Regional

1. **Illicit tobacco potential identification ---- AOI: No specific**

   Illicit tobacco may include cigarettes, cigars, loose tobacco, and tobacco leaf and plant matter. Tobacco is illicit when it is:
   - grown, manufactured and/or produced in Australia without an appropriate excise license, even if the tobacco is intended for personal use, or
   - imported into the domestic market without customs duty being paid – see Excise equivalent goods (imports)

   How can we create a better process in combating illicit tobacco by leveraging high resolution satellite imagery?

2. **Murray Darling Basin environmental & ecosystem sustainability analysis ---- AOI: Barmah Choke**

   Pursuant to the Basin Plan, how can high resolution satellite imagery & space based technology be used to monitor the ecology and river system surrounding this area, while at the same time balance the farming industry that is heavily relying on the river system for irrigation?

3. **Tailings management and risk assessment ---- AOI: Olympic Dam, Prominent Hill & Newcrest Cadia Hill**

   A tailings dam is typically an onsite engineered structure used to contain the by-products, or tailings. Through the separation process of the valuable minerals from the unused waste like ground-up rock, process water and chemical reagents, the tailings can be in the form of liquid, solid, or a slurry of fine particles that are usually highly toxic. Given the increasing global trend of tailing dams related to disasters, how can we leverage high resolution satellite imagery to help broaden our understanding of the disaster risk associated with the tailings dam and the consequences to the nearby communities?

4. **Timber forecasting potentially via stockpile analysis ---- AOI: Portland Victoria, Burnie Tasmania & Hobart Tasmania**

   Monitoring log stocks at ports and rail yards within Australia could potentially provide a good baseline volume analysis for raw timber supply and demand. How can high resolution satellite imagery help in understanding the economics of raw timber supply and consequently forecast demand?

5. **Almond yield forecast & analysis ---- AOI: Loxton & Barmera**

   A problem faced by the Australian Almond industry is that of understanding how ongoing production capacity will match future demand. Due to the high demand for Almonds, the industry has undergone a rapid expansion, with multiple new areas targeted to produce almonds on a large-scale basis. However, as Almond trees take several years to mature to full capacity, there is a potential scenario of oversupply in the future years. How can we leverage high resolution satellite imagery to help create the necessary workflow in understanding the almond production lifecycle therefore helping the Almond industry plan its macro-economic strategy?