



Process industry infrastructure inspection

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www.processitinnovations.se www.processit.eu

ProcessIT's innovation system

- **Energy companies**
 - Skellefteå Kraft, Luleå/Piteå/Boden/Umeå Energy, Vattenfall
- **Pulp&Paper companies**
 - SCA, Smurfit Kappa Kraftliner, Billerud Korsnäs, Mondi Dynäs, Metsä Board Husum
- **Forest equipment companies**
 - Komatsu Forest, Alent Drying
- **Mining, minerals, and metal production**
 - Boliden Mineral, LKAB, SSAB
- **Other organizations**
 - Universities and technical institutes (+20)
 - SME (+100) – Fältcom, BnearIT, Biosteam, Optimation, Algoryx, Oryx, ThingWave
 - Automation/IT/telecom companies – ABB, Ericsson, Midroc, Prevas

Process industry infrastructure inspection

Use of UAVs for inspection (and repairs/maintenance) within the contexts of...:

Pulp & paper + forest management

- Extensive piping, chimneys – structural, leaks etc.
- Forest planning – cutting and facts for long-term management
- Fires

Energy production and distribution

- Windmills – structural damages, need for cleaning or de-icing
- Power line gates and power lines/poles/isolators in rural areas

Mining, minerals, metal production

- Fires/gas - structural, find/locate vehicles and personell, safety
- Conveyer belts – rollers or belt problems
- Unstable rock areas, shafts

...potential for sensors - communicating with the UAVs as they pass by
...legal aspects – autonomous, remote or within sight