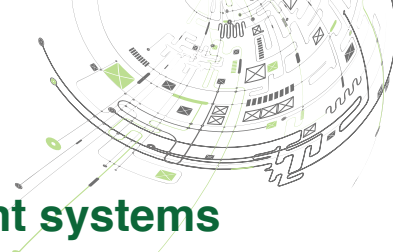
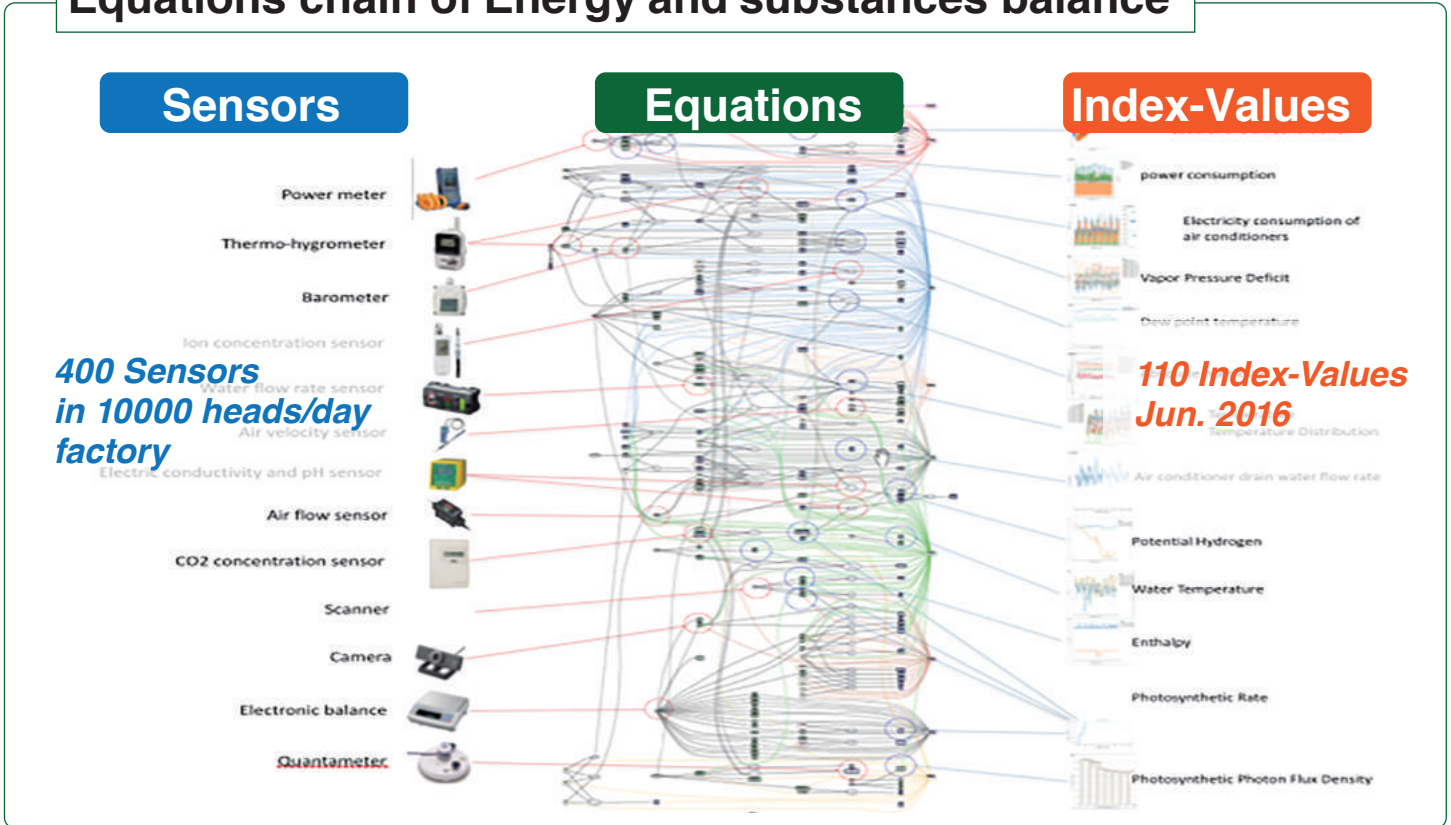


# What is SAIBAIX ?

Environment condition & Growth rate management systems



## Equations chain of Energy and substances balance



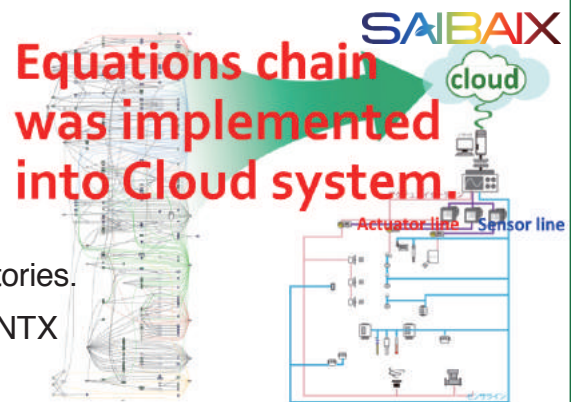
## Dr.T. KOZAI & PLANTX Engineers

SAIBAIX is an environment condition and Growth rate management systems in a Plant Factory.

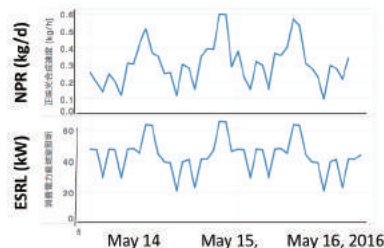
It was developed by applying Dr. T. KOZAI's 300 peer-reviewed papers regarding the relationship

between rate variables and state variables within Plant Factories.

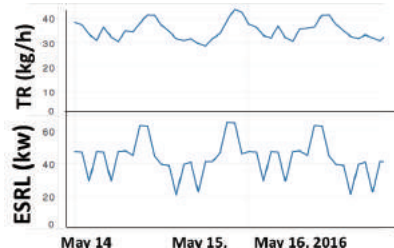
During the last two and half years , Dr. KOZAI and the PLANTX engineers had more than 100 study sessions.



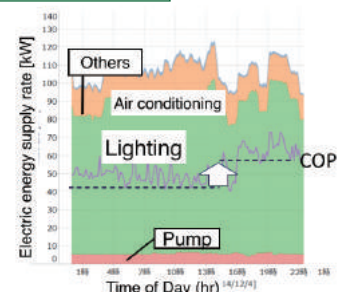
## Growth rate is managed by index values of SAIBAIX



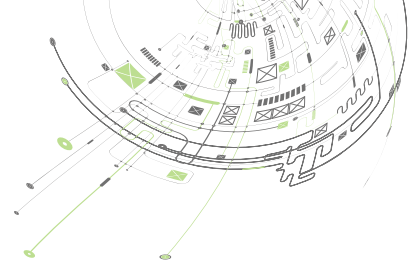
Net Photosynthetic rate (NPR) [kg/h] as affected by electricity supply rate for lighting (ESRL) (kW)



Transpiration rate (TR) [kg/h] as affected by electricity supply rate for lighting (ESRL) (kW)



Electric energy supply rate



**SAIBAIX is Environment condition & Growth rate management system**

**SAIBAIX**



SAIBAIX Dashboard at Raise Plant Factory in Chiba Univ.

**Made it possible to double the productivity of harvests.**

**Achieved 120g / head average harvest weight of ruffle lettuce.**

By implementing SAIBAIX, the average harvest weight has increased from 60g/head to 120g/head **in 36 days** from seeding.

With the establishment of PLANTX, It is possible to double the productivity in Plant Factories.

