of smart gas meters**
  - **Leading supplier of end-to-end smart metering solutions** in EMEA
- A leader in **metering as a service (MaaS)**
- **Cost reduction and restructuring programs** delivering margin expansion (Projects Lightfoot and Phoenix)

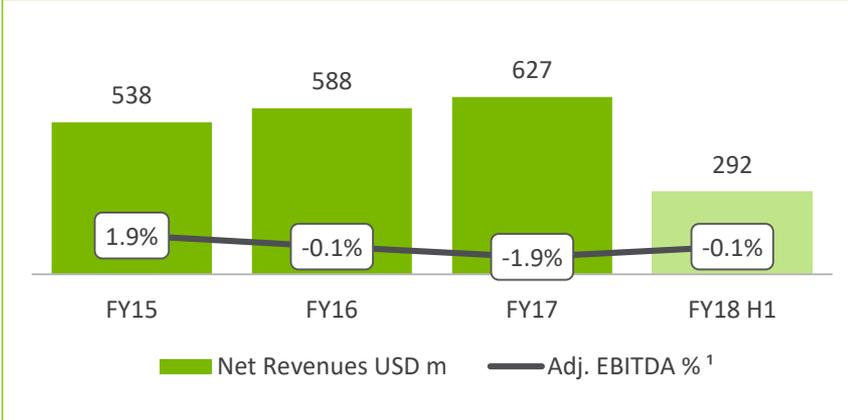
# Cost reduction and restructuring programs drive margin recovery

## Material improvement in committed backlog

### Performance

- Break-even reached as margin expansion materializes driven by operational improvements
- Orders in UK and France increase committed backlog, reaching USD 760m at the end of FY18 H1
- However, market delays to overall UK rollout and supply chain constraints impacted revenue
- Impacted volume deferred from FY18 H1 but not lost

### Revenues and profitability



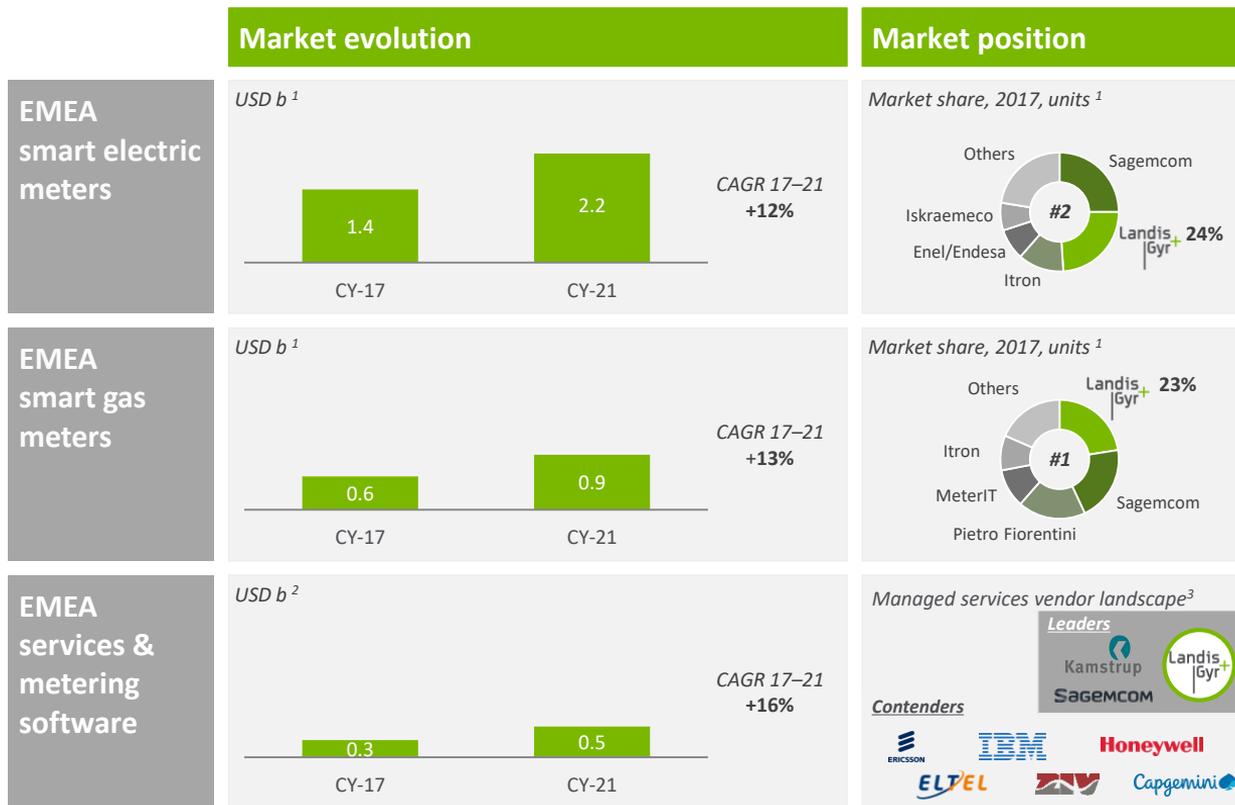
### Committed backlog



1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, Adj. EBITDA has been revised down by USD 0.2m, USD 1.5m, and by USD 3.1m in FY15, FY16 and FY17 respectively as all pension income and expenses other than service costs are now reported under "Other income (expense)"

# Well positioned in growing meter market driven by mandated rollouts. Increasing importance of services

- **Smart electric meters:** growth driven by large rollouts in several EU markets
- **Smart gas meters:** Growth through large rollouts in multiple markets (UK, France, Italy, Netherlands)
- Widespread smart meter deployments and growing volume of smart meter data drives strong growth of the **services & metering software** market



1. IHS Markit (2018)

2. Northeast Group (2018)

3. Northeast Group, Managed Services: Smart Metering-as-a-Service (2018 – 2027), Landis+Gyr internal company estimates (2018)

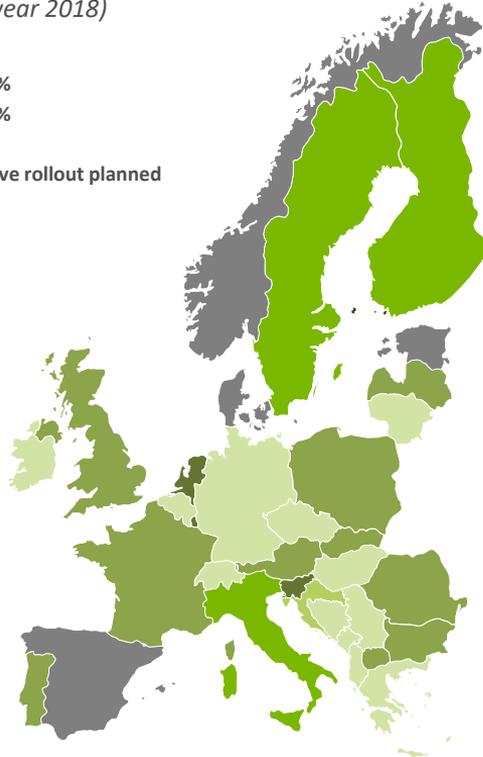
# Growth driven by continuing smart meter penetration

## Upcoming 2<sup>nd</sup> wave rollouts create next phase of opportunity

### Electricity smart meter penetration

(end of year 2018)

- >80%
- 50–80%
- 10–50%
- 0–10%
- 2<sup>nd</sup> wave rollout planned



**2018**

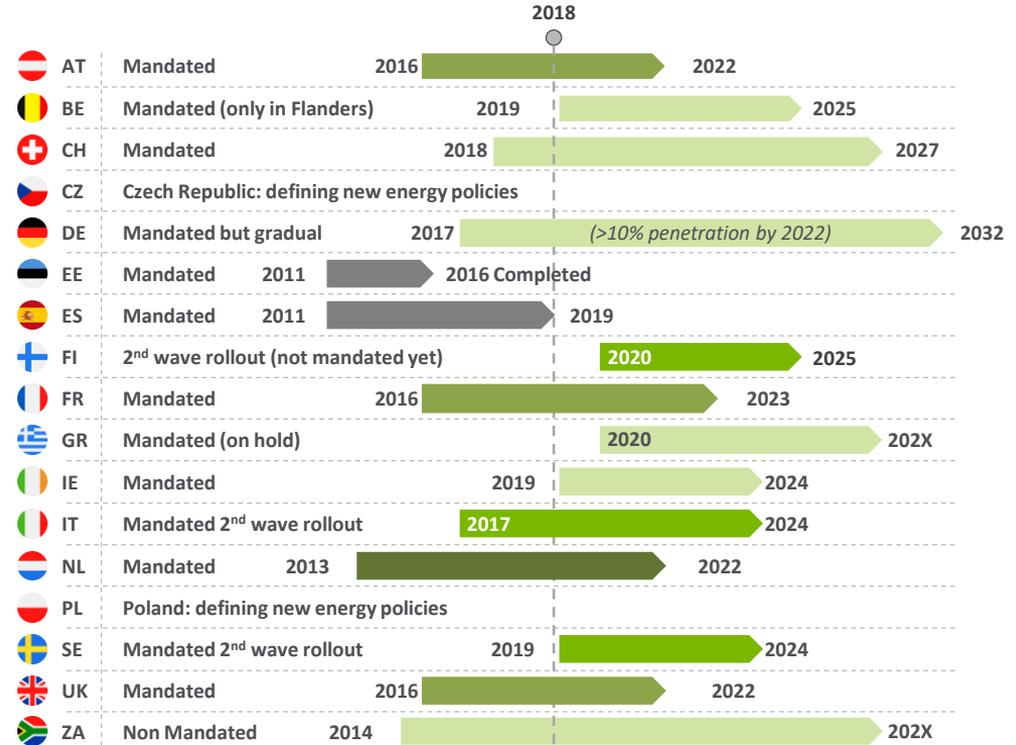
Installed base: 125m  
Penetration: 42%

*86m meters to be installed*

**11% CAGR**

**2023**

Installed base: 211m  
Penetration: 69%



# Selected high priority markets and our key success factors

**France**

- Up to 35m endpoints
- Execute the Enedis contract: deploy the base
- Leverage services enabled by smart meter base



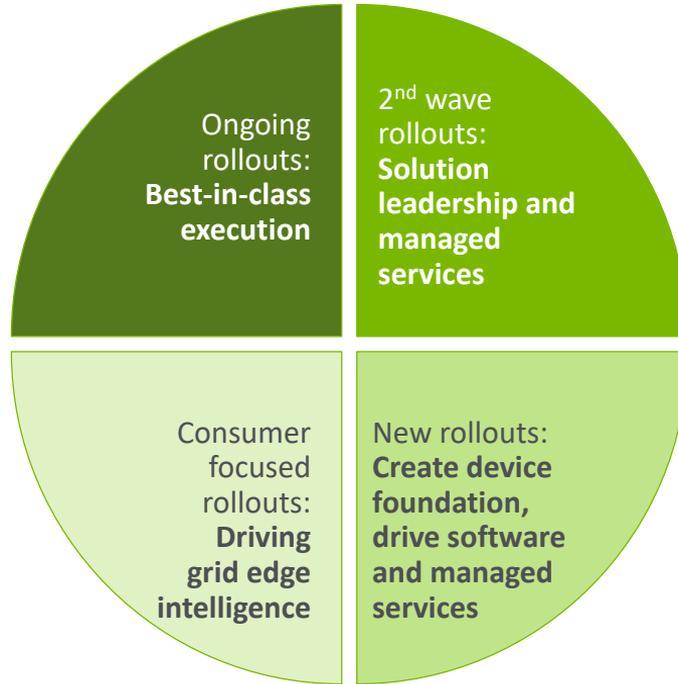
**The Netherlands**

- Dual fuel: gas and electricity, 7m and 8m endpoints respectively
- Execute rollout, expand to smart and consumer domains
- DSO's preparing for next generation meter architecture



**The United Kingdom**

- Dual fuel: gas and electricity, 53m endpoints
- Design and develop suite of rich consumer use cases
- Build beyond meter consumer/customer apps on installed base

**Finland & Sweden**

- 9m endpoints
- Push for e2e solution offering: meters, rollout, integration, managed services
- Build on market leadership for managed services




**Switzerland**

- 5m endpoints, fragmented market
- Push for e2e solution offering: meters, rollout, integration, managed services
- Offer new value adding consumer use cases

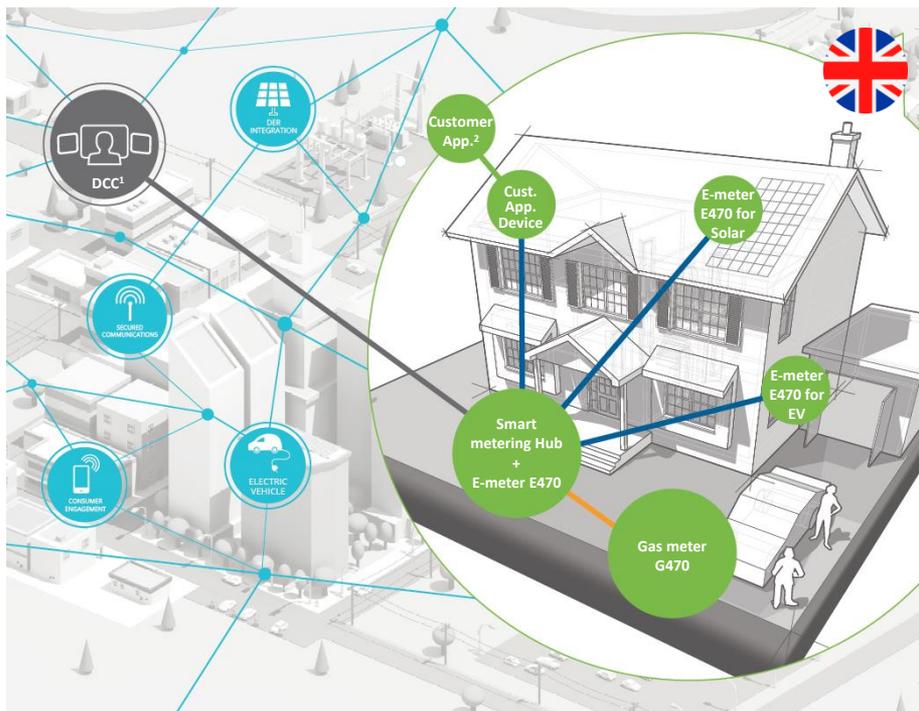


**Germany**

- 45m electric endpoints
- Smart meter gateway important driver of the market
- Grow smart metering business and deploy managed services for small utilities and municipalities



# UK Vision: establishing the base for a consumer energy application-driven future



## Market development and customer needs

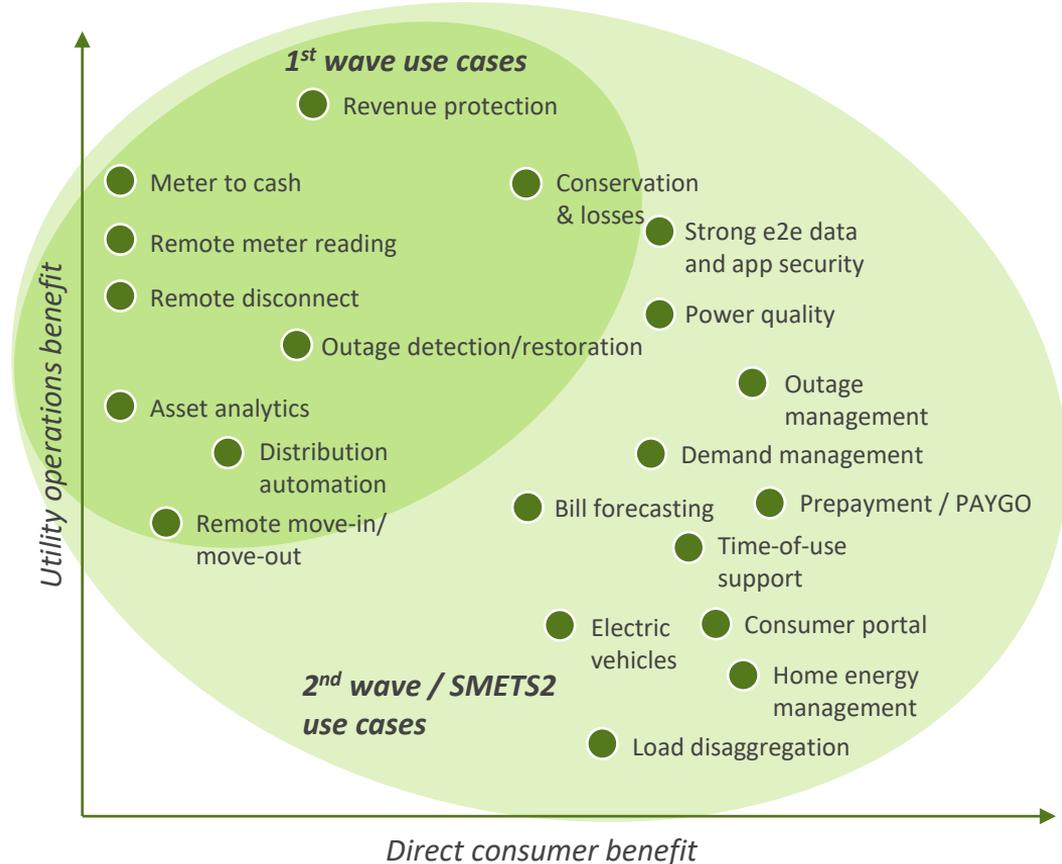
- SMETS geared towards consumer use cases
  - High demand for grid edge intelligence
- Market development delays now overcome
  - Backbone (DCC<sup>1</sup>) operational
- Integration of 11 million 1<sup>st</sup> Generation (SMETS1) devices underway
- Key functionality demands:
  - Consumer differentiation
  - Distributed energy
  - Cyber security

## How do we win

- Investing beyond the meter
- Leading partnerships outside utility space
  - Batteries, automotive, appliances
- Continue intelligent edge development program to develop value added applications

# Grid edge use cases driven by retail market innovation

- Increasing focus on grid edge intelligence for 2<sup>nd</sup> wave use cases:
  - Hyper-critical focus on leading E2E solution data security – particularly for consumer data
  - Increasing value of prepayment / Pay-As-You-Go solution for consumer engagement / household budgeting
  - Common approach to single management solution for home-plus-EV metering and management
- This strong position and experience allows us to further develop applications for use across EMEA



## Drive long-term growth

- Capture **large share of the upcoming smart meter deployments**
- Address small and medium DSO with our **end to end solutions** based on our software and applications leveraging a partner ecosystem
- Focus on selling services around the meter **and leverage our installed base** of 25 million connected intelligent devices
- **Develop ‘beyond the specification’** capabilities in our next generation devices and solutions offerings

## Return to profitability

### Product cost down

- Product cost down programs for high volume AMI products
- Ongoing value based engineering projects

### Lightfoot

- Manufacturing footprint optimization by transferring / outsourcing production of selected manufacturing facilities

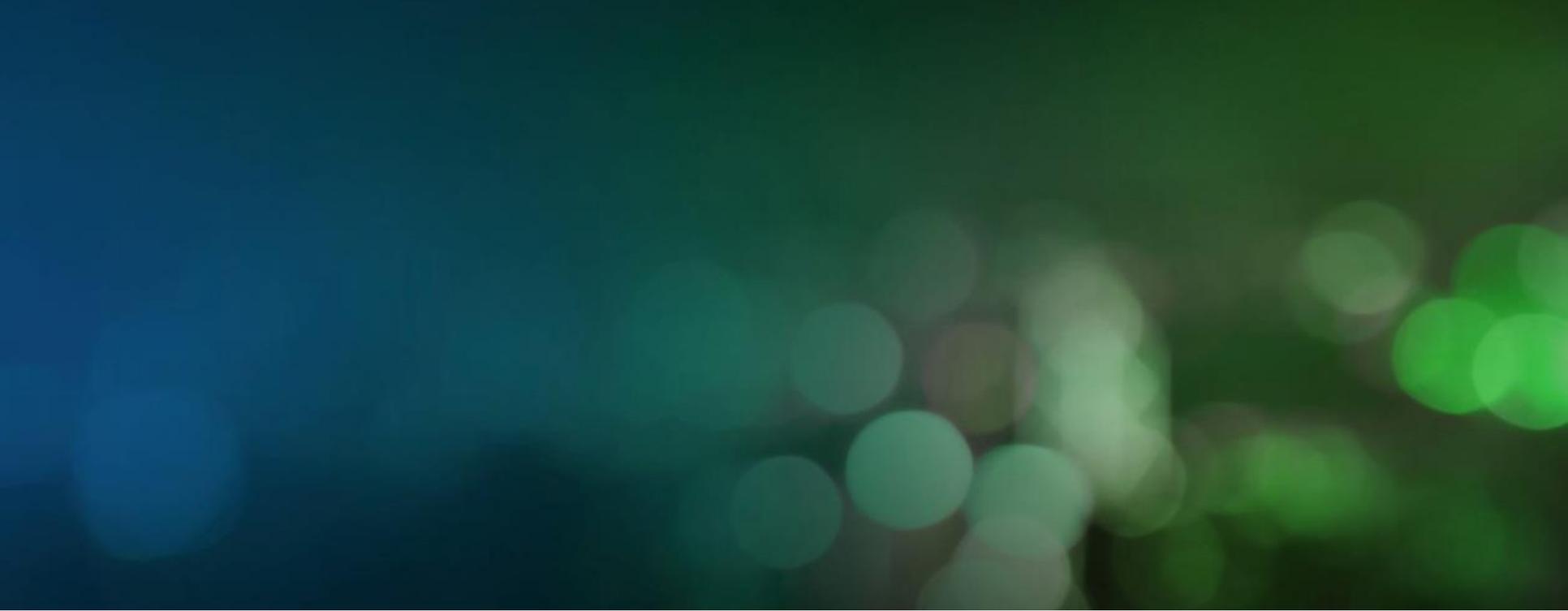
### Phoenix

- Overhead cost reduction program fully completed

### Operational excellence

- Ongoing optimization of sales, project execution and shared service center established in Prague

**EMEA's growth is based on our unique position to offer end-to-end solutions, customer proximity and technology leadership**



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## **Asia-Pacific**

*Steve Jeston, Head AP*

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## Regional footprint

- Leading supplier in Asia-Pacific with longstanding tradition
- Presence in all major markets

## Regional highlights

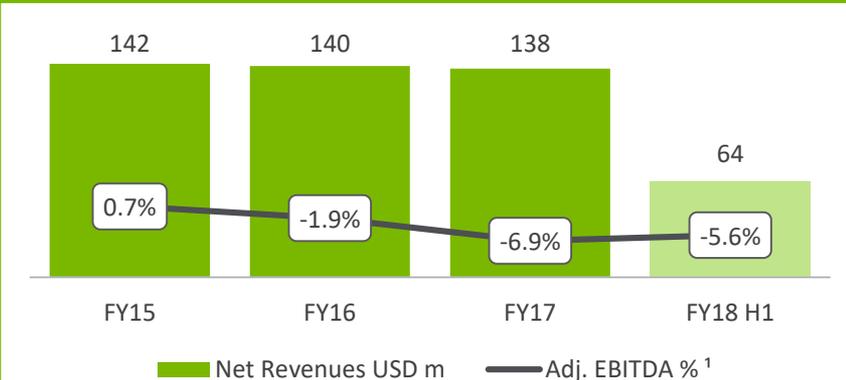
- **#1 in electricity and gas metering in Australia and New Zealand**
  - Metering supply agreement in place with intelliHUB / Acumen Joint Venture to serve #1 electricity retailer in Australia
- **Smart metering contracts in targeted growth areas Australia, Hong Kong and India**
  - intelliHUB, Australia – 120k AMI meters, and growing on back of Power of Choice regulation
  - CLP, Hong Kong – 400k AMI meters delivered, full rollout over next 7 years
  - Tata, New Delhi – largest smart metering canopy project 500k endpoints
- In China, focusing on selected market segments where we are competitive: electricity grid metering and high quality heat metering

# Asia-Pacific revenue will grow as key markets gather pace

## Performance

- Revenues remained flat in recent years, due to temporary market weakness
  - in Australia due to introduction of Power of Choice regulatory changes
  - In India and SEA due to slower uptake of smart metering
- Investments in intelliHUB managed services business in Australia impacted Adj. EBITDA
- USD 65m committed backlog at the end of FY18 H1 shows upward trajectory

## Revenues and profitability



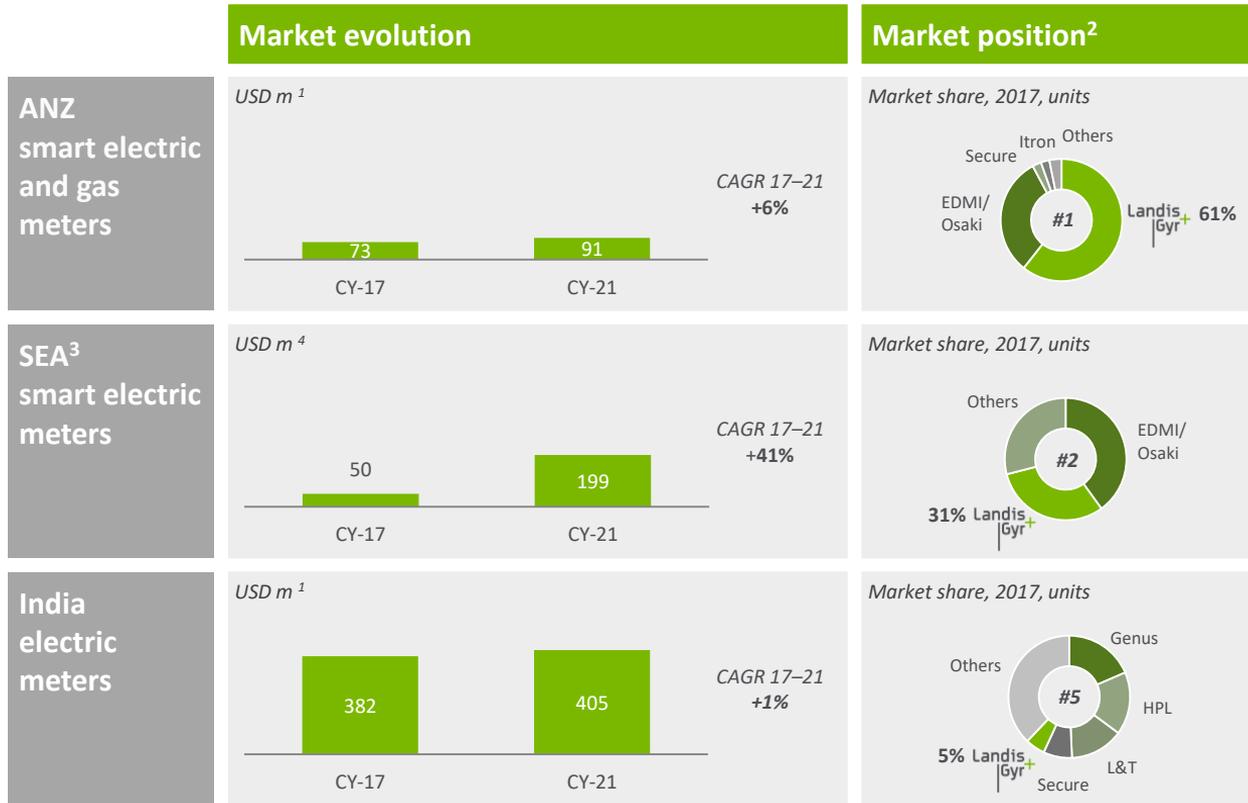
## Committed backlog



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# Asia-Pacific growth comes from transition to smart metering and emerging grid edge intelligence applications

- ANZ growth largely driven by the shift to **smart electricity metering** leading to **grid edge intelligence** in Australia under Power of Choice
- Various **smart electricity metering** opportunities in **SEA** countries (i.e. Hong Kong, Malaysia)
- Transition towards **smart prepayment** in electricity metering in **India**
- Strong **commitment of Government of India** to drive smart electricity metering market



1. IHS Markit (2018)

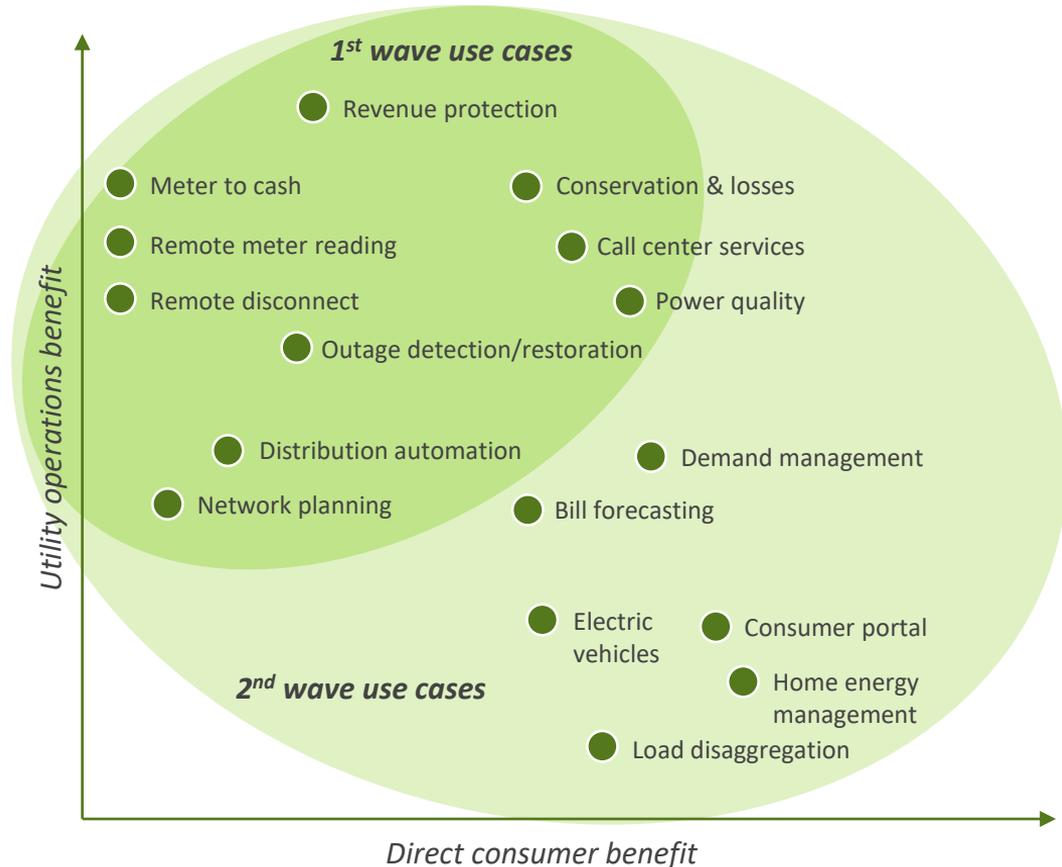
2. Frost & Sullivan (2018)

3. SEA: Bangladesh, Brunei, Hong Kong, Indonesia, Malaysia, Pakistan, Philippines, Singapore, Thailand, Vietnam

4. Landis+Gyr internal company estimates (2018)

# Asia-Pacific use cases driven by market maturity

- As smart metering deployments in mature countries develop we see emerging emphasis on grid edge intelligence
- Focus on consumer engagement services such as demand response, home energy management (HEM), and load analysis/disaggregation
- New deployments require both 1<sup>st</sup> and 2<sup>nd</sup> wave use cases



# ANZ | Leveraging our strong local presence to capture additional grid edge intelligence opportunities



## Australia and New Zealand

- 12m + 2m endpoints (Australia, New Zealand)
- Retailer-led rollout under Power of Choice in Australia (outside of Victoria)
- 2<sup>nd</sup> wave in New Zealand to start in 2023

## Market development and customer needs

- Smart electric meter volumes in Australia driven by government-led programs to enable consumer engagement
- Early smart metering deployments in New Zealand nearing end of life, moving to refresh

## Our priorities and how do we win

- **Maintain** electricity and gas metering market **leadership** by leveraging our **strong local presence** with **exceptional customer relationships** and access
- Provide **grid edge intelligence solutions** enabling new use cases

## Proof point of new use cases beyond smart metering: intelliHUB JV



intelli**HUB**

*Offering intelligent hardware and smart applications in grid edge together with partners*

### Use Cases:

- Management of distributed energies at the home (solar)
- Demand management
- Bill prediction
- Consumer engagement
- Home energy management
- Load disaggregation

# SEA | Targeted smart metering growth, leveraging our reference deployment, strong brand and advanced technology offering



## SEA – focus countries

- Hong Kong
- Indonesia
- Malaysia
- Pakistan
- Philippines
- Thailand
- Vietnam

## Market development and customer needs

- Significant areas of growth in smart metering
- Large investments in energy infrastructure and significant energy reforms
- Customer needs range from metering (e.g. prepay) to grid edge intelligence

## Our priorities and how do we win

- Become the **leading smart metering solutions** provider by **leveraging our proven offering**
- Gaining customer access through our **strong Landis+Gyr brand**, together with our extensive distributor network
- **Explore** adjacent grid edge intelligence applications with **targeted** pursuit of **opportunities**

## Proof point of new use cases beyond smart metering: CLP



*Proven scalable smart metering solution supporting CLP's Smart City vision for Hong Kong*

### Use Cases:

- Demand management
- Consumer engagement
- Outage management

# India | Strongly positioned to exploit market transition to smart metering



## India

- Government of India has set up, and is strongly backing a framework to drive smart prepayment metering

## Market development and customer needs

- Significant power sector reforms
- Utilities needs move from smart metering (e.g. reducing non-technical losses, improving revenue collection with prepayment) to grid edge intelligence (e.g. grid stability)

## Our priorities and how do we win

- **Lead the smart metering evolution** through our **strong local presence** and **industry engagement**
- **Leverage the Tata Power deployment**, showcasing our proven and localised solutions offering for future smart metering opportunities
- **Capture new revenue** streams in **grid edge intelligence applications** such as distribution automation, analytics, distributed energy resource management

## Proof point of new use cases beyond smart metering : Tata Power



*Communication canopy to enable distribution automation (DA), and smart infrastructure application in addition to smart metering*

### Use Cases:

- Reliable energy supply
- Distribution automation
- Network management
- Consumer engagement

# Moving forward: margin improvement and positioning for long-term growth

## Return to profitability

The key measures to bring Asia-Pacific region back to profitability are on track and already producing first results

### Reduce operating cost base

- Re-position intelliHUB managed service business
- Right sizing the organisation structure

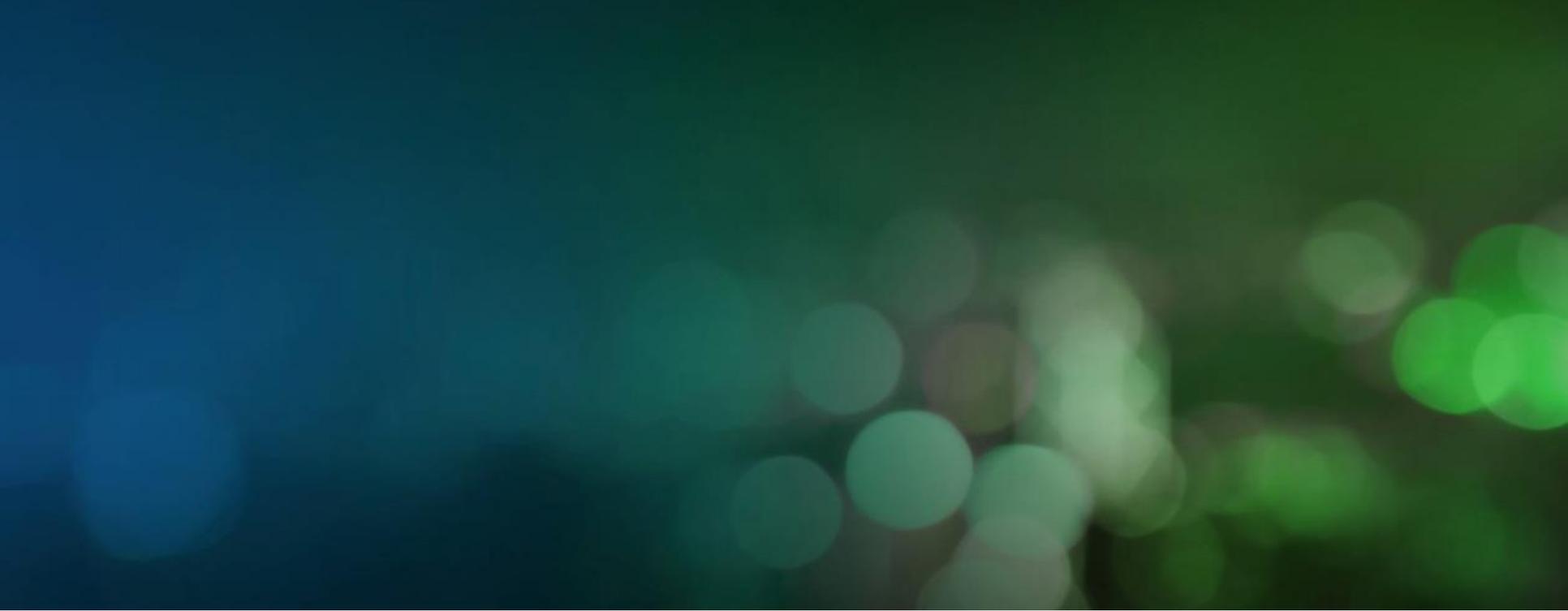
### Improved margin quality

- Product cost down programs for high volume AMI products (India, Australia, Hong Kong)
- Optimisation of manufacturing by shifting of activities from Australia to China

## Differentiation as a competitive advantage

- Leverage **our leading brand** and **strong local presence**
- Leverage our **reference deployments in Hong Kong and India** (demonstrating our proven ability to deliver) to capture emerging growth across the region
- Offering a **full scalable, standards based smart metering solutions**, enabling capabilities in grid edge intelligence such as distribution automation
- Deliver **flexible solution models** to meet different customer demands including owner operate, Software-aaS, Data-aaS

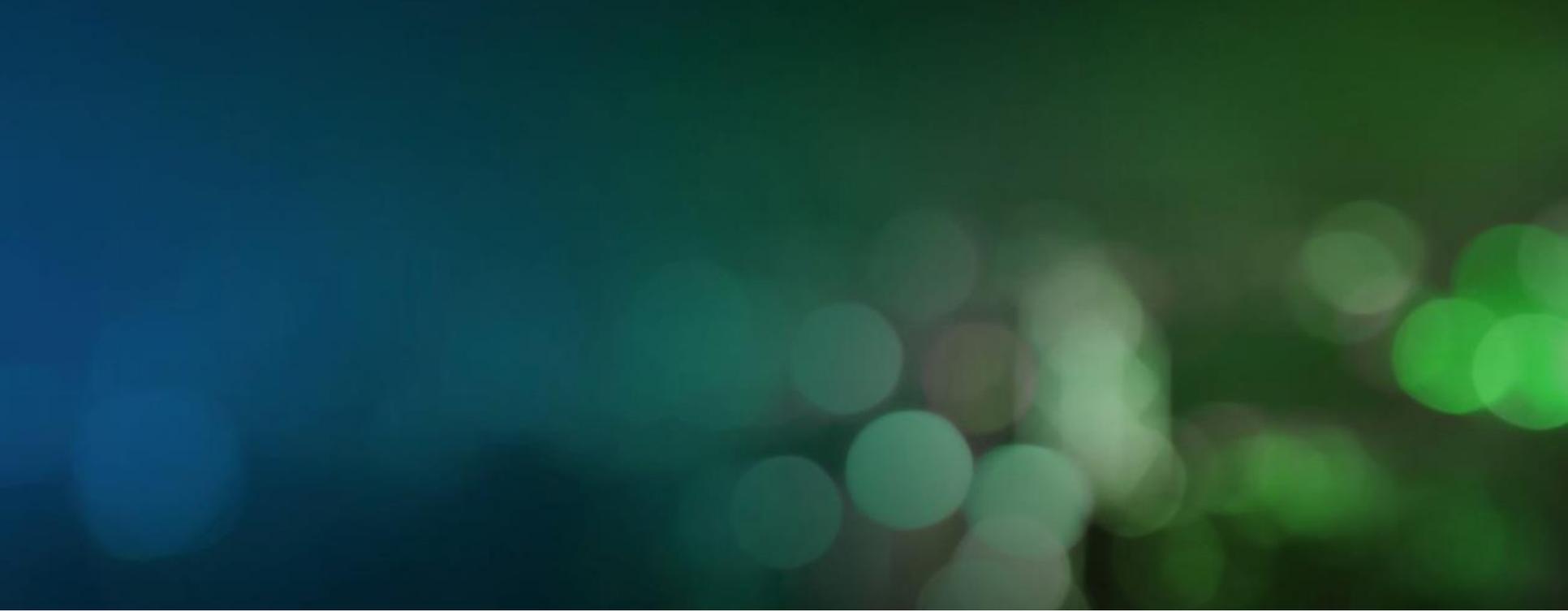
**Our reference deployments coupled with a strong focus on improved profitability position us well in a growing smart metering market in Asia-Pacific**



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## Q&A

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## Supply Chain & Operations

*Bodo Zeug, EVP SCM*

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## Global supply chain footprint



## Supply chain & operations

- **Supply chain** – inbound and outbound, planning and forecasting
- **Manufacturing** – in-house and outsourcing
- **Procurement** – supplier selection and negotiation
- **Product cost out** – design to cost and value engineering
- **Quality** – manufacturing, supplier and product quality

# Asset light strategy is geared to optimize cost, cash and performance

## How to optimize

### Cost

- Move to best cost countries and leverage labor arbitrage
- Leverage purchasing power of top Tier 1 suppliers
- Keep strategic and customized components under our own control
- Collaboration with suppliers on design to cost (DtC)

### Cash

- Less CAPEX due to less investment and maintenance
- Less work in progress (WIP) at Landis+Gyr
- Direct shipments lead to less operating working capital (OWC)

### Performance

- Flexibility in load and factory utilization
- Dual sourcing (sites) for business continuity
- Shorter supply chain and shorter lead-times with direct shipments
- Use EMS expertise, which they have gained from other industries

## Guiding principles

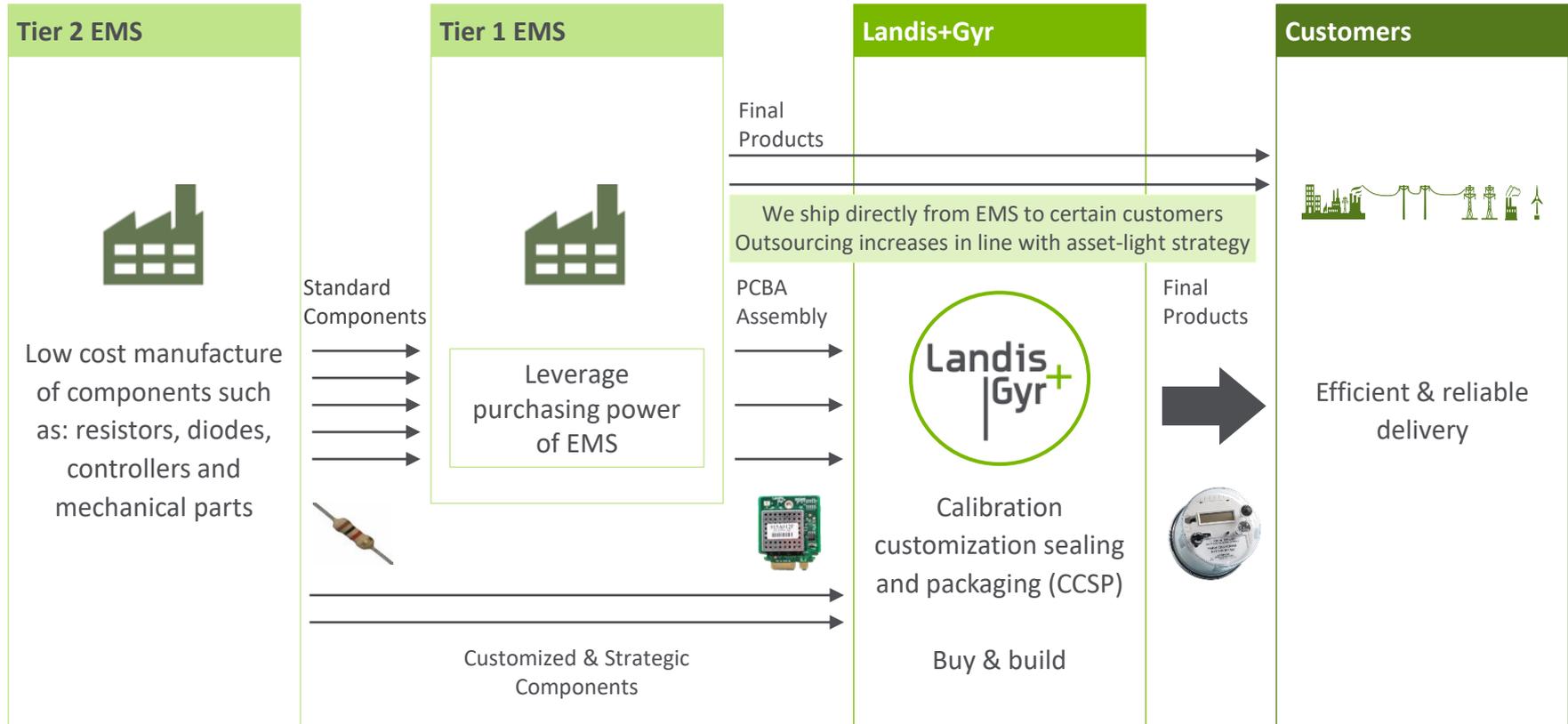
- Move to best cost countries along with our Tier 1 suppliers (e.g. Poland, Romania, Vietnam, Malaysia) where we are not already (e.g. Mexico)
- No new factories, use Tier 1 suppliers' facilities instead
- Keep specific test equipment and know-how under Landis+Gyr control
- Low volume / high mix products manufactured in house as too complex for outsourcing e.g. Corinth
- Keep value chain in country where there is a regulatory need e.g. South Africa, Brazil, China, India, France

# We have a flexible, modular and robust supply chain which enables outsourcing at any stage of the production flow



- Landis+Gyr customized design
- Procurement of plastic and metallic parts
- Landis+Gyr design and test specification
- Assembly of PCBA by electronics manufacturing services (EMS)
- Handling of standard components via EMS
- Assembly at Landis+Gyr manufacturing site
- Alternatively, assembly at electronics manufacturing services (EMS)
- Calibration, customization, sealing and packaging (CCSP) at Landis+Gyr manufacturing site
- Alternatively, at EMS dedicated sites under our supervision

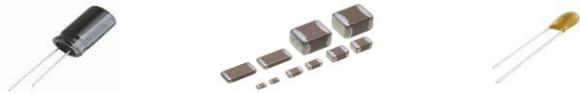
# We leverage the cost structure and purchasing power of our Tier 1 EMS partners



# We have implemented measures to minimize the impact of the industry-wide components shortage for Landis+Gyr

## Situation at Landis+Gyr

- Seller's market: Since 2018, global electronic component shortage due to high demand in other industry sectors (e.g. automotive, IoT)
- Landis+Gyr uses about 15'000 different components among which only 100 passive components are impacted (mainly capacitors, resistors and inductors)
- For some of these critical components lead time reached 40 weeks



- Incremental costs associated with supply chain constraints reduce Adj. EBITDA USD 12m in FY18 H1
- Temporary in nature but still a challenge for FY18 H2

## Measures to secure deliveries for FY18 H2 and beyond

### Leverage EMS

- Ongoing intensive collaboration with EMS to mitigate lead time for critical component suppliers

### Safety stock

- Continue the buffer stock initiative at the EMS's / Component manufacturers
- Expand safety stock beyond key components to include standard, passive products

### Visibility

- Increase forecast visibility at EMS from current 12 months to 24 months
- Increase period with order coverage between Landis+Gyr and EMS and between EMS and component suppliers

### Alternative components

- Close interaction between Landis+Gyr (supply chain and R&D), EMS, component suppliers to identify and qualify alternative sources/technologies for critical components

# Reliable quality delivered through our Zero Defect Initiative (ZDI)

## Description of the initiative

- Ongoing, continuous improvement initiative, running over multiple years
- Aiming to proactively address structural and systemic quality issues and reduce associated costs
- Key enabler of outsourcing and of our Asset Light strategy

## Development of 2 pillars

- Adapted quality management system standard from the automotive industry (VDA 6.3) to ensure best in class collaboration with a wide base of suppliers
- Focus on business areas with highest potential to reduce Non-Conformance-Cost (NCC)
- Continuous improvement and adjustment with the learning from field experience

### Supplier pillar

- Clear quality requirements for suppliers with quality assurance agreements (QAA) and production part approval process (PPAP)
- Over the past two years built up a team of trained and certified PPAP employees (>200) managing our suppliers at all levels
- Standardized qualification of suppliers (VDA 6.3)
- Number of VDA audits increased by 54% from 2016 to 2018
- Global and standardized supplier management process (with QBRs)
- Ensure ongoing reliability: for all product lines batch test of 1'000 hours

### Design pillar

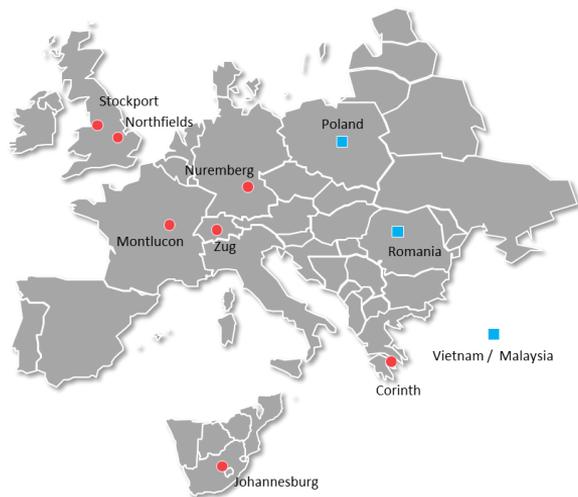
- First year product reliability has improved
- SW test automation improvement
  - Coverage extension by more than 30% since last year
- Contingency concept for SW with over the air (OTA) update
- Globally harmonized NPI hardware design reviews
  - Developed 355 safety/design/manufacturing elements

# Project Lightfoot will overachieve IPO commitment, delivering USD 25m yearly run-rate savings by FY20

## Description of the initiative

### Shifting to an asset light set up:

- Introduction of a dual source/site using existing EMS sites
- Optimize / ramp-down / close selected manufacturing facilities



- Landis+Gyr manufacturing sites
- Major EMS sites

## Project status

### Implemented

- Transferred production of UK smart meters to EMS from Stockport and cease production of electric meters in Northfields
- Focused Montluçon on production of Linky meters and transferred all other products to Corinth

### In progress

- Further ramp down Zug and transfer to Corinth
- Further transfer to EMS underway (several sites)

## Savings

### Commitment

- IPO: USD 20m of run-rate savings by FY21
- Revised: USD 25m of run-rate savings by FY20

### Savings

- USD 5m already achieved and included in gross margin
- USD 20m still to be delivered, mainly in FY19 and FY20

# Landis+Gyr systematically drives out product cost with a dedicated value-engineering team

## Product cost structure (typical meter)

<b>General overhead &amp; profit (suppliers)</b>	5 - 7 %
<b>Logistics</b>	2 - 5 %
<ul style="list-style-type: none"> <li>■ Packaging</li> <li>■ Shipping</li> </ul>	
<b>Value add</b>	10 - 15 %
<ul style="list-style-type: none"> <li>■ Assembly</li> <li>■ Testing</li> </ul>	
<b>Mechanical bill of materials (BoM)</b>	20 - 25 %
<ul style="list-style-type: none"> <li>■ Housing</li> <li>■ Switches</li> </ul>	
<b>Electrical BoM</b>	50 - 60 %
<ul style="list-style-type: none"> <li>■ Capacitors</li> <li>■ Resistors</li> <li>■ Memory</li> <li>■ PCB</li> </ul>	



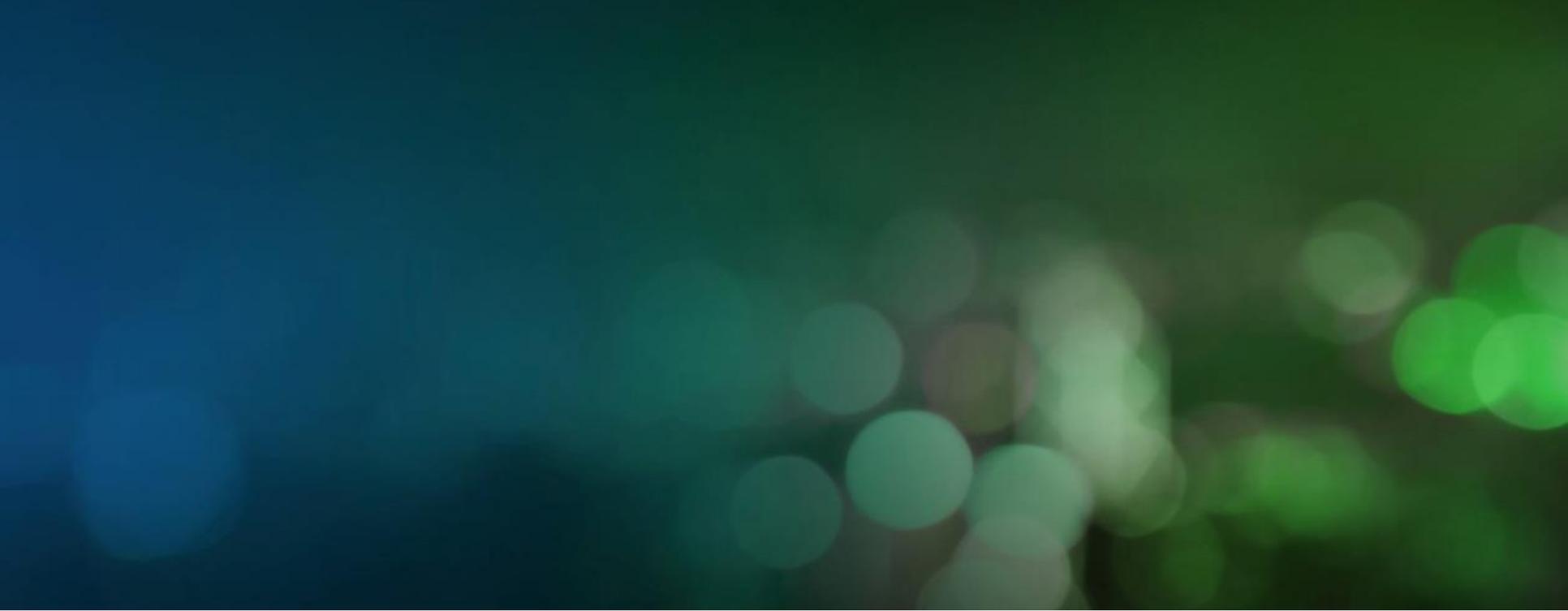
## How Landis+Gyr drives product cost out

- Should-cost analysis
  - e-tendering
- 
- Directly negotiate shipment terms
  - Improve supply chain setup (direct shipments)
  - Packaging design optimization
- 
- Should-cost analysis of manufacturing process steps
  - Design for manufacturing
  - Improved supply chain setup (best cost countries)
- 
- Long term contracts with in-built cost reduction year over year
  - Dual / multiple sourcing
  - Deploy latest technologies
  - Harmonization and standardization
  - Design to cost
  - Cost benchmarking and linear performance pricing

## Execution

- Cost down program for six volume products in FY18
- Targeted at existing contracts in key AMI markets
- Real product cost down example
  - Achieved 17% cost reduction from FY17 to FY18
  - On track to further reduce cost by 15% in FY19





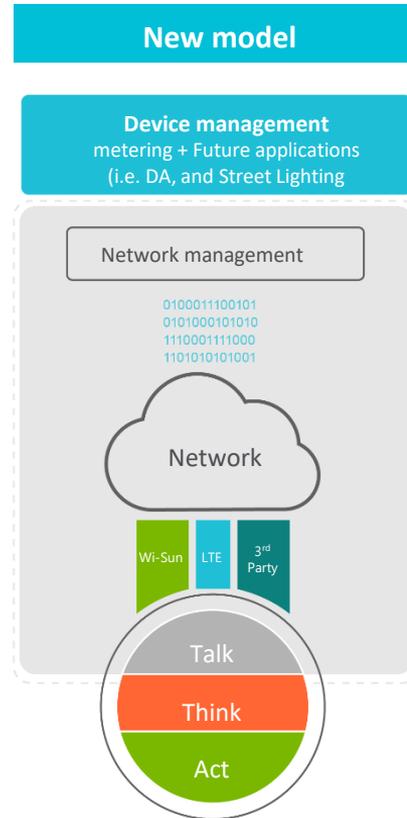
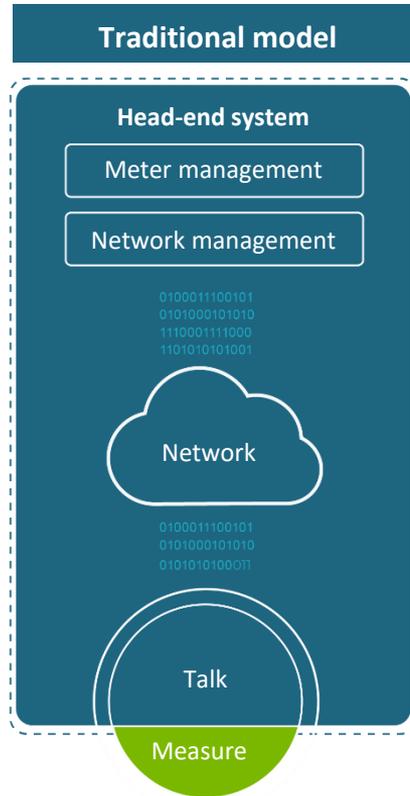
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## **Technology & Innovation**

*Jyoti Mahurkar-Thombre, EVP R&D, CTO*

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# Shifting from smart metering to grid edge intelligence



## Benefits of the new model

- Intelligence layer across many networks
- Application support on third party sensors
- Ability to leverage existing networks

## Gridstream Connect

- Gridstream Connect is Landis+Gyr's **technology platform**, enabling **intelligent connectivity** across the Utilities service territory
- Designed to **evolve with the utility** as their business and technology needs change, i.e. to address the unique needs that come with **managing the grid**
- Allow augmented capabilities extending the utility investment into **smart infrastructure** and **increasing benefit to consumers**.



## 1 Intelligent endpoints

- Advanced metrology
- Increase edge Intelligence
- 3<sup>rd</sup> party sensors & apps
- Integration with home energy management

## 2 Flexible communications

- Multi-protocol communications
- Network management
- Multi-networks: Wi-SUN, NB-IoT, LTE-M

## 3 Application enablement

- Modular software
- Independent device management system
- App development software development kit and ecosystem
- 3<sup>rd</sup> party software integration
- Meter data analytics

## ★ 2<sup>nd</sup> wave use cases

- Value proposition driven by grid edge intelligence
- Capability to integrate apps at the endpoint, at the network, and at the business applications layer
- Driving flexibility, resilience and security at the grid edge.

Our next generation architecture is enhancing grid edge intelligence for 2<sup>nd</sup> wave use cases

# Taking Gridstream® Connect to market



## Needs

	Intelligent endpoints	Flexible communications	Application enablement
<b>Needs</b>	<ul style="list-style-type: none"> <li>Integration to the grid of behind the meter assets: residential solar, storage, EV</li> <li>Interaction with smart controllers</li> </ul>	<ul style="list-style-type: none"> <li>Build a bidirectional multi-tier communication network</li> <li>Enable multiple utility-grade applications: flexibility management, grid management</li> <li>Enable smart infrastructure applications</li> </ul>	<ul style="list-style-type: none"> <li>Grid resilience</li> <li>Energy management</li> <li>Flexibility management</li> <li>Asset optimization analytics</li> <li>Grid management</li> </ul>
<b>Landis+Gyr advantages</b>	<ul style="list-style-type: none"> <li>Advanced sensing</li> <li>Smart load and generation controllers</li> <li>Flexible processing, modular capabilities</li> <li>Multi-utility coverage: electricity, gas, water, street-lighting</li> </ul>	<ul style="list-style-type: none"> <li>Proven high scalability</li> <li>Multi-networks and flexible network management</li> <li>Intelligent connectivity</li> <li>Standards based interoperability</li> </ul>	<ul style="list-style-type: none"> <li>Enabling edge intelligence, community intelligence or enterprise-level intelligence</li> <li>Enabling 3<sup>rd</sup> party developers</li> <li>Having largest installed base for deployment</li> </ul>
<b>Key product launches</b>	<ul style="list-style-type: none"> <li>E360 Next gen residential meter for IEC markets</li> <li>E660 Next gen industrial meter for IEC markets</li> <li>Street lighting controller</li> </ul>	<ul style="list-style-type: none"> <li>Cisco partnership</li> <li>Network gateway and bridge</li> <li>Gridstream network management</li> <li>Wi-SUN, LTE-M, communication modules and networking</li> </ul>	<ul style="list-style-type: none"> <li>Advanced Grid Analytics</li> <li>Gridstream Connect app ecosystem: developers hub, apps marketplace, insights, provisioning</li> </ul>

## Upgradable endpoints

### Field upgradeable meter endpoint

- Hot pluggable – no disruption of service required



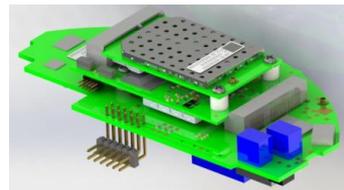
### Key value for utilities

Rapid deployment of new capabilities

## Expansion modules

### Added processing power and flexible communications

- Connect to behind the meter assets (e.g. solar, EV, home battery)
- Real time load disaggregation



### Key value for utilities

Upgrade endpoint with grid edge applications at marginal cost

Enhancing edge computing, new processing modules, and new miniaturized endpoints

# Innovation (2/2) | Grid edge applications to enable 2<sup>nd</sup> wave use cases

## Endpoint embedded apps

### Landis+Gyr and 3<sup>rd</sup> party apps at the grid edge

- Flexibility management
- Load disaggregation



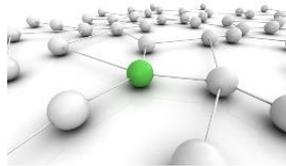
### Key value for utilities

Remote deployment of new grid edge monitoring and control apps

## Crowdsourced IQ

### Grid edge distributed computation

- For artificial intelligence calculations
- Dynamic discovery of neighboring nodes and associated services



### Key value for utilities

More distributed processing power for infrequent calculations or for co-processing between advanced/non-advanced endpoints

## Voice augmented metering

### Smart assistants for energy

- Integration of smart metering with Amazon Alexa (digital assistant)
- Provides notifications, energy saving tips of the day and insights about last consumptions



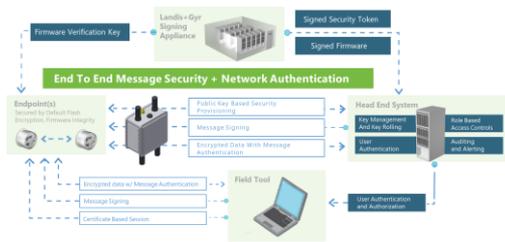
### Key value for utilities

Smart energy efficiency assistant at home

**Flexibility management, load disaggregation, distributed computation and energy monitoring using digital assistants**

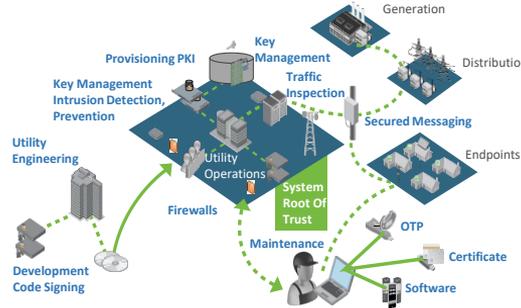
# Continuously developing industry-standard security

## Far-reaching data security



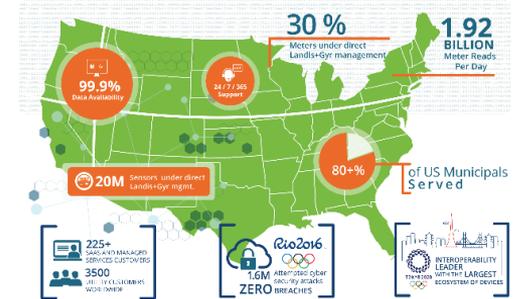
- People and process
- Systematic data protection
- Compliance and auditability
- Resistance and local security
- Periodic edge-to-edge penetration tests

## Security architecture



- Secure by design
- Industry standards-based approach
  - Based on government best practices/recommendations
  - NSA Suite B / NISTIR 7628 / OpenSG AMI-SEC / NIST FIPS 140
  - Edge-to-edge protection

## Open security posture



- Open security posture with utilities
- Joint risk-based prioritization with our customers
- Continuous improvement and road mapping of updates/hot-patches

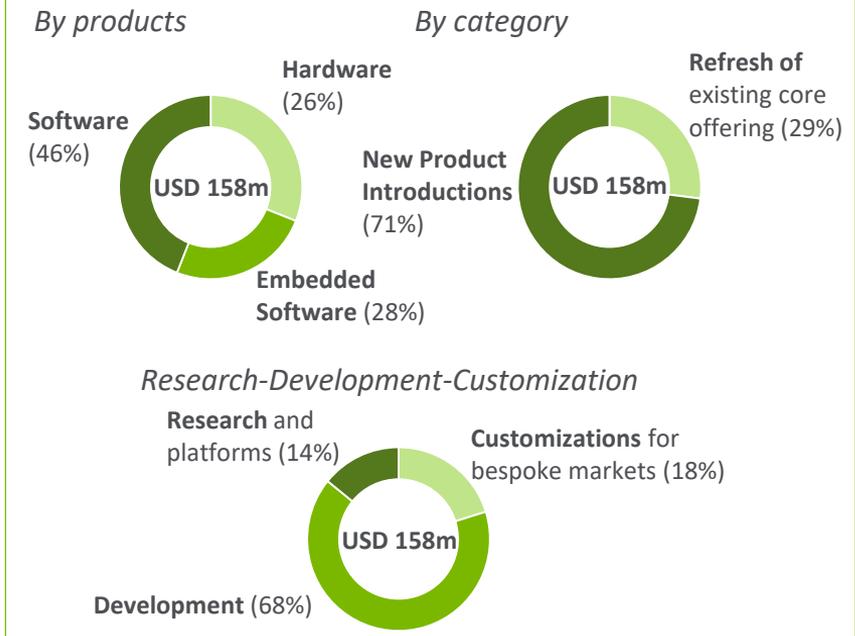
Security is of paramount importance: designed into portfolio, continuously tested and improved

# The DNA of Landis+Gyr research and development is software

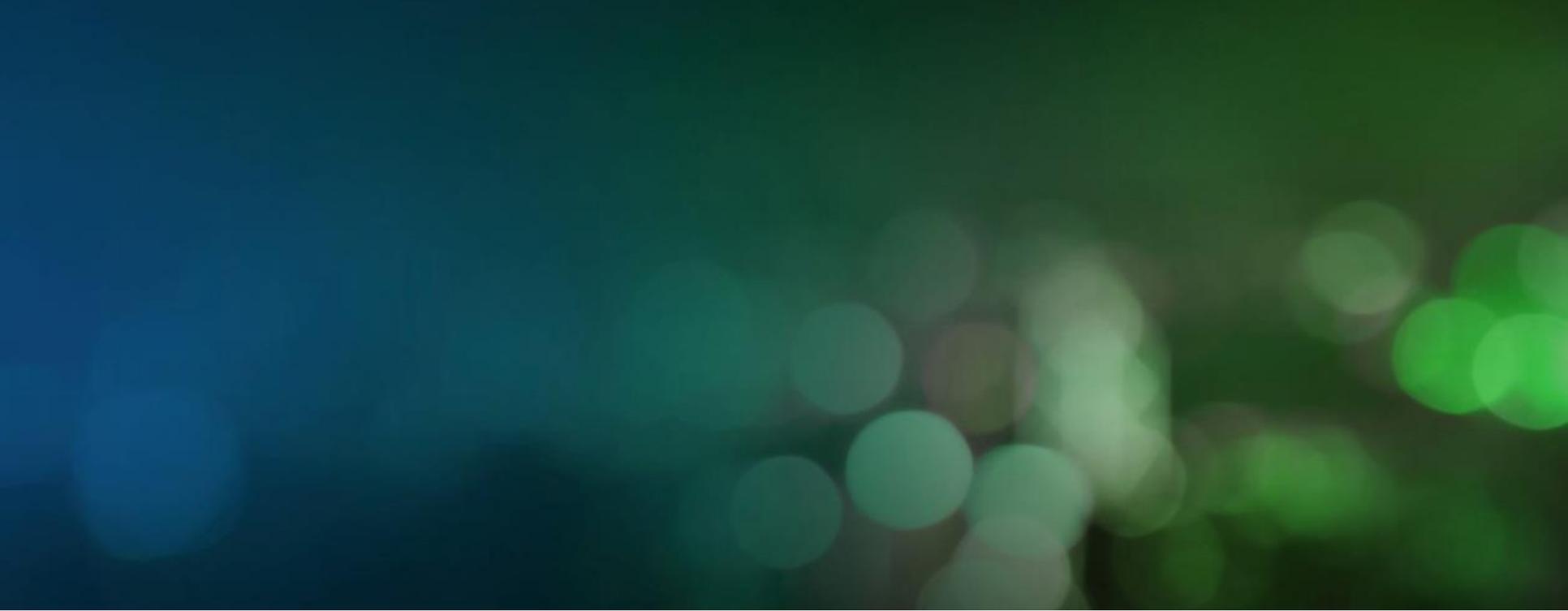
## Key success factors

<p><b>Global footprint</b></p>	<ul style="list-style-type: none"> <li>Technical expertise where customers need it: customer intimacy, responsiveness</li> </ul>
<p><b>Scale creates opportunity</b></p>	<ul style="list-style-type: none"> <li>1'389 technical professionals working on leading edge solutions and innovations</li> </ul>
<p><b>Expertise</b></p>	<ul style="list-style-type: none"> <li>Breadth &amp; depth of expertise in metering, communication, software, analytics</li> <li>Over USD 110m annual spend on software (embedded or applications) gives significant competitive advantage for 2<sup>nd</sup> wave positioning i.e. value add use cases</li> </ul>

## Breakdown of FY17 R&D investments



74% of our R&D focus is related to software and embedded software, 71% is on new product introductions



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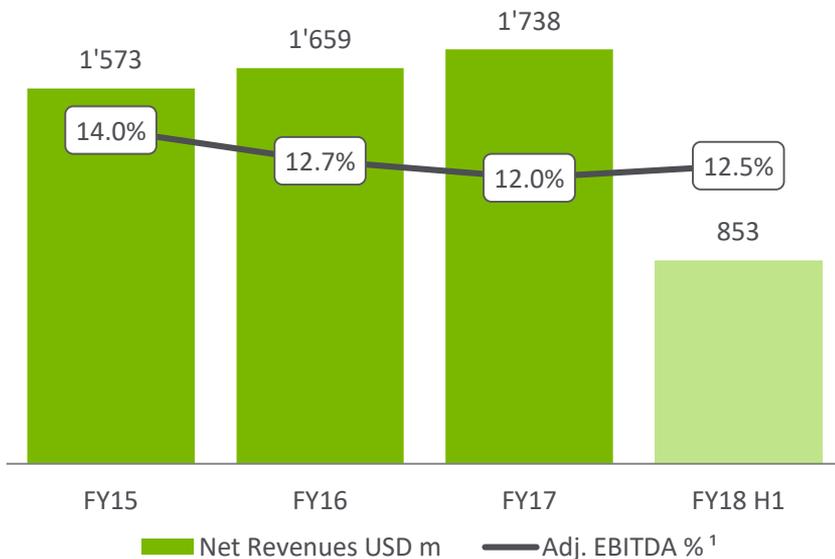
## Finance

*Jonathan Elmer, CFO*

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# Group performance | Positive Net Revenues trend with uptick in profitability

Net Revenues development in constant currency:	FY15 – FY17 +4.8% CAGR	FY17 H1 – FY18 H1 -1.9%
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## Net Revenues development

### FY15 – FY17

- Smart metering growth in Americas and EMEA
- No growth in Asia-Pacific

### FY18 H1

- Strong growth in North America
- Declines in EMEA and Japan

## Adjusted EBITDA %

### FY15 – FY17

- Adjusted EBITDA % declines on margin compression mostly in EMEA

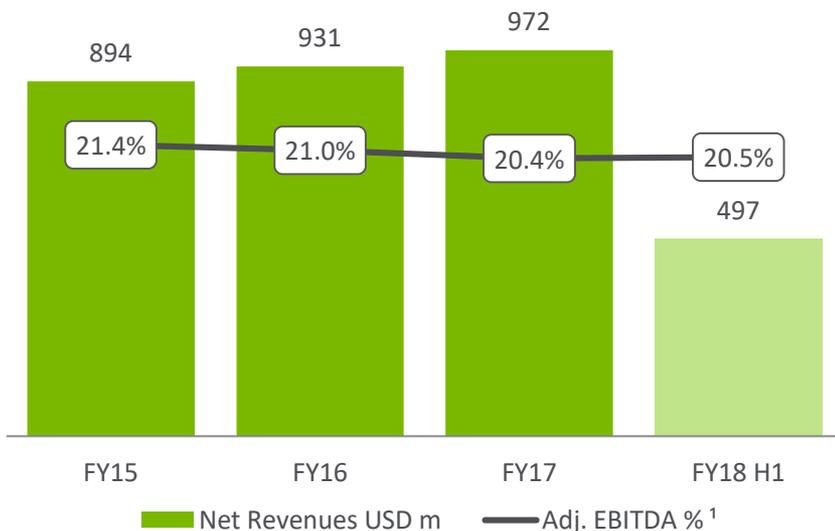
## Indicators for recovery in FY18 H1

- Uptick in EMEA & AP drives higher margin despite 140bps headwind from incremental supply chain costs

1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, Adj. EBITDA has been revised down by USD 0.8m, USD 1.4m, and USD 3.8m in FY15, FY16 and FY17 respectively as all pension income and expenses other than service costs are now reported under "Other income (expense)"

# Americas performance | Continued Net Revenues growth with high margins

Net Revenues development in constant currency:	FY15 – FY17 +3.6% CAGR	FY17 H1 – FY18 H1 +5.6%
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1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, Adj. EBITDA has been revised down by USD 0.6m, up by USD 0.1m, and down by USD 0.7m in FY15, FY16 and FY17 respectively as all pension income and expenses other than service costs are now reported under "Other income (expense)"

## Net Revenues development

### FY15 – FY17

- Growth as North America market continues to outpace forecasts

### FY18 H1

- Two large US deployments underpin strong growth
- Japan revenue down USD 33m to USD 14m as contract model changes. Next growth cycle is expected from 2023

## Adjusted EBITDA %

- Adjusted EBITDA % remains >20%
- Some FY18 H1 headwinds due to
  - Decline of Japan revenue
  - 160 bps margin impact from supply chain issues

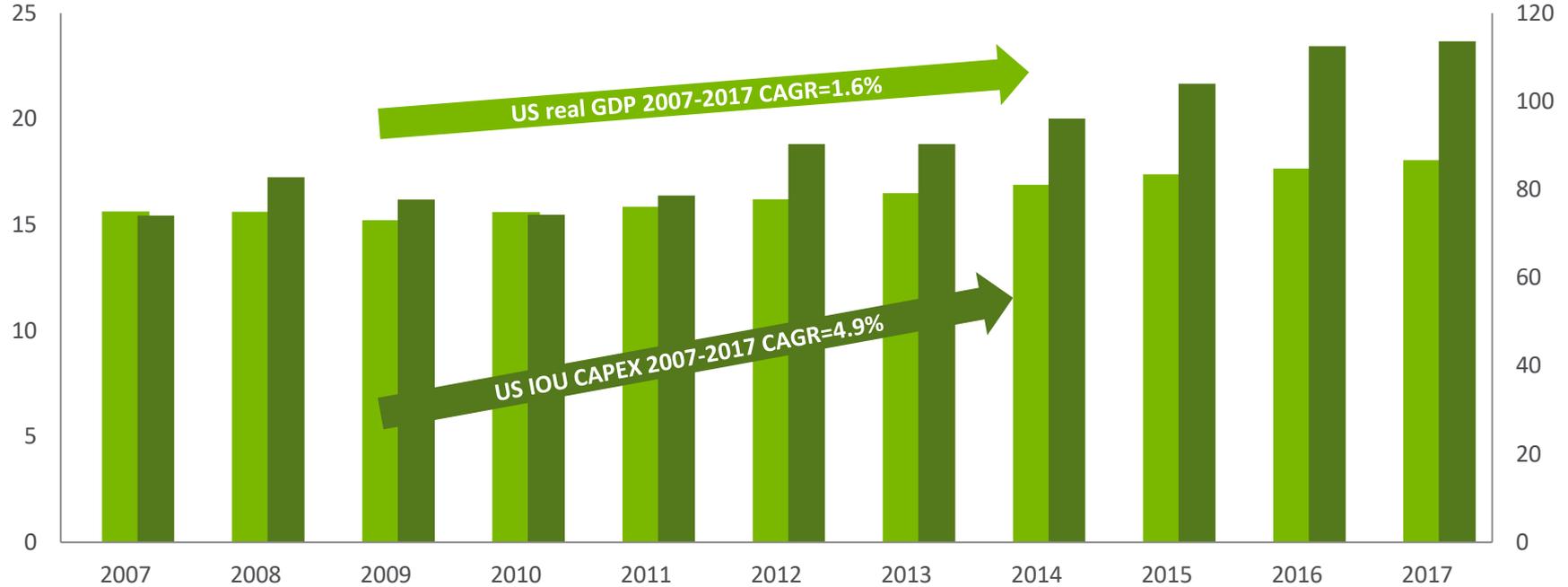
## North American smart electric meter market

- Unit prices and sales volumes for smart electric meters in North America are higher than expected at IPO, supported by IHS and internal data

# Utility CAPEX cycles largely uncorrelated to GDP

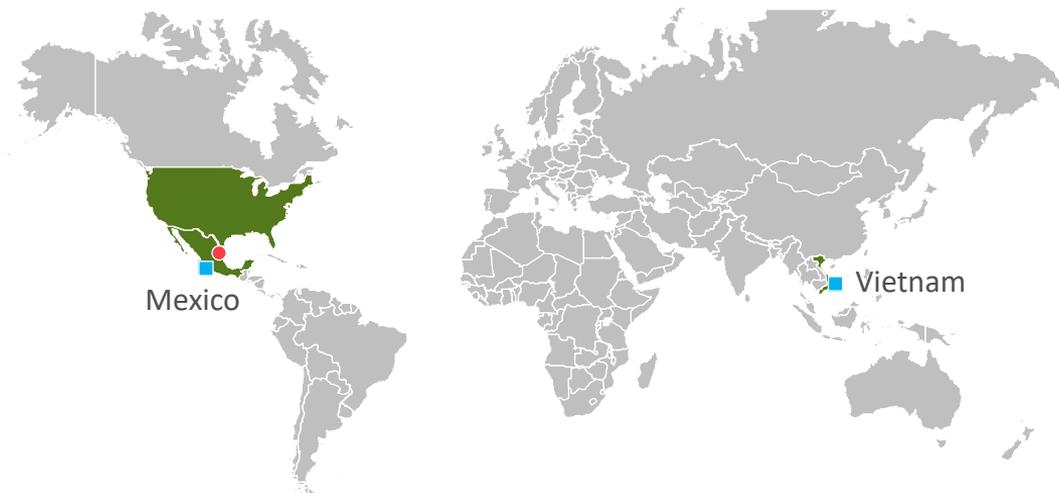
US real GDP  
(USD trillion)

US investor owned utility CAPEX  
(USD billion)



# No material impact expected from either tariffs or USMCA, if ratified

## Americas supply chain set-up

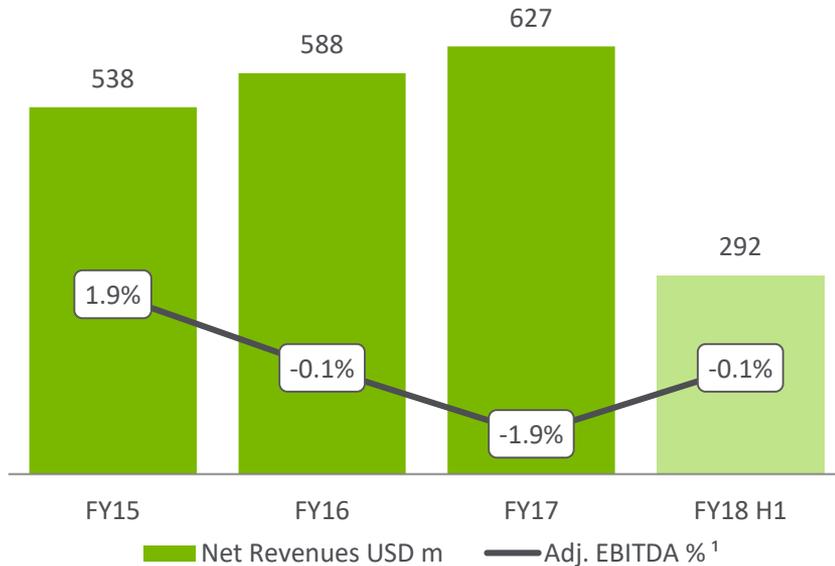


- Landis+Gyr manufacturing sites for North America
- Main EMS's for North America

- Main Landis+Gyr assembly site for North America is in Reynosa, Mexico
- Main EMS's for North America are located in Mexico and Vietnam
- Subject to ratification, the new agreement represents no change versus NAFTA
- Tariffs on direct imports from China are expected to have only a minor impact on Americas Adj. EBITDA margin

# EMEA performance | Growing Net Revenues to FY17 with profitability recovery in FY18 H1

Net Revenues development in constant currency:	FY15 – FY17 +8.0% CAGR	FY17 H1 – FY18 H1 -11.6%
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## Net Revenues development

FY15 – FY17

- Growth in key smart metering markets: France, NL and UK

FY18 H1

- Temporary delays in UK, project roll-off in Spain & supply chain issues cause revenue decline

## Adjusted EBITDA %

FY15 – FY17

- Adjusted EBITDA % under pressure in certain smart metering markets

## Indicators for recovery in FY18 H1

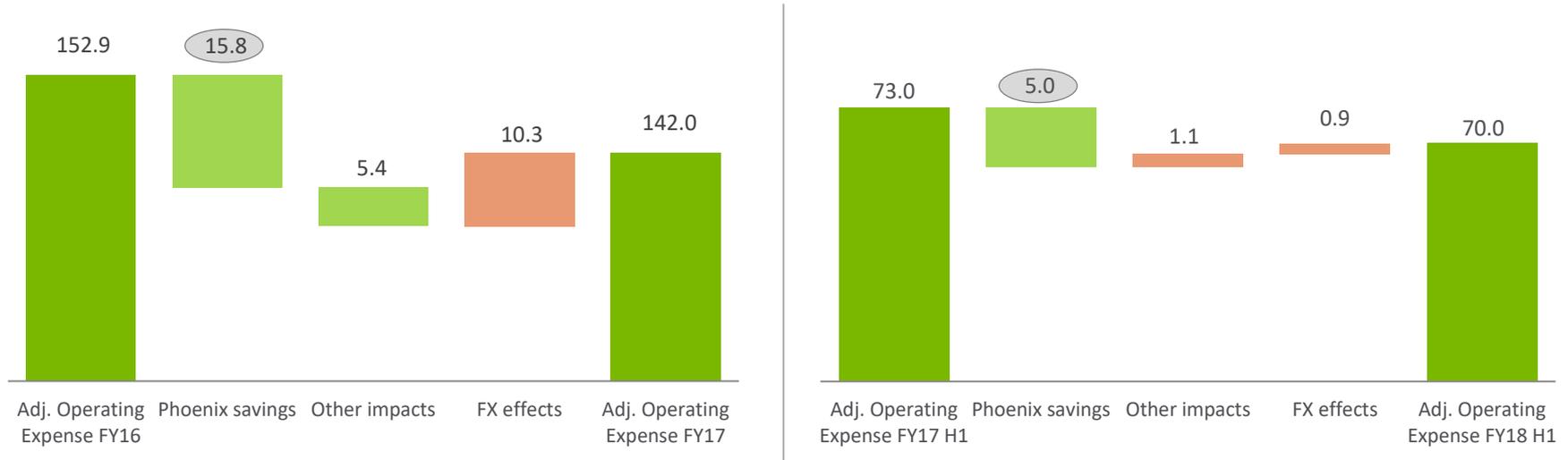
- Positive impact from new product introductions and lower operating expenses (Project Phoenix)
- Headwind: 130 bps margin impact from incremental supply chain costs

1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, Adj. EBITDA has been revised down by USD 0.2m, USD 1.5m, and by USD 3.1m in FY15, FY16 and FY17 respectively as all pension income and expenses other than service costs are now reported under "Other income (expense)"

# Project Phoenix executed and generating savings as planned

IPO commitment: USD 20m of savings by FY18  
 Delivered: USD 21m of savings by FY18

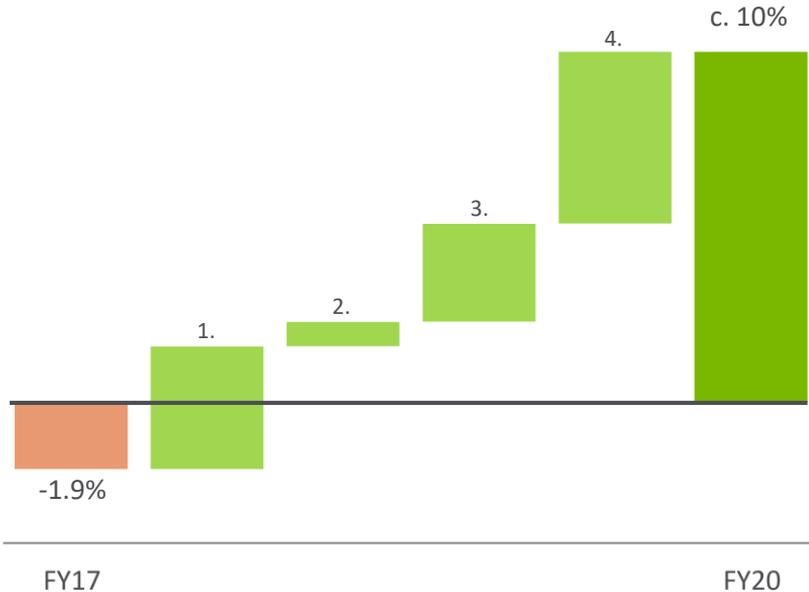
Adjusted Operating Expense bridges (in USD m) <sup>1</sup>



1. All numbers revised for the adoption of ASU 2017-07 relating to defined benefit pension scheme costs and excluding Group charges

# Clear path to sustainable, double digit, Adj. EBITDA margins in EMEA

## Adjusted EBITDA as a % of Net Revenues



## Measures

- 1. Improved Margin Quality: +3.2% to +3.7%**  
Product cost downs on high volume AMI products
- 2. Phoenix Savings: +0.6% to +0.8%**  
Further savings of USD 5m materialised in FY18 H1 (USD 21m in total)
- 3. Lightfoot Savings: +2.6% to +3.0%**  
USD 20m still to be delivered, mainly in FY19 and FY20
- 4. Operating Leverage: +4.5% to +5.3%**  
Higher net revenue volumes lead to economies of scale  
Group charges back to basis assumed at IPO

## Status

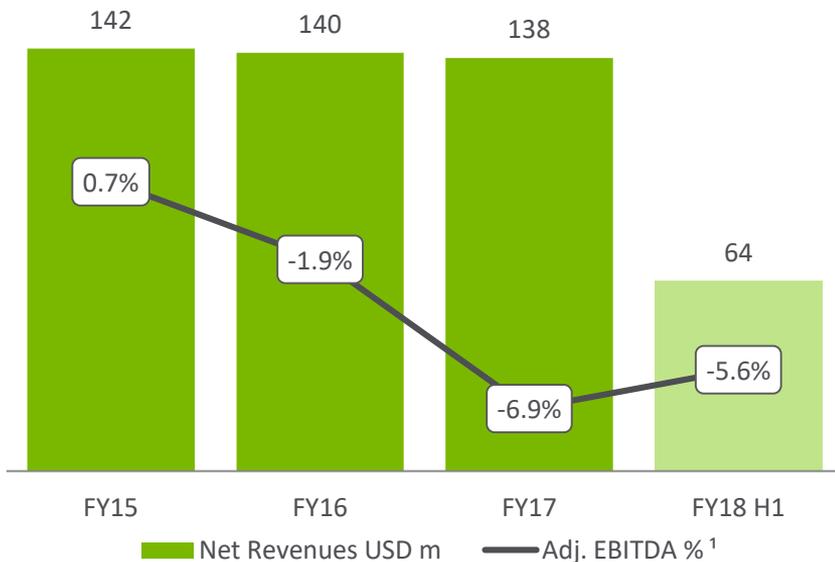
- UK is the largest market in EMEA and 2<sup>nd</sup> largest market globally for Landis+Gyr
- Mass deployment of smart meters is accelerating as transition to SMETS2 kicks in
- Uncertainty remains over the UK's exit from the EU
  - A no-deal scenario is the main negative short-term scenario

## Potential Implications

- WTO terms would result in import duties of 1.1% on electric and 2.1% on gas meters
- New import procedures & customs congestion may result in disruption to deliveries
- Exchange rate fluctuations may impact margins
- UK may become a more uncertain market

# Asia-Pacific performance | Reduction in operating expenses positions region for profitable growth

Net Revenues development in constant currency:	FY15 – FY17 -2.5% CAGR	FY17 H1 – FY18 H1 -6.6%
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## Net Revenues development

FY15 – FY17

- All major markets have been slow including Australia with Power of Choice regulation implemented December 2017

FY18 H1

- intelliHUB JV provides new sales opportunities

## Adjusted EBITDA %

FY15 – FY17

- Margins impacted by lower net revenues & incremental operating expenses establishing intelliHUB in FY15 to FY17

FY18 H1

- FY18 H1 recovery is expected to continue through the year
- Restructuring measures have reduced break even point

1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, Adj. EBITDA has been revised up by USD 0.1m in both FY15 and FY17 as all pension income and expenses other than service costs are now reported under "Other income (expense)"

# Adjustments to EBITDA decreasing on lower warranty expenses

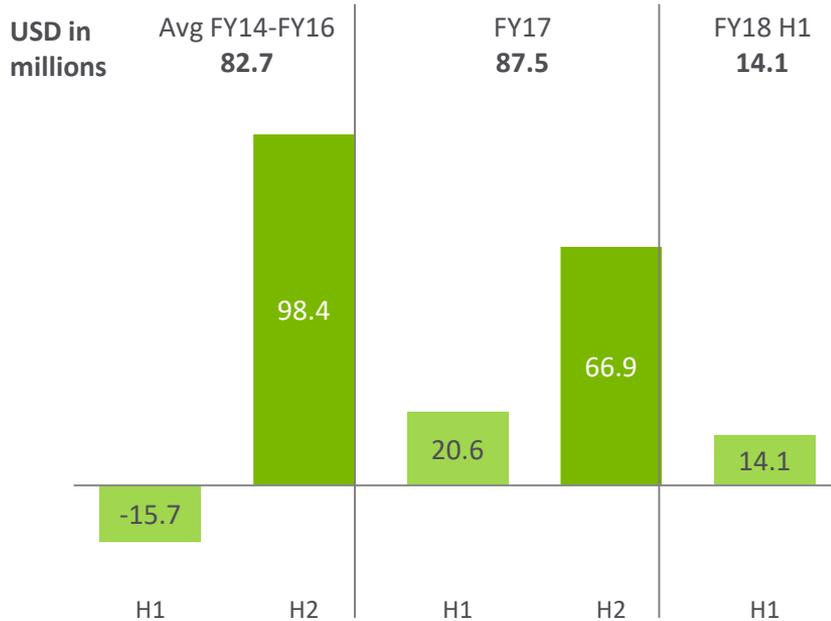
USD in millions	FY18 H1	FY17 H2 <sup>1</sup>	FY17 H1 <sup>1</sup>
<b>Reported EBITDA</b>	<b>114.9</b>	<b>100.6</b>	<b>40.8</b>
<i>Adjustments</i>			
Restructuring Charges	2.6	6.5	8.1
Exceptional Warranty Expenses	0.6	(0.1)	2.4
Normalized Warranty Expenses	(11.3)	(6.1)	30.3
Special Items	-	0.9	24.8
<b>Adjusted EBITDA</b>	<b>106.8</b>	<b>101.9</b>	<b>106.5</b>

- Significant reduction in adjustments
  - Reported EBITDA now higher than Adjusted EBITDA.
- Exceptional warranty adjustments
  - No further significant expenses expected.
- Normalised expense adjustment mainly relates to legacy component issue

1. Following the adoption by the Company of ASU 2017-07 relating to defined benefit pension scheme costs, EBITDA has been revised down by USD 2.3m in FY17 H1 and by USD 1.5m in FY17 H2 as all pension income and expenses other than service costs are now reported under "Other income (expense)"

# Strong Free Cash Flow track record

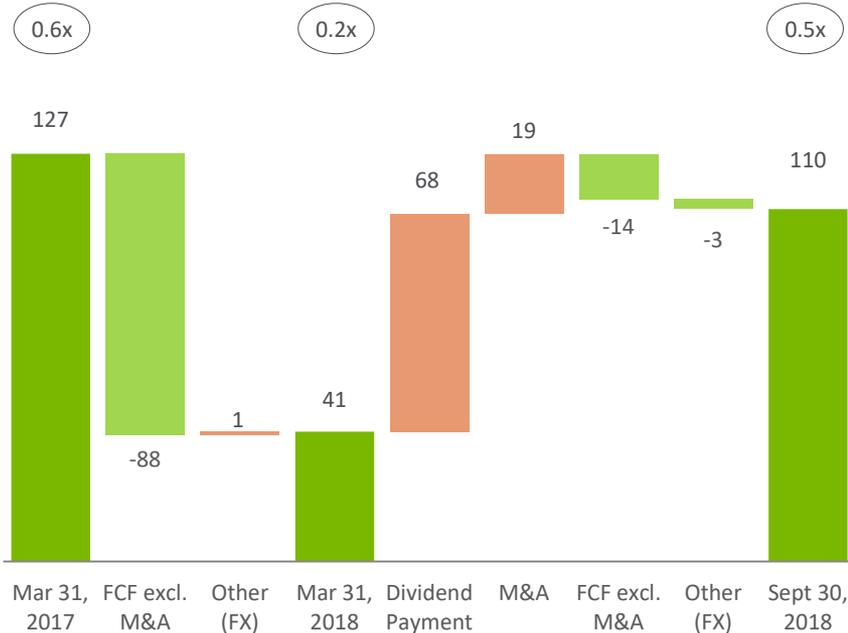
## Free Cash Flow (excl. M&A)



- Strong historical Free Cash Flow (excl. M&A)
- H1 tends to have weaker cash flow than H2
- Other cash flow drivers
  - CAPEX at around c. USD 45m
  - Operating working capital at c. 16% of revenue
  - Cash taxes guided at 20-26% of pre-tax profit

# Leverage remains low with net debt at 0.5x Adjusted EBITDA in FY18 H1

USD in millions



○ Net Debt / trailing twelve month Adjusted EBITDA

- Net debt was reduced in FY17 based on strong cash flow and no dividend payment falling in the year
- Net debt increased in FY18 H1 given
  - Dividend payment
  - Investment in intelliHUB joint venture
- FY18 H1 leverage levels remain low at 0.5x Adj. EBITDA

# Capital allocation focuses on creating shareholder value



# Share buy back scheme enhances shareholder returns

- Share buy back program of up to CHF 100m or 8% of share capital announced today
  - Will be run over up to 3 years
  - May be stopped at any time
- Compatible with
  - Investing for organic growth
  - Dividend policy (which remains unchanged)
  - Bolt-on M&A
- Overall leverage ratio guidance remains consistent with the IPO guidance
  - Net debt expected to remain below 1.5x Adj. EBITDA
- Shares bought on the first trading line
  - Will be bought out of capital reserves without deduction of withholding tax
- Shares are being bought for cancellation, subject to shareholder approval

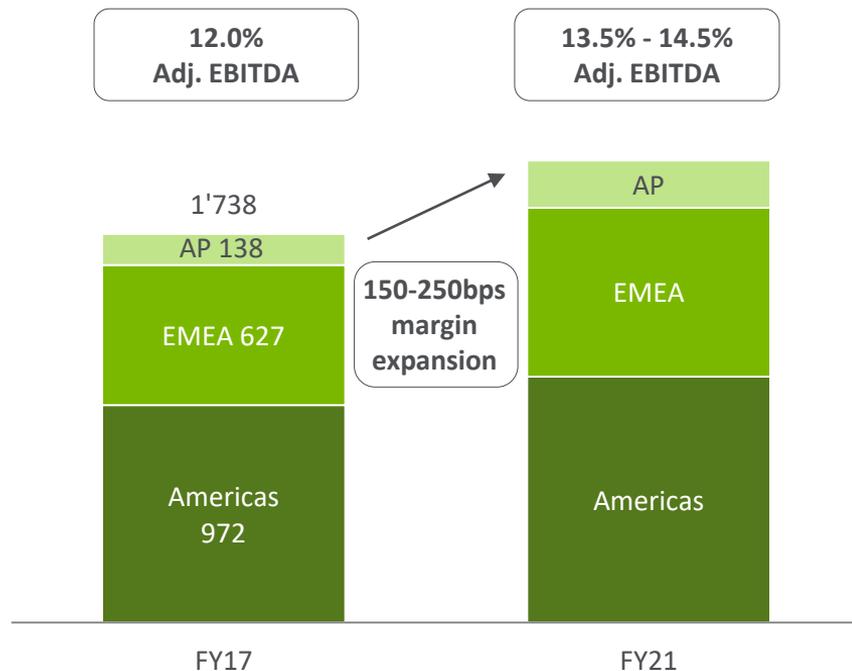
# Reconfirming FY18 Outlook

- Landis+Gyr expects the second half of FY18 to be stronger than the first half of FY18
- Supply chain situation remains challenging
- Net Revenues growth for FY18 is projected at approximately +1% to +3%
- Forecasted Group Adjusted EBITDA is between USD 217m and USD 237m
- Free Cash Flow, excluding M&A, expected to be between USD 90m and USD 110m
- Dividend of at least 75% of Free Cash Flow, excluding M&A, for FY18 but not less than the FY17 dividend of CHF 2.30 per share

# Positive mid-term outlook projections

## Mid single digit annual Net Revenues growth

USD in millions



### Group

- Net Revenues expected to grow based on targeted profitable smart metering opportunities at mid single digit annual rate
- Adjusted EBITDA margins expected to increase to between 13.5% and 14.5% of Net Revenues as EMEA and AP return to profitability

### Americas

- Core North American smart metering market expected to remain strong and above expectations at time of IPO
- Growth in Japan likely beyond the mid-term period, as network renewal expected to start in 2023
- Adjusted EBITDA margins expected to remain strong

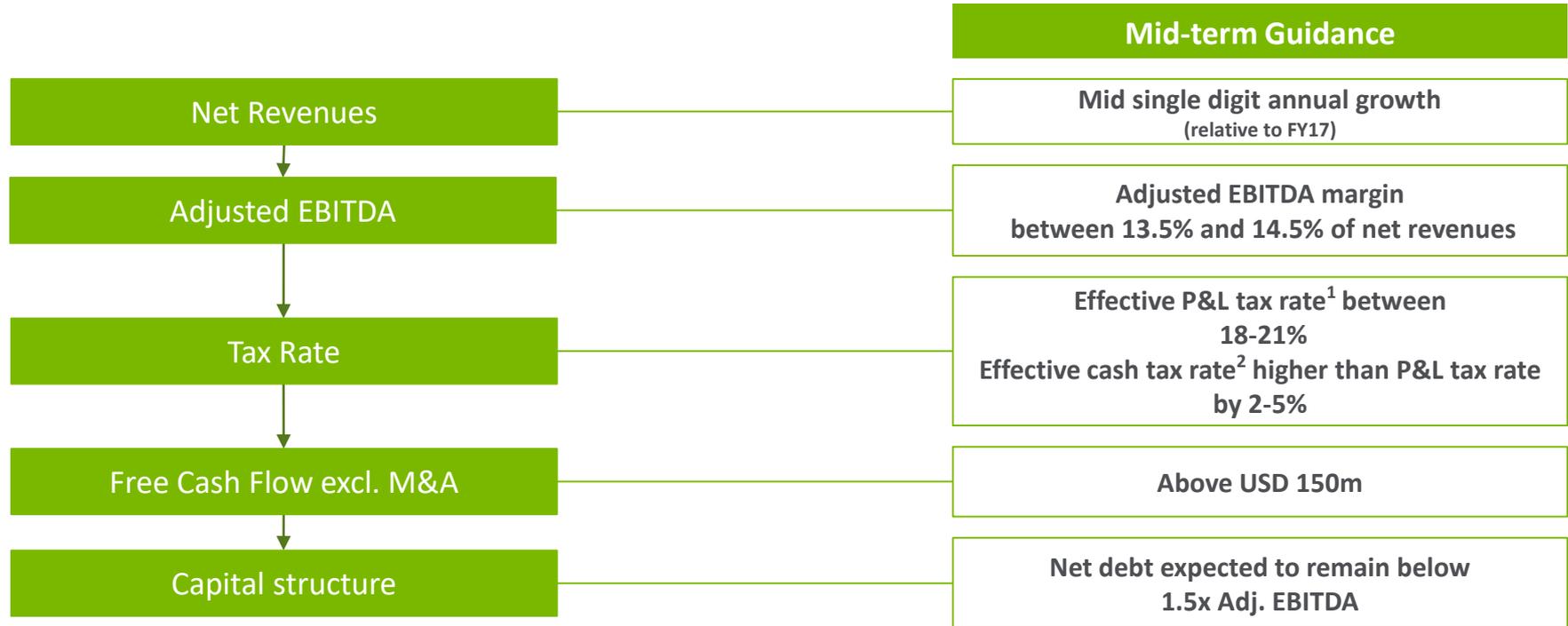
### EMEA

- Net Revenues expected to grow based on targeted profitable smart metering opportunities
- Adjusted EBITDA % expected to reach c. 10% as margin enhancement projects materialise by FY20

### Asia-Pacific

- Growth expected to resume as key markets in ANZ, India and SEA gather pace

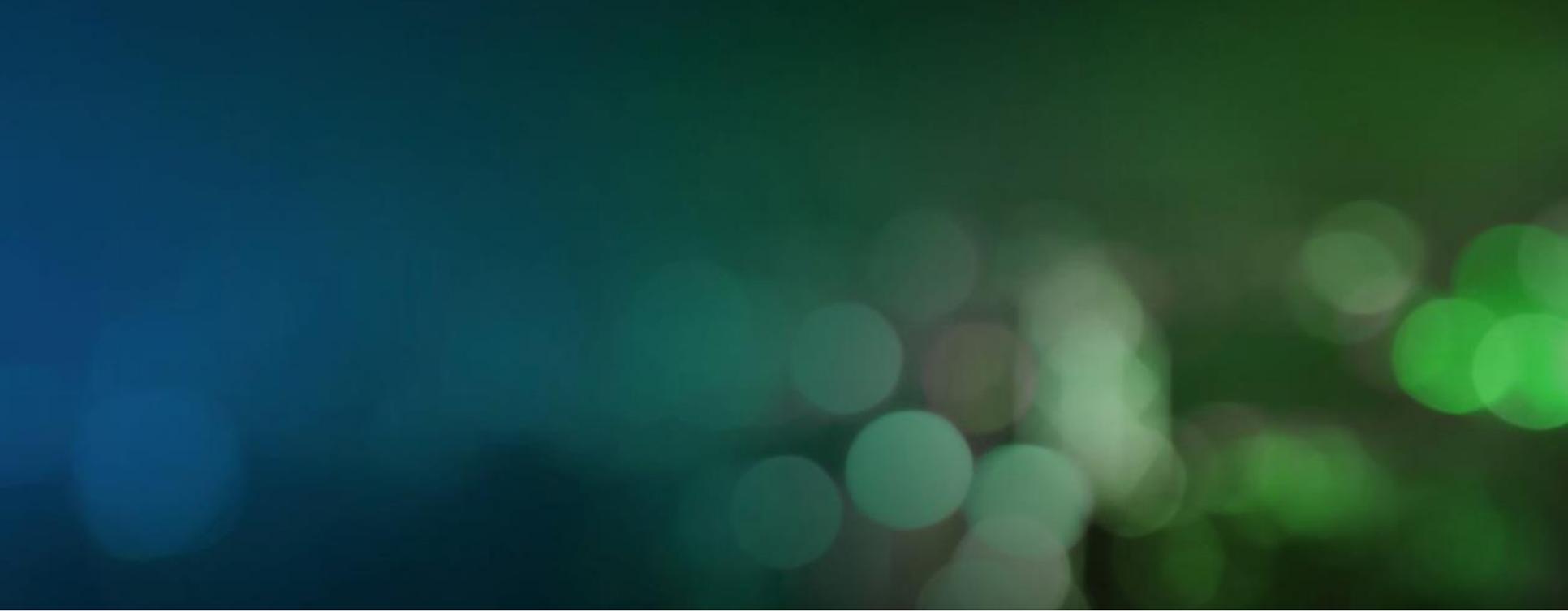
# Mid-term (FY21) guidance



**Dividend payout of at least 75% of Free Cash Flow excl. M&A**

1. Total projected tax expense including current and deferred taxes, as well as discrete events as a percentage of net income before income tax expenses.

2. Total projected cash tax payments as a percentage of net income before income tax expenses.



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## Capital Markets Day – Wrap Up

*Richard Mora, CEO*

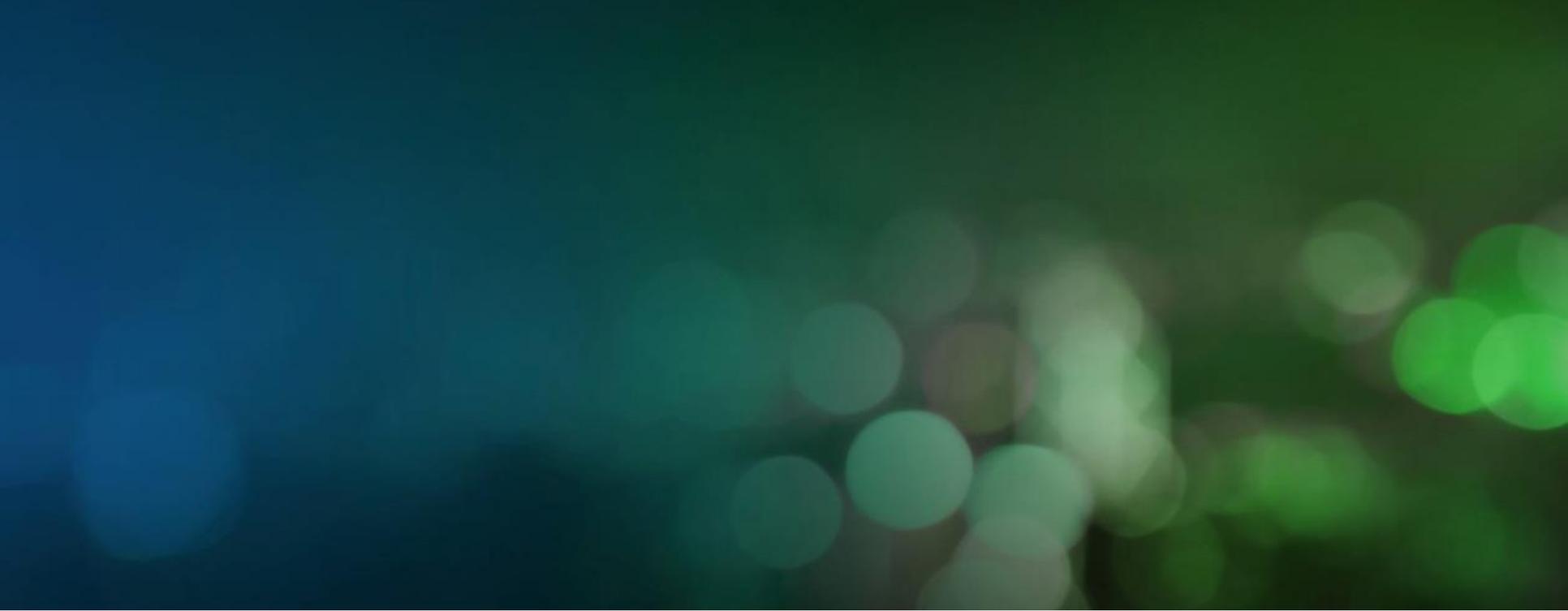
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# Reasons to invest: Landis+Gyr is positioned for continued growth and improved profitability

- ✓ **We operate in highly attractive markets**, with an identified TAM of USD 12.6b growing at more than 11% CAGR through 2021
- ✓ **We have the right growth strategy** in place, building on smart-metering to deliver grid edge intelligence and expansion in smart-infrastructure
- ✓ **We are on track to deliver our mid-term guidance (FY21)**

Landis+Gyr leadership in grid edge intelligence enables utilities to leverage smart metering for 2<sup>nd</sup> wave use cases in the digital energy revolution

# Thank You!



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## Q&A

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<b>AMI</b>	Advanced metering infrastructure	<b>NB-IoT</b>	Narrowband IoT
<b>AMR</b>	Automated meter reading	<b>NCC</b>	Non-conformance-cost
<b>ANSI</b>	American National Standards Institute	<b>NOC</b>	Network operations center
<b>BOM</b>	Bill of materials	<b>ODM</b>	Original design manufacturer
<b>CAD</b>	Consumer access device	<b>OPS &amp; SCM</b>	Operations & supply chain management
<b>CAGR</b>	Compound Annual Growth Rate	<b>OWC</b>	Operating working capital
<b>CCSP</b>	Calibration, customization, sealing and packaging	<b>PCBA</b>	Printed circuit board assembly
<b>DA</b>	Distribution automation	<b>PLC</b>	Power line communication
<b>DCC</b>	Data communication company	<b>PP</b>	Public Power
<b>DER</b>	Distributed energy resources	<b>PPAP</b>	Production part approval process
<b>DERMS</b>	Distributed energy resources management system	<b>PV</b>	Photovoltaic
<b>DR</b>	Demand response	<b>QOS</b>	Quality of service
<b>DSO</b>	Distribution system operator	<b>REC</b>	Rural electric cooperative
<b>DtC</b>	Design to cost	<b>RF</b>	Radiofrequency
<b>EMS</b>	Electronic manufacturing services	<b>SaaS</b>	Software as a service
<b>EV</b>	Electric vehicles	<b>SCAR</b>	Supplier corrective action request
<b>FAN</b>	Field area network	<b>SMaaS</b>	Smart metering as a service
<b>FW</b>	Firmware	<b>SMETS</b>	Smart metering equipment technical specifications
<b>HEM(S)</b>	Home energy management (system)	<b>TOU</b>	Time-of-use
<b>I&amp;C</b>	Industrial & commercial	<b>TTM</b>	Time to market
<b>ICG</b>	Industrial, commercial and grid	<b>VAVE</b>	Value analysis and value engineering
<b>IoT</b>	Internet of things	<b>VDA</b>	Verband der Automobilindustrie (association of automotive industry)
<b>IOU</b>	Investor-owned utility	<b>WAN</b>	Wide area network
<b>IPv6</b>	Internet protocol version 6	<b>WIP</b>	Work in progress
<b>JDM</b>	Joint development manufacturing	<b>ZDI</b>	Zero defect initiative
<b>kWh</b>	Kilowatt hour		
<b>MaaS</b>	Metering as a service		
<b>MDM(S)</b>	Meter data management (system)		



## Important Dates

**Release of FY18 Results:**

May 29, 2019

**Annual General Assembly:**

June 25, 2019 - Zug

**Release of H1 FY19 Results:**

October 25, 2019

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