

TECHNOLOGIES FOR SMART FARMING SUSTAINABLE SWINE PRODUCTION IN AFRICA.

www.tsfafrica.com

by Marcio Schmidt

10/10/2026



Where our food comes from



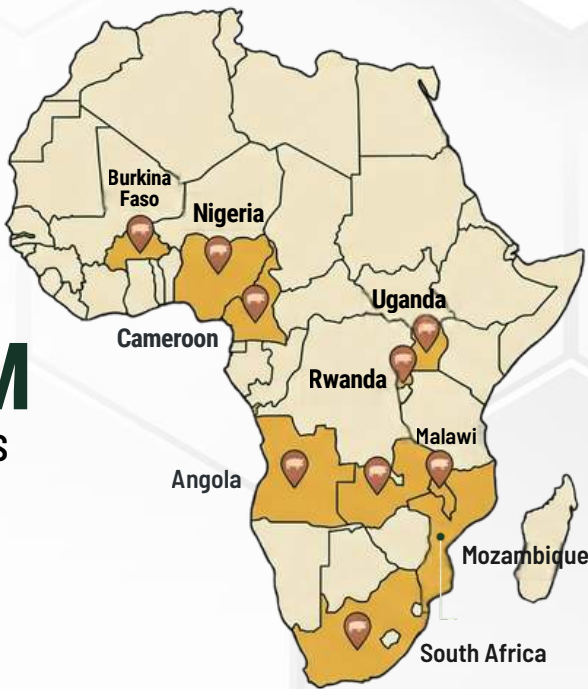
Protein mining

43M - 44M

ESTIMATED TOTAL
PIG POPULATION

4.5M - 6.0M

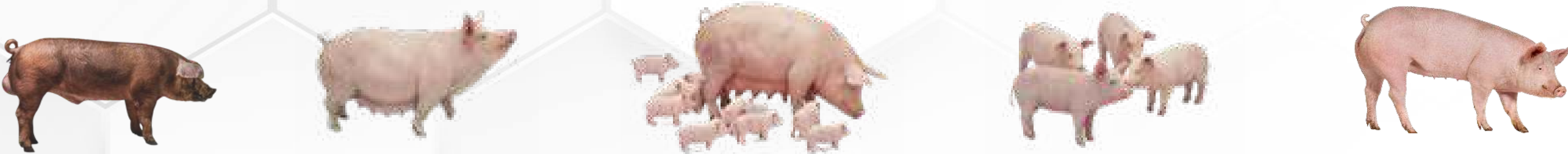
ESTIMATED BREEDING SOWS
(10-15% of total herd)



PSY? FCR?

Raise pigs is very complex process

GAP of 150 Years





Reference case in Ghana



<https://www.willsfarms.com>



Genetics discipline

Structured breeding program with focus on performance, consistency, and measurable outcomes.



Biosecurity-led operations

Controlled access, SOPs, hygiene routines, quarantine, and ongoing surveillance to protect herd health.



Documented assurance

Health and handling documentation, traceability identifiers, and clear expectations for receiving farms.



Professional management

Standard operating cadence, trained staff, and transparent processes designed for reliability.



Quality control

Quality-focused production and handling practices that prioritize animal welfare, hygiene, and consistency.



Reliable supply

Operational discipline and planning to support predictable deliveries for farms.





Technology for Smart Farming

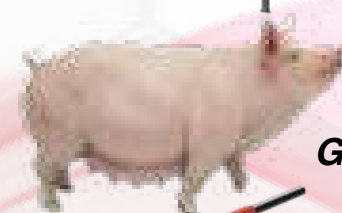


**OWN HARDWARE
CLOUD + AI
APP ECOSYSTEM**

PIG SMART FARMING



AUTO SILO



GESTATION



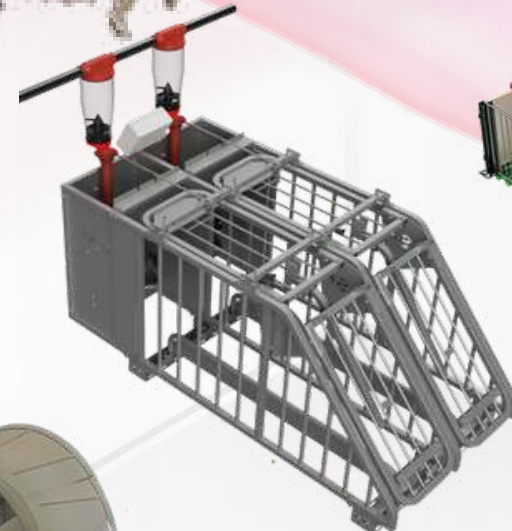
GENETICS



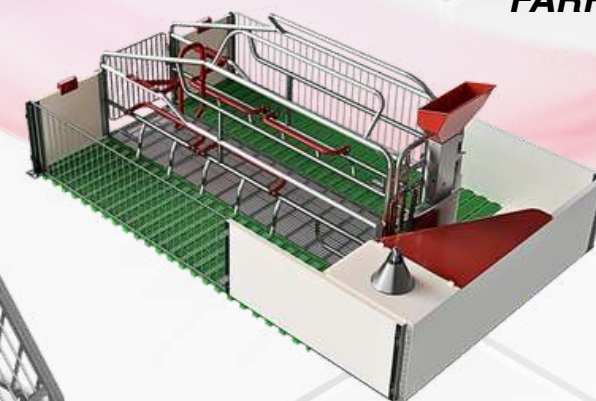
AUTOTEST



VENTILATION



AUTOSOW



PENNING



FARROWING



AUTODOS



MICROLIQUID



PIGLETS



CHAINDISK



NURSERY



AUTOGATE



SPOTFEEDER



FINISHERS



AUTOCAM



Pig farming smart automation
INCREASE THE EFFICIENCY OF PIG
FARMING



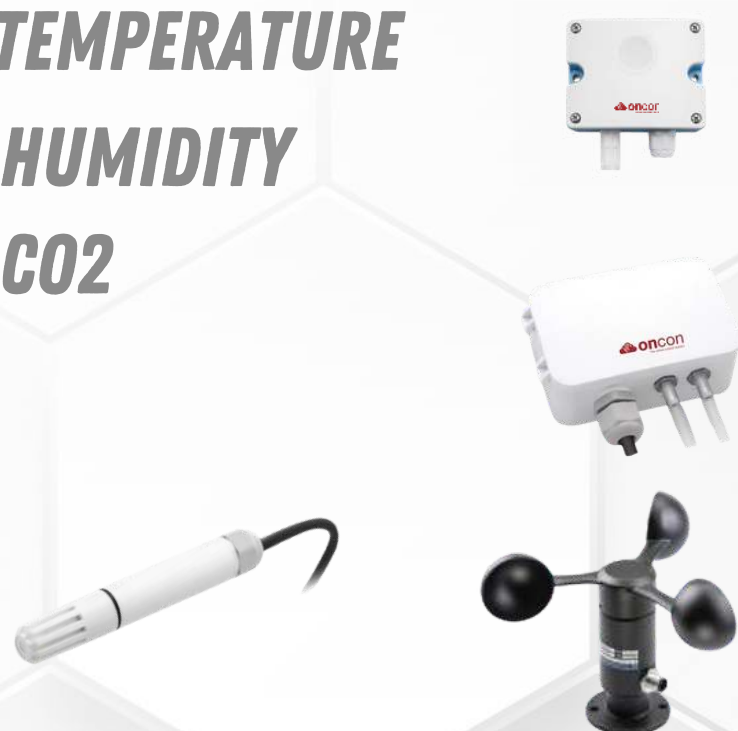
MONITORING

Water



Air

TEMPERATURE
HUMIDITY
CO2



VENTILATION



0 kg (1019 kg)

1 (1)

System state is good

Main State: running

32°C

60%

26°C 28°C

72% 78%

30°

454 m3/h

30°

1.5m/s

CO₂ 454 ppm

1

0 Hz

2

50 Hz

3

0

4

50

5

0

6

50

7

0

8

50

9

0

10

50

Temperature

Current Temperature: 22.3 °C

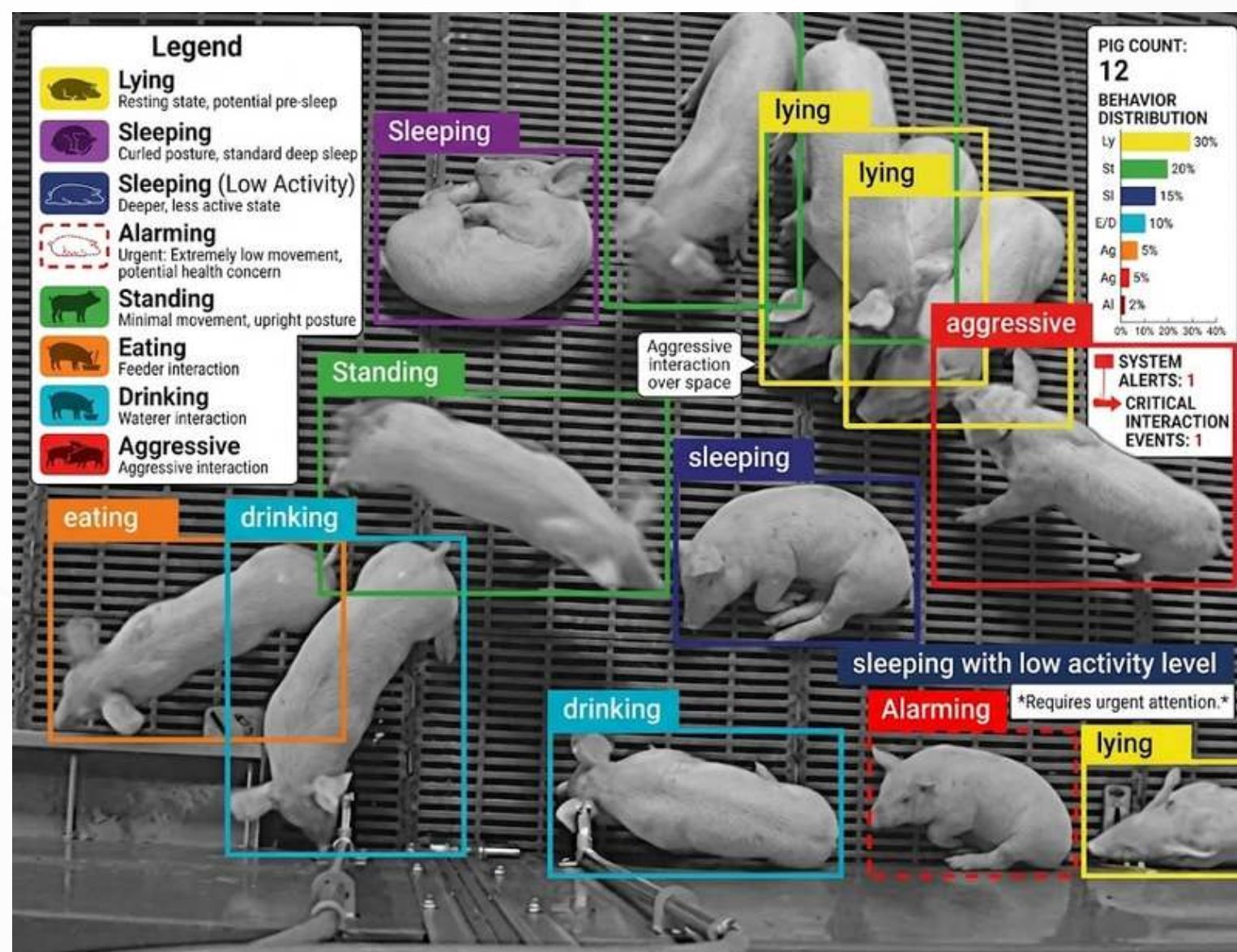
Humidity

Current Humidity: 62.0 %

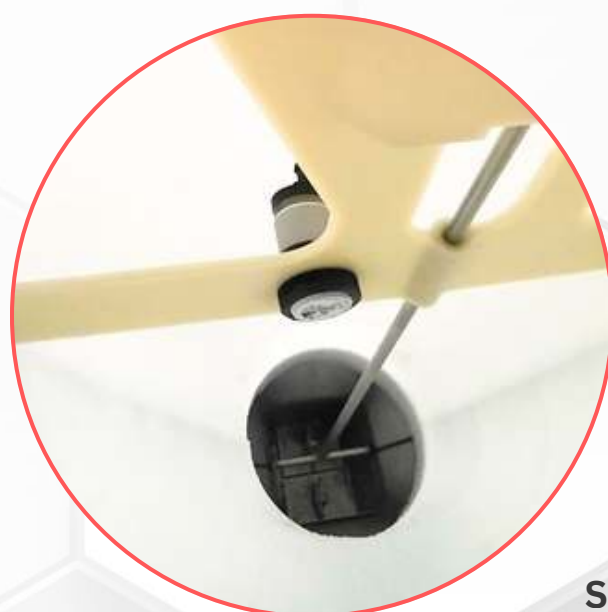
CO₂

Current CO₂: 560 ppm

AUTOCAM MONITORING



SPOTFEEDER

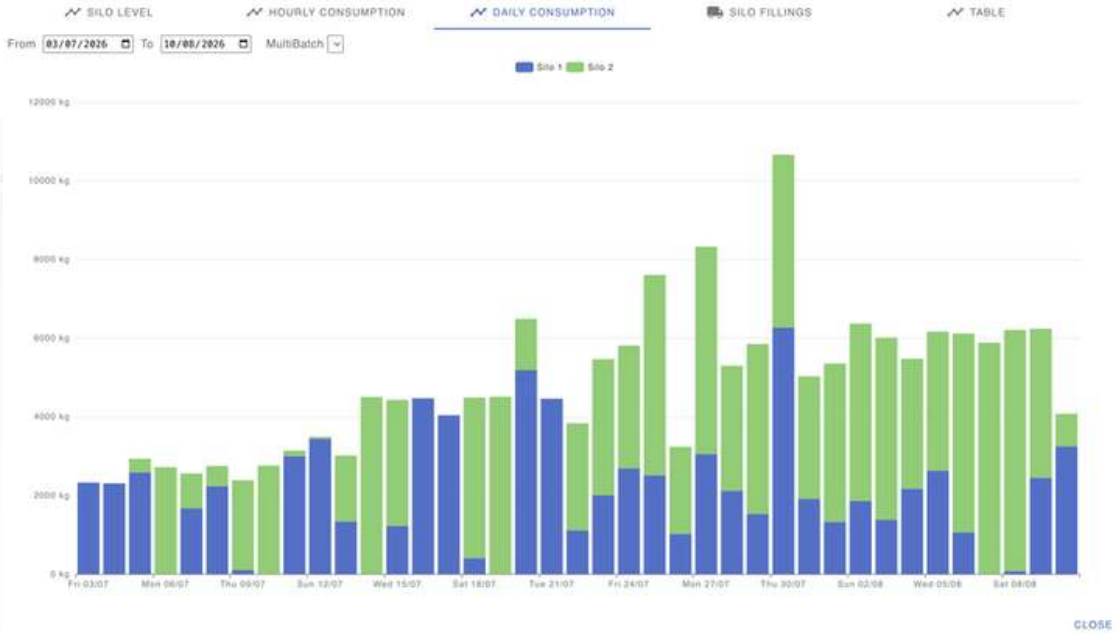
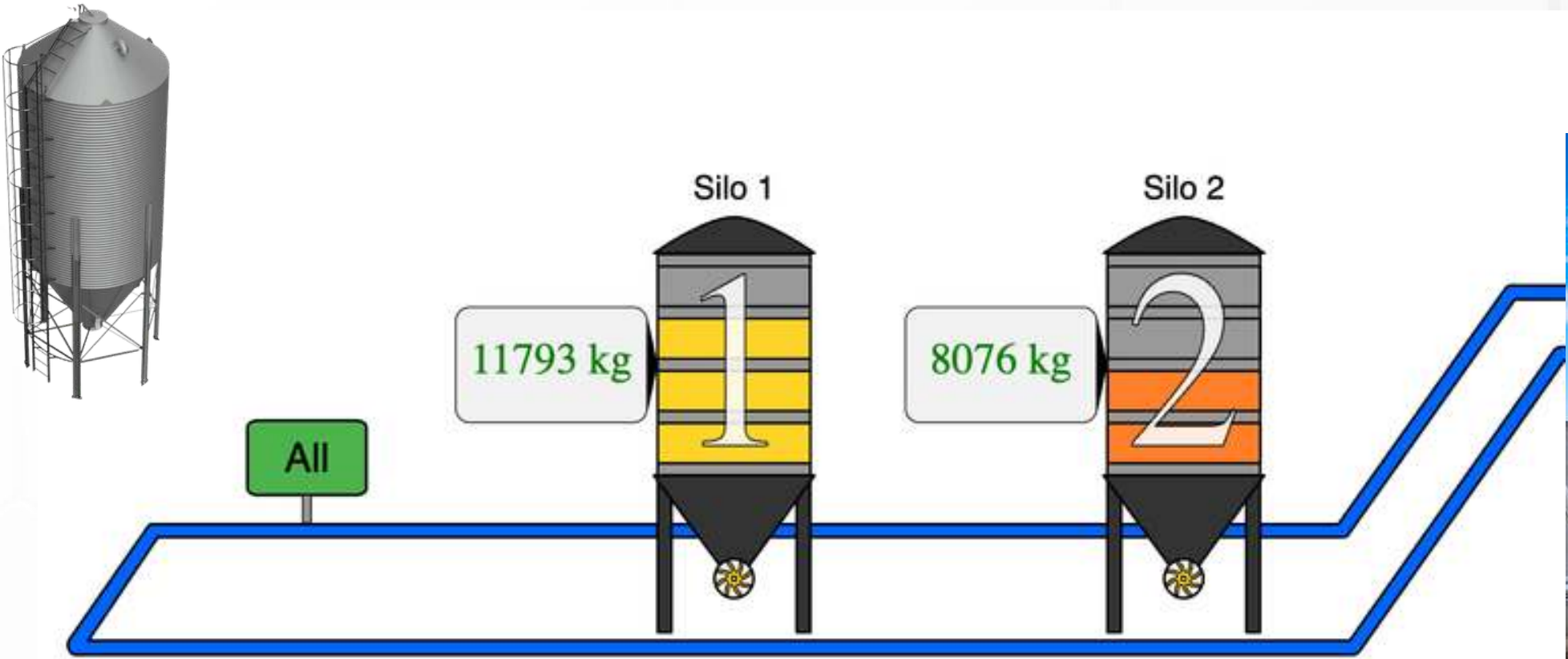


FEED
SENSOR

48 Pigs 26.8	52 Pigs 26.18	54 Pigs 26.1	41 Pigs 26.11	0 Pigs 26.5	45 Pigs 26.15
52 Pigs 26.9	23 Pigs 26.19	55 Pigs 26.2	44 Pigs 26.12	0 Pigs 26.6	44 Pigs 26.16
46 Pigs 26.10	33 Pigs 26.20	57 Pigs 26.3	34 Pigs 26.13	45 Pigs 26.7	26.17



SILOS



FEEDING SYSTEM

- EASY
- ECONOMICAL
- STRONG
- INNOVATIVE
- WATERPROOF
- DIGITAL
- REMOTE



☐ Write Mode

System state is good

Main State: running



FEEDING NOW

14:00

Time	Fill Chain
6:00	Yes
10:00	Yes
14:00	Yes
14:53	Yes
16:00	Yes
20:00	Yes



168 kg (915 kg)



1293



7.04 kg (6.47 kg)



32 (45)



26.8 °C



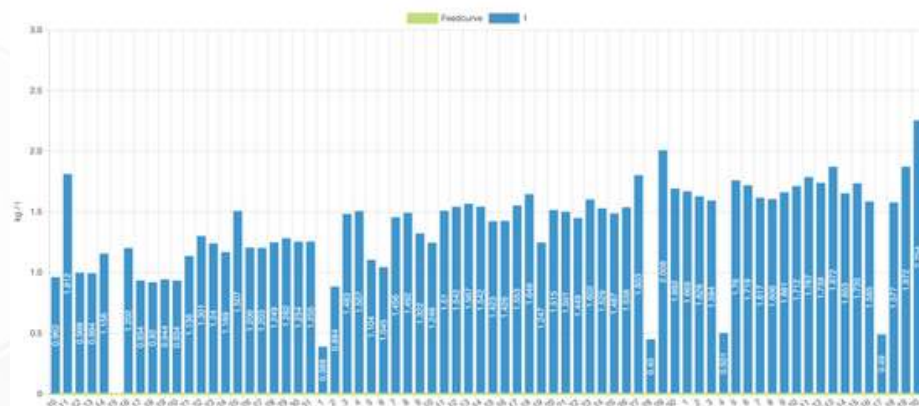
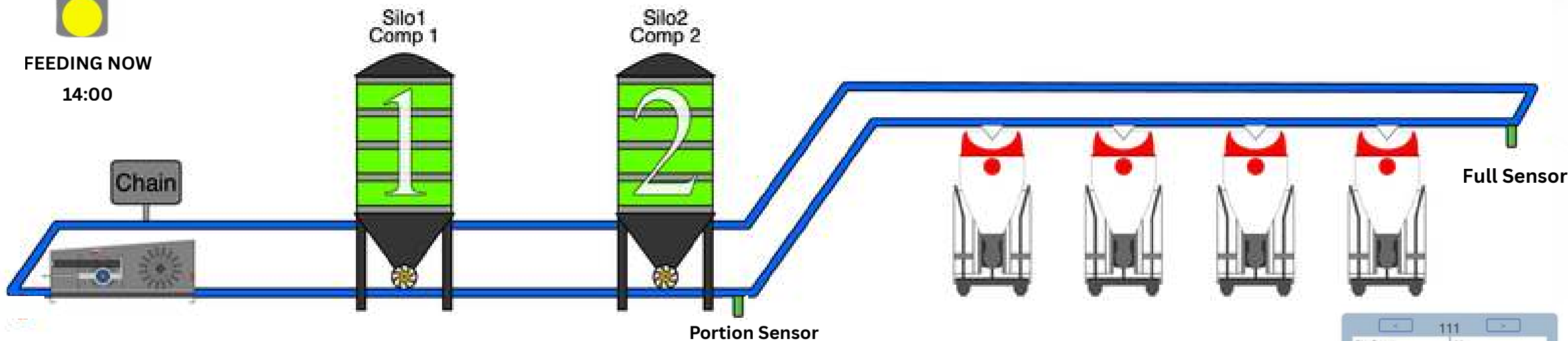
586 ppm



81 %



0 l



atch:

tart date:

nd date:

Batch for valve: 111
(17.11.2025 14:05:04)
17/11/2025

START BATCH

ADD COMMENT

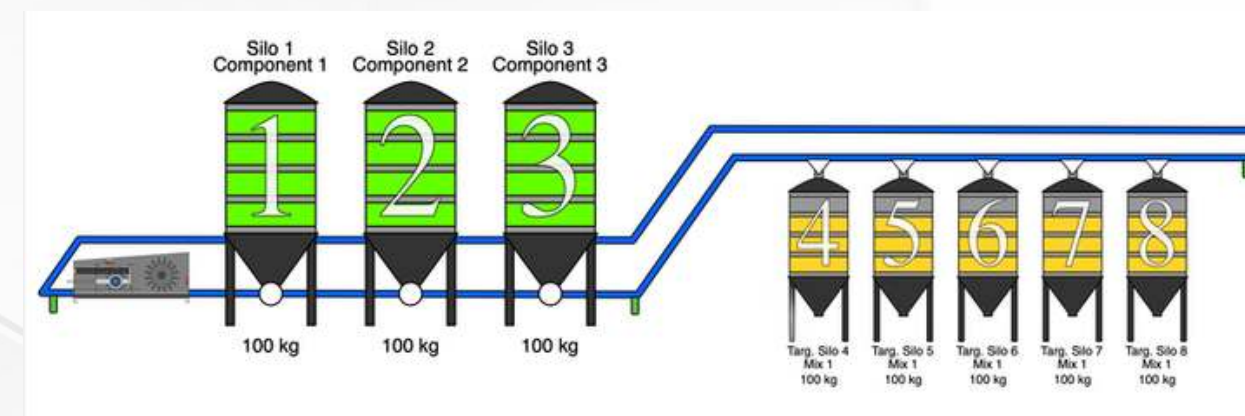
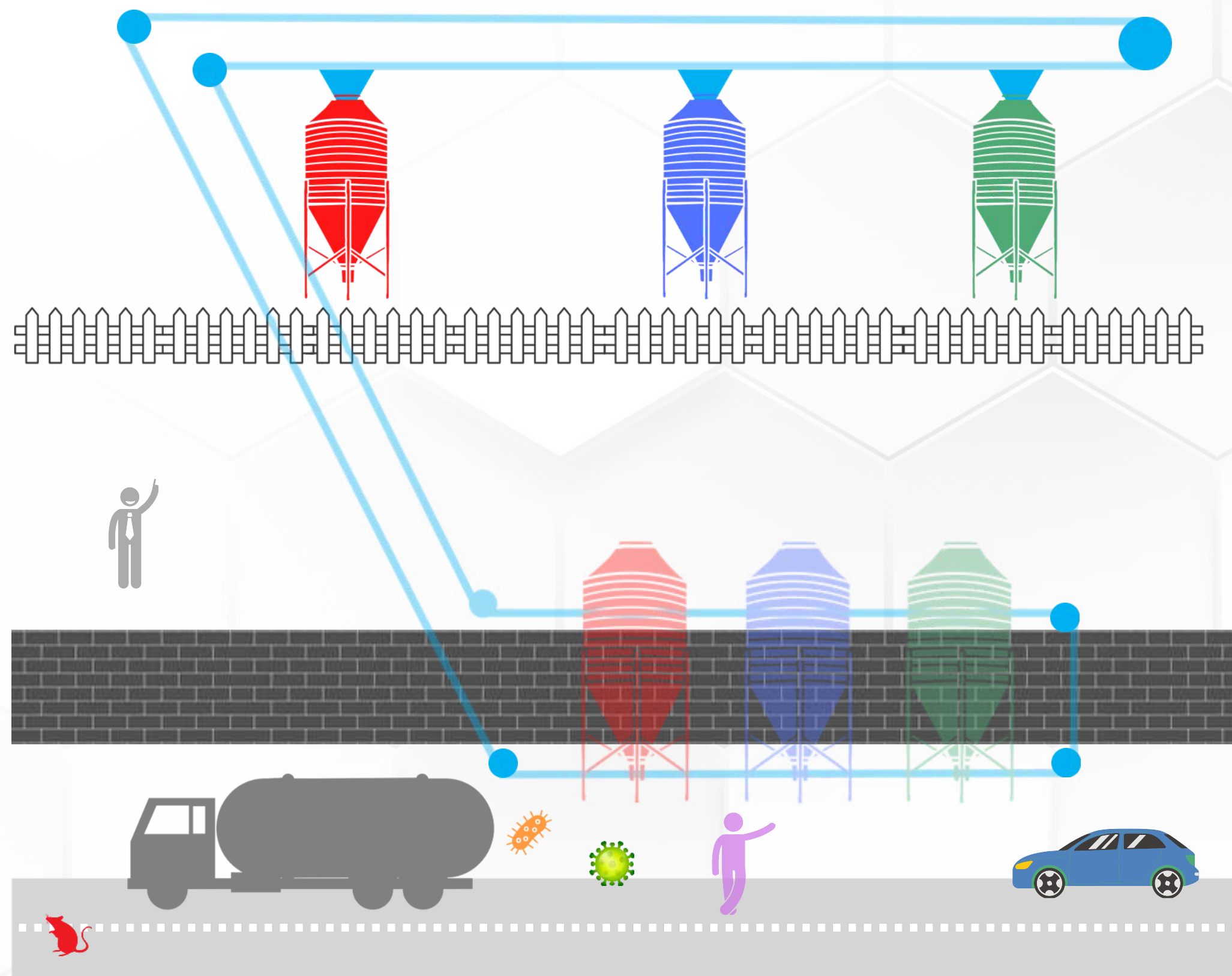
END BATCH

SET TARGET WEIGHT

REMOVE ANIMAL

111	
Pig Count	96
Age	21
Weight	0
Day avg. weight 07/12/2025	12.40 kg
Correction	0
Mixture	Mix 1
Sensor State	
07/12/2025, 10:59:38	Feeding done
07/12/2025, 10:59:22	Full
07/12/2025, 10:57:11	Empty
07/12/2025, 10:55:25	Full
Last Feedings	
07/12/2025, 10:59:38	1.56 kg 3.99 28.1%
07/12/2025, 10:59:22	1.56 kg 3.96 28.3%
07/12/2025, 10:57:11	1.55 kg 3.96 28.2%
07/12/2025, 10:55:25	1.56 kg 3.99 28.1%
Status	Active

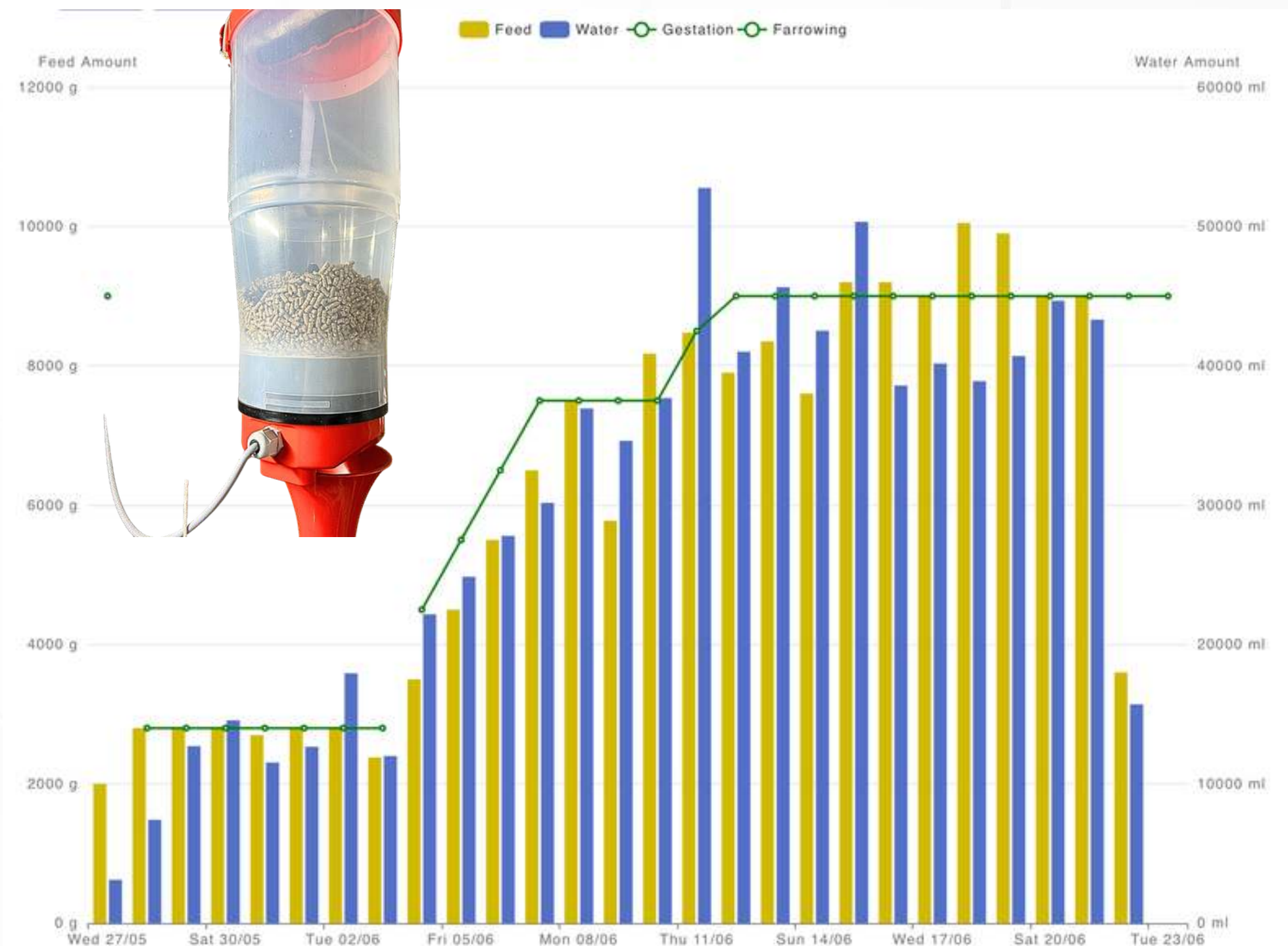
BIOSECURITY - CENTRAL SILO



- ▶ **Essential for Biosecurity**
- ▶ **Low investment cost**
- ▶ **Less human errors**
- ▶ **Less labor cost**
- ▶ **Smart farming**



AUTODOS - PRECISE SOW NUTRITION



AUTODOS - PRECISE SOW NUTRITION



CONSTACT FEED AND WATER MONITORING OF THE SOW

AUTODOS - PRECISE SOW NUTRITION

VOLUME DISPENSER

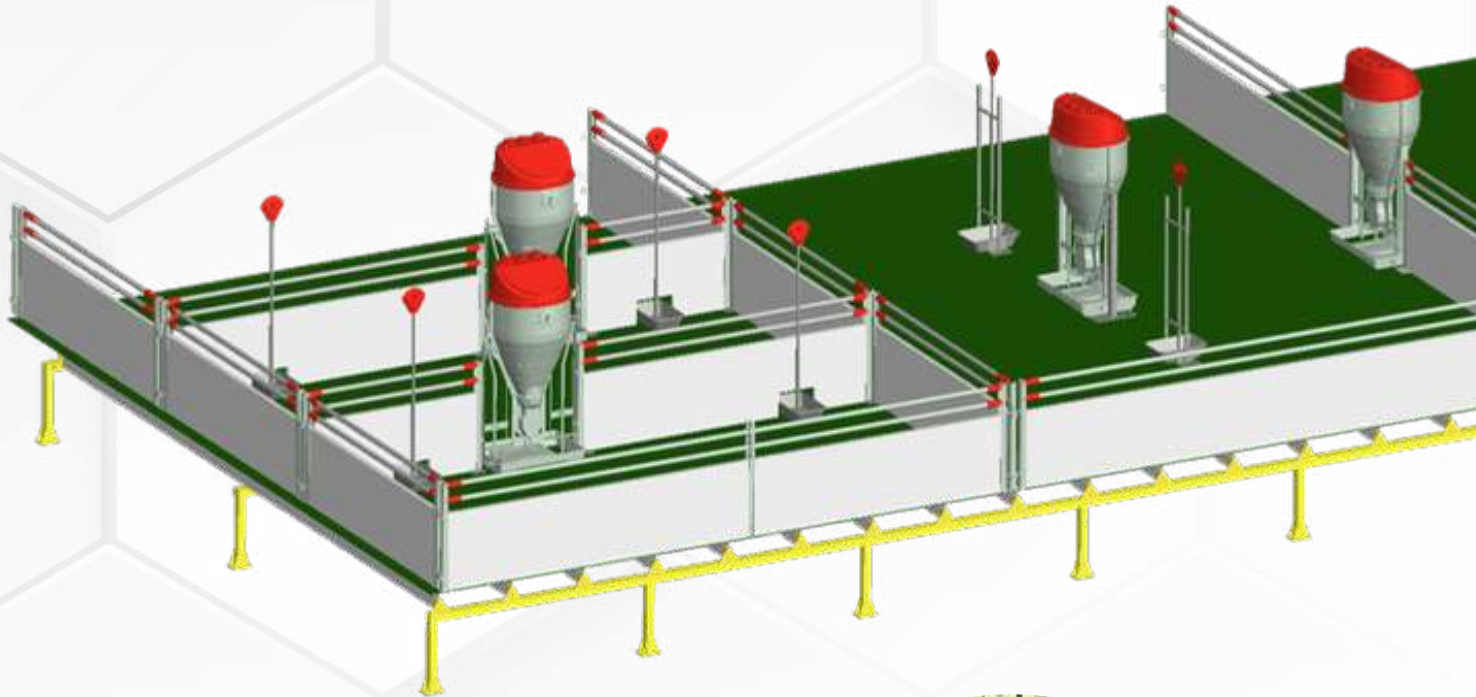
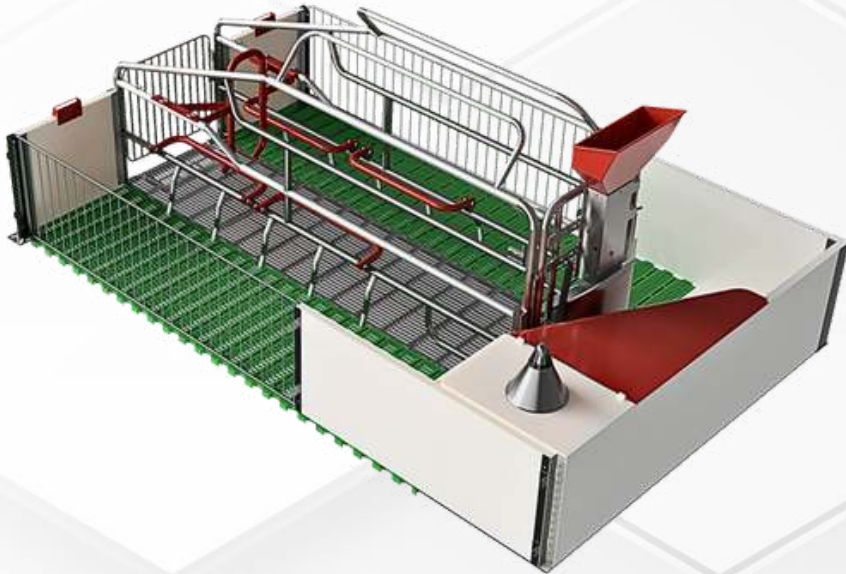
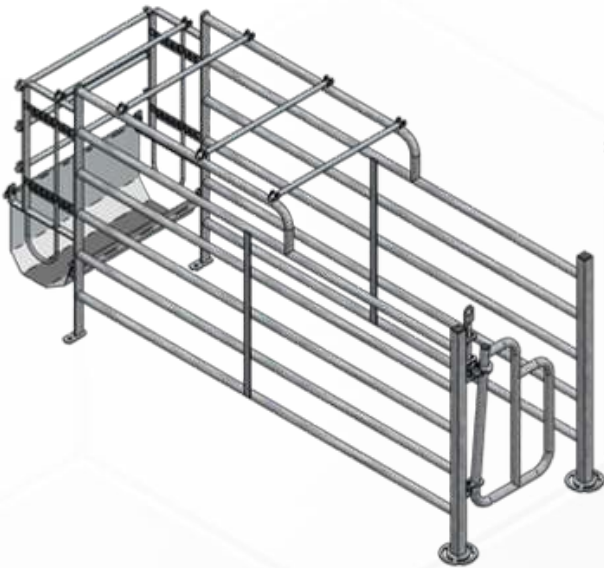
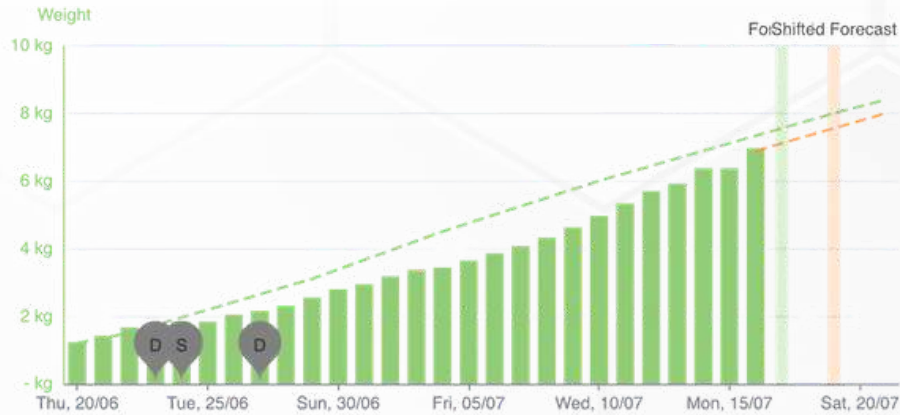


AUTODOS

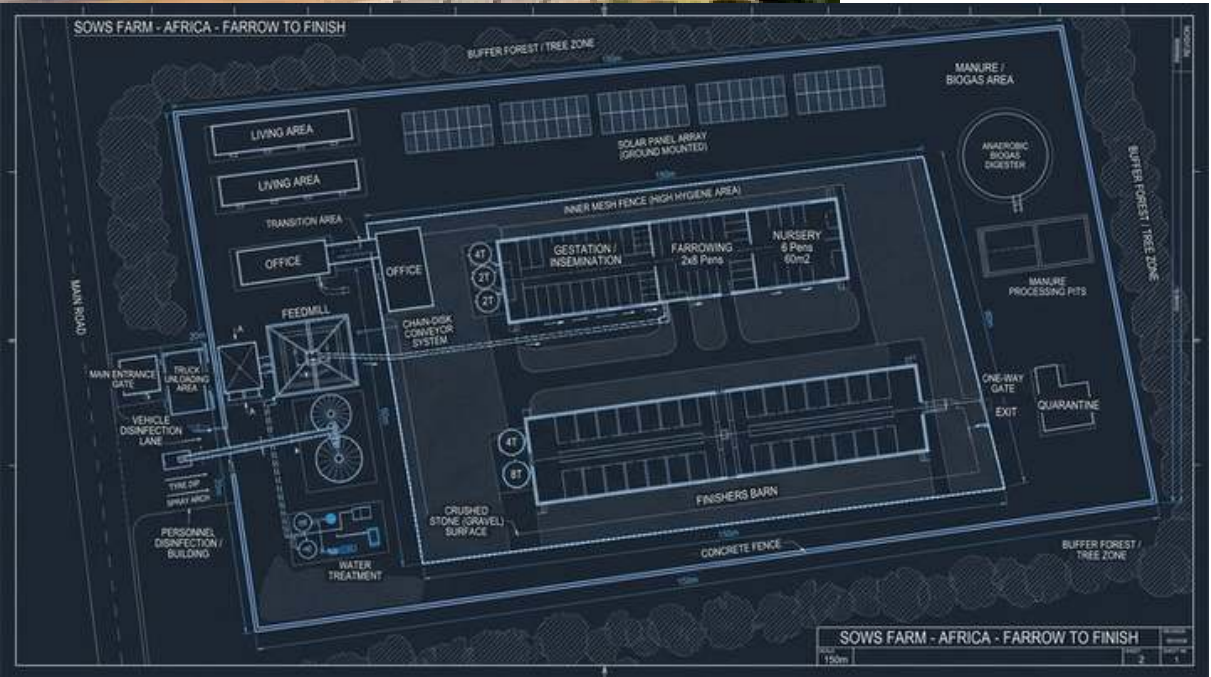


HOUSING

Smart Penning



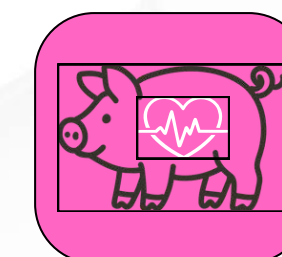
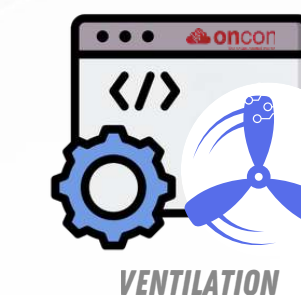
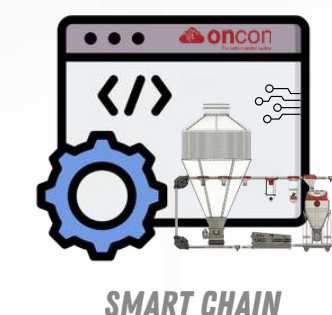
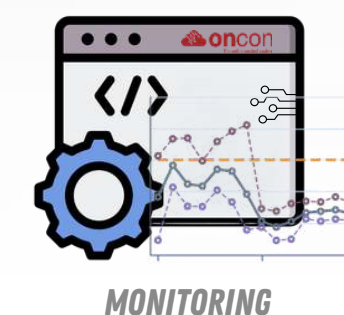
Farrow to Finish



Digital Pig Business Integration



ONCON APP'S



FUTURE

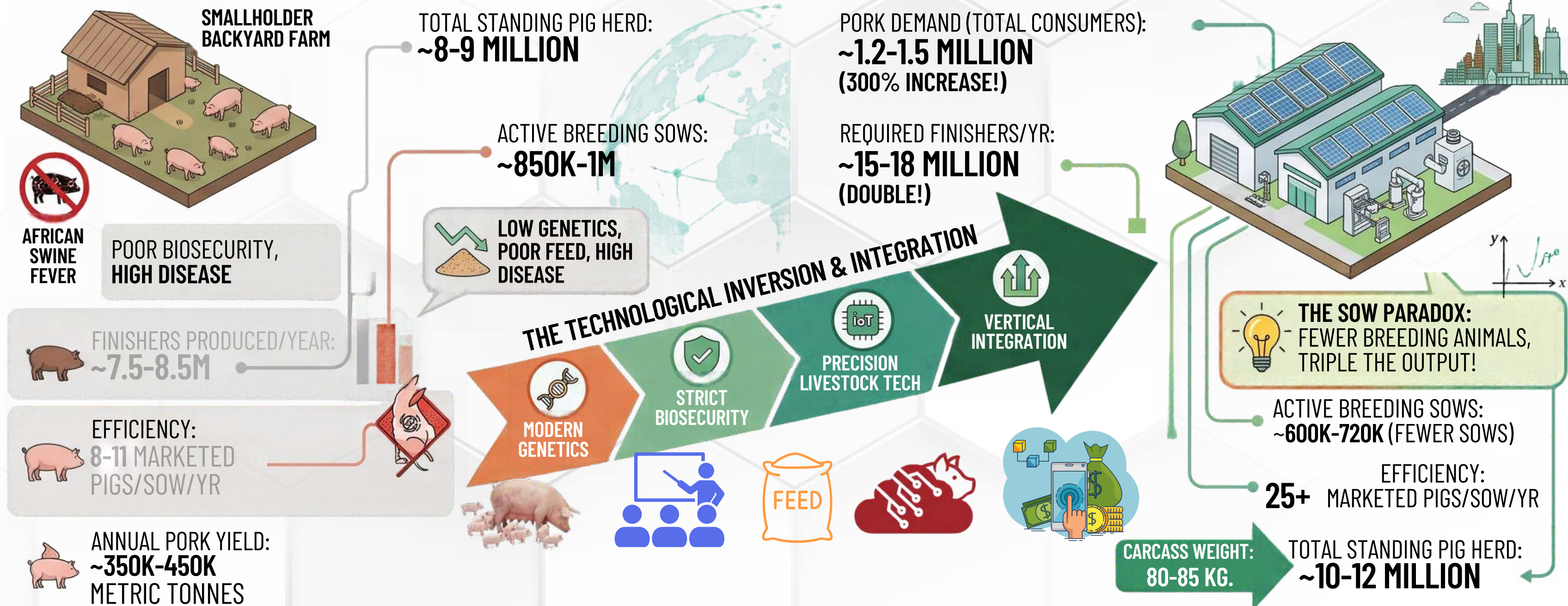
Integrated with the complete production chain



2050 DEMAND & PRODUCTION

2026 BASELINE: LOW-EFFICIENCY FRAGMENTATION

2050 TARGET: HIGH-EFFICIENCY COMMERCIALIZATION





oncon
INTEGRATED PIG PRODUCTION

Let's grow a modern pig business together.



Marcio Schmidt
Co-Founder



Simon Wang
Global Sales



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