

Renewable Energy Data Sources in the Semantic Web with OpenWatt

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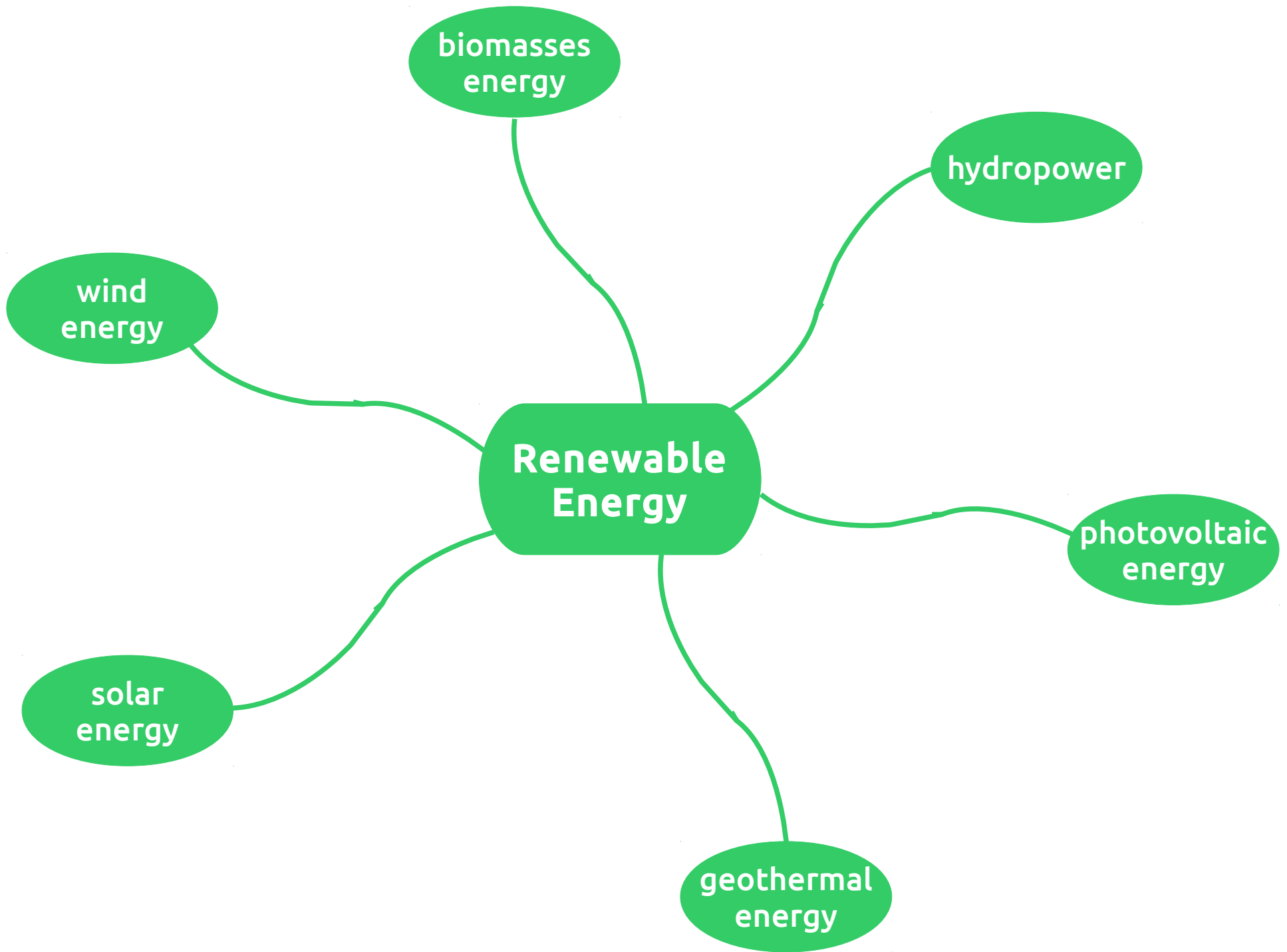
Antonio Maccioni
University Rome Tre, Rome

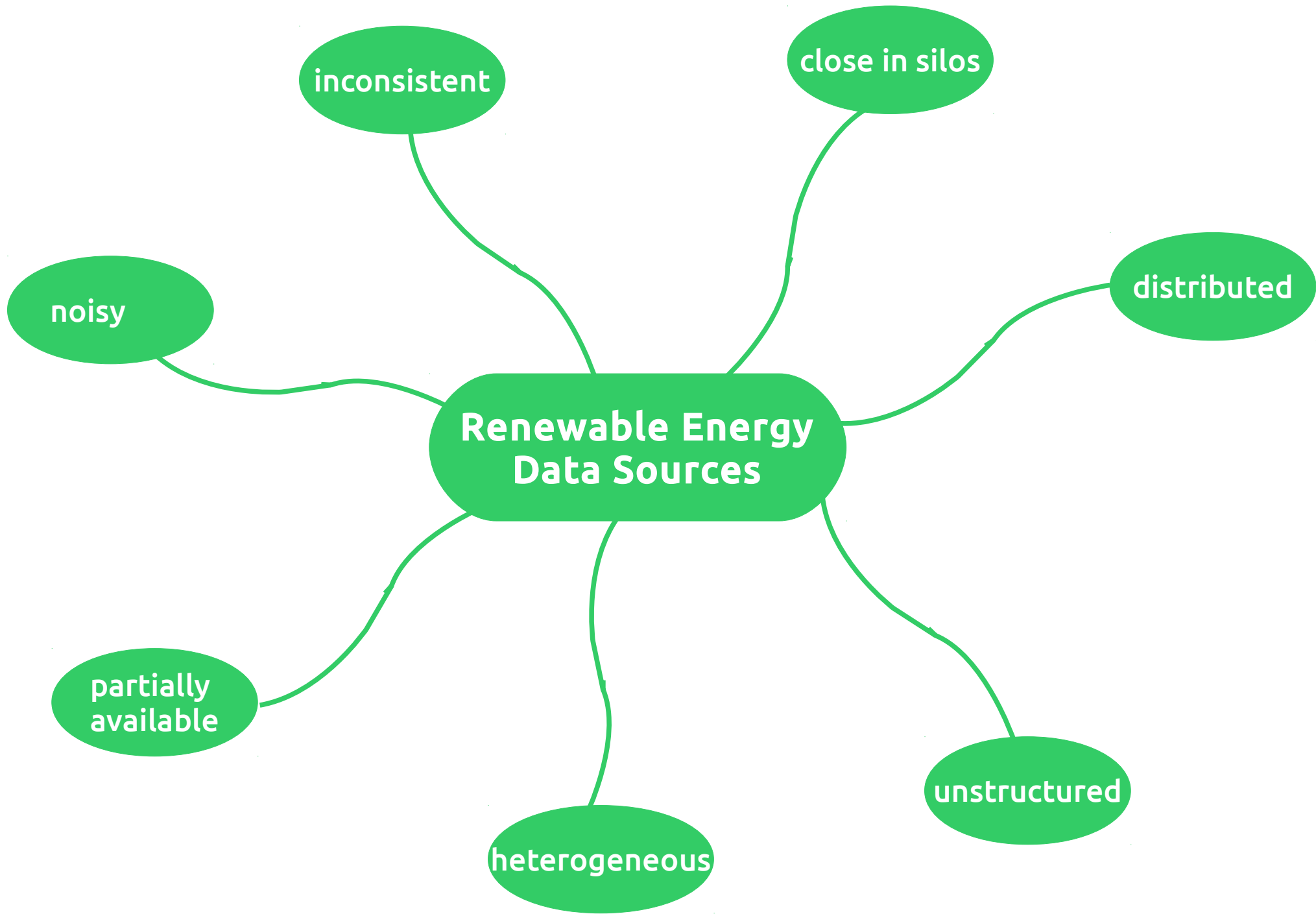
“I came to realize that the great economic revolutions in history occur when new communication technologies converge with new energy systems”

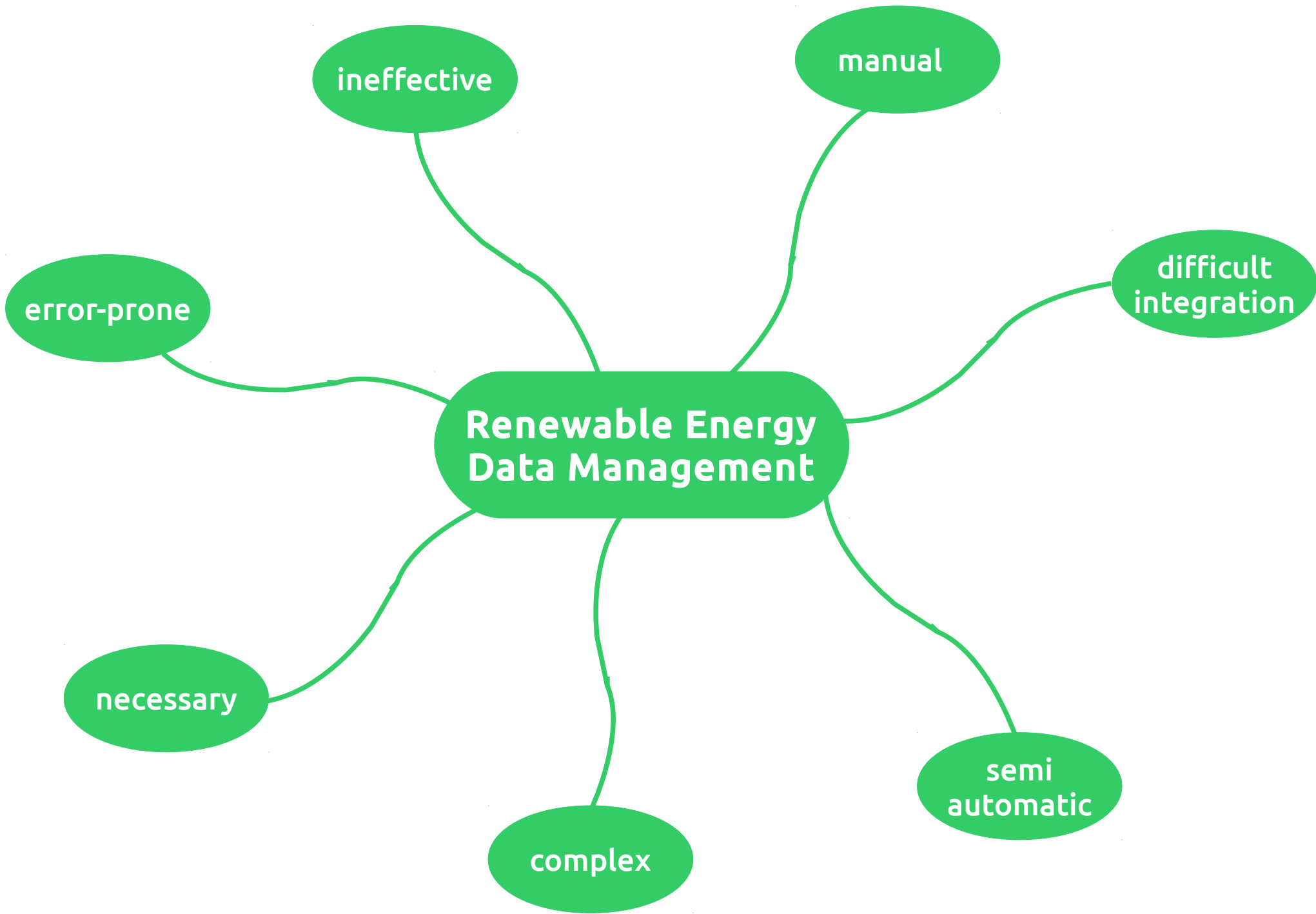
J. Rifkin - The third Industrial Revolution

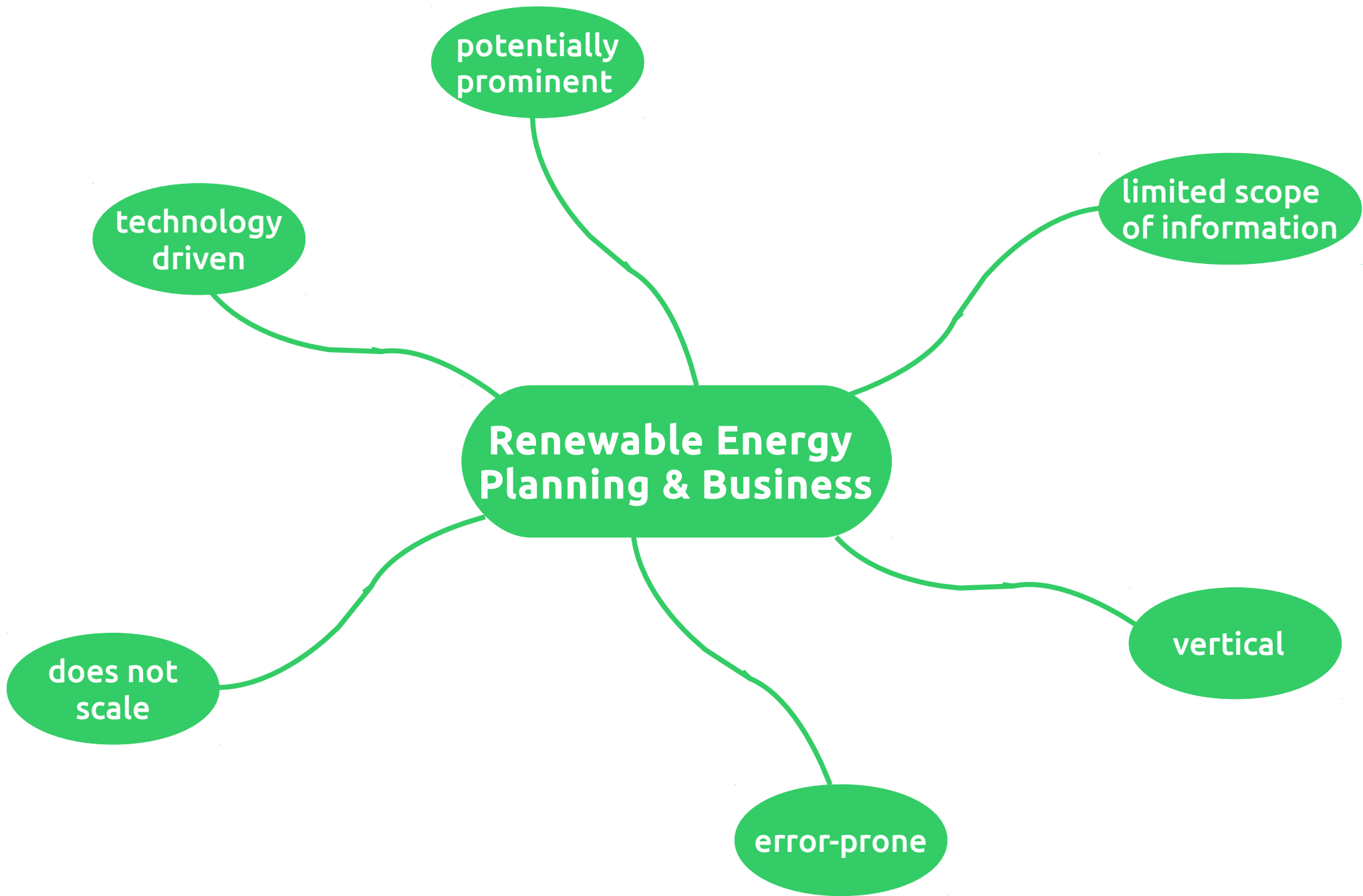
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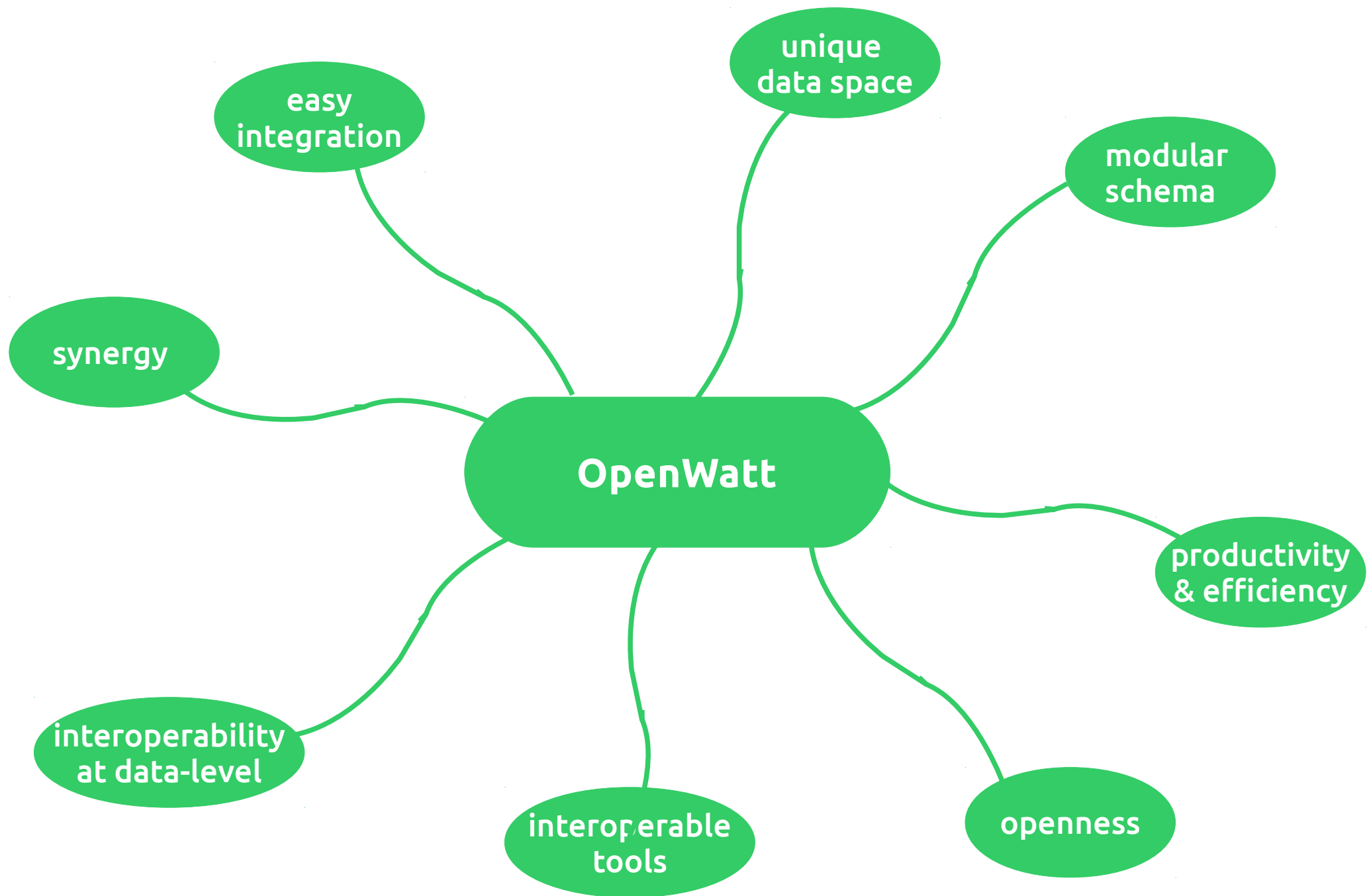
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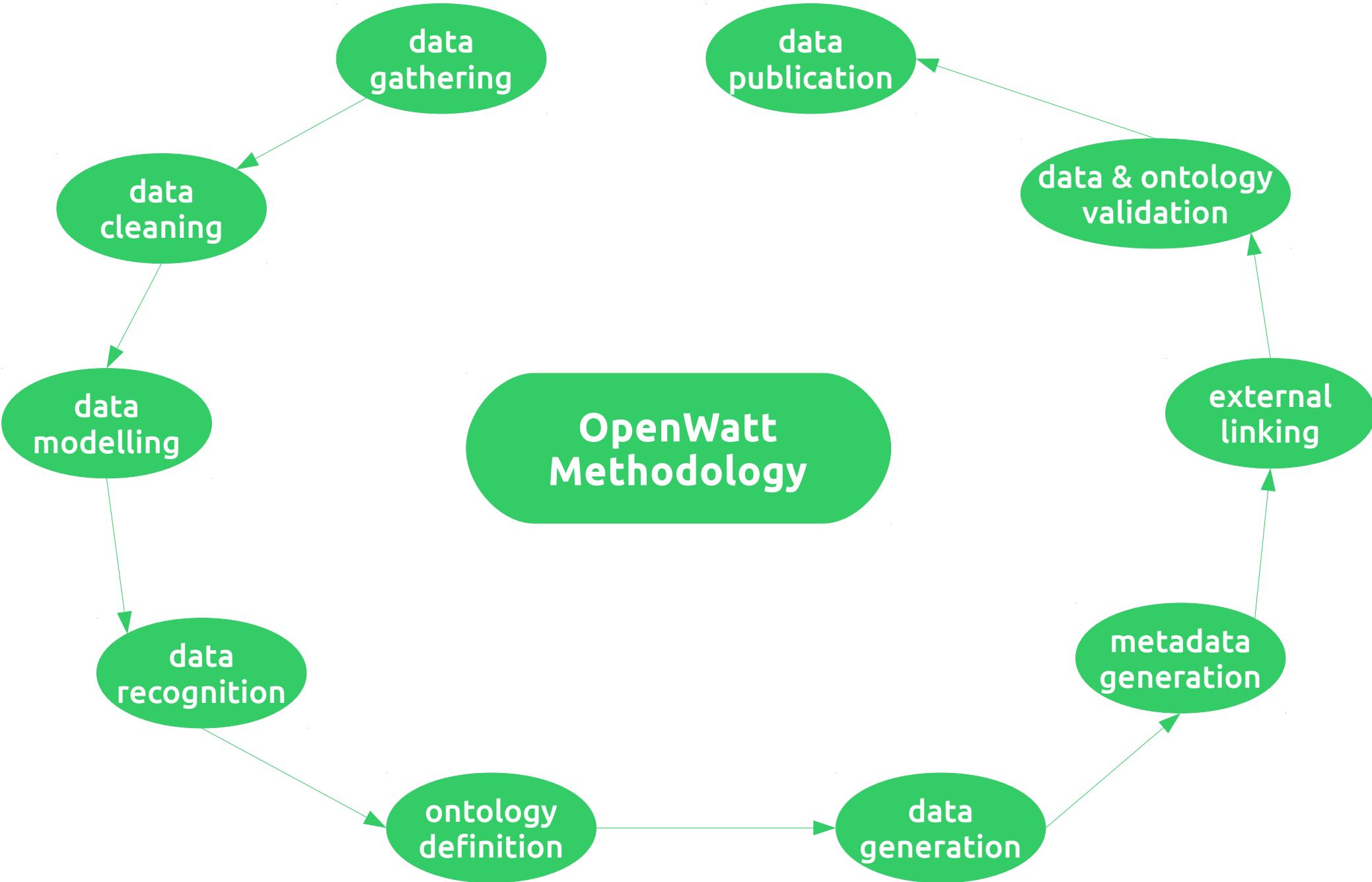


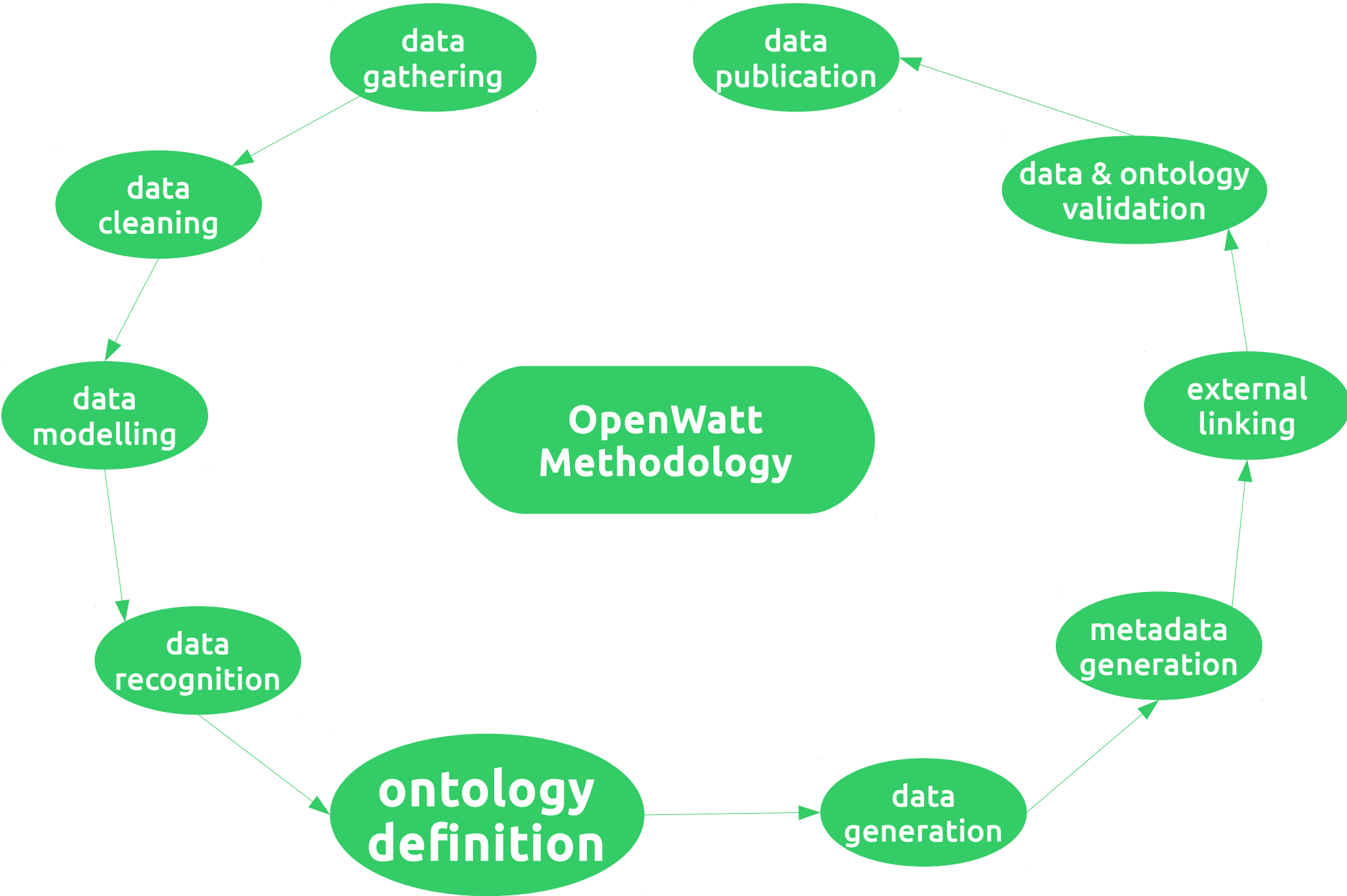


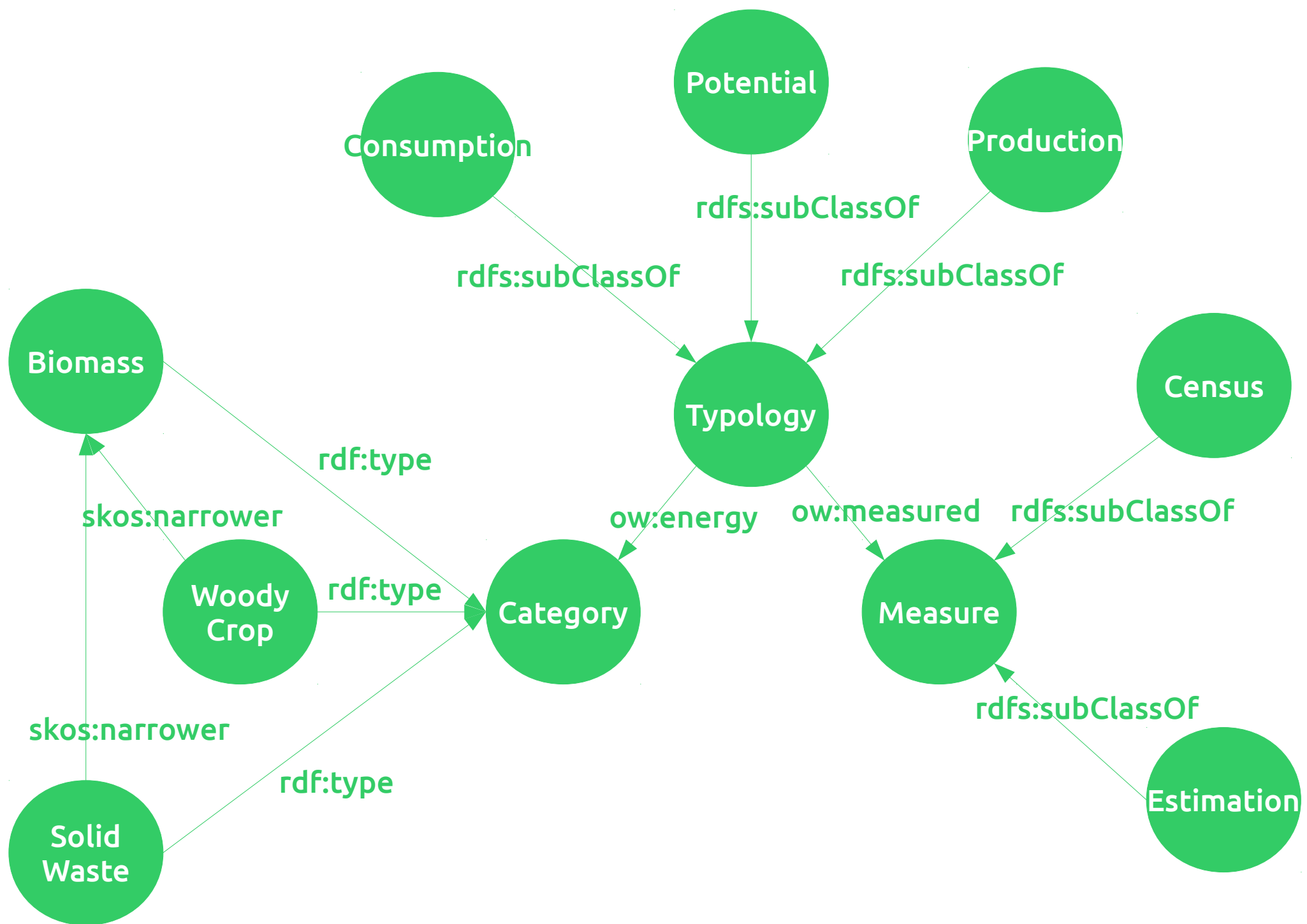






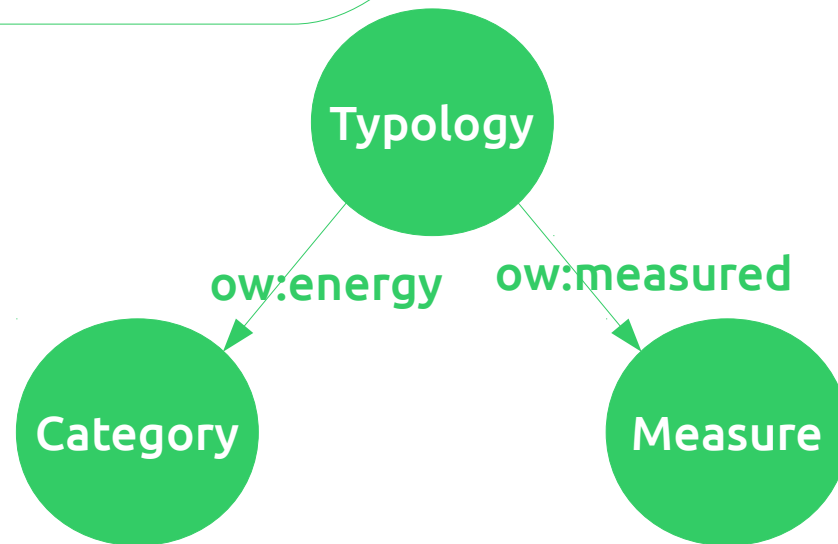


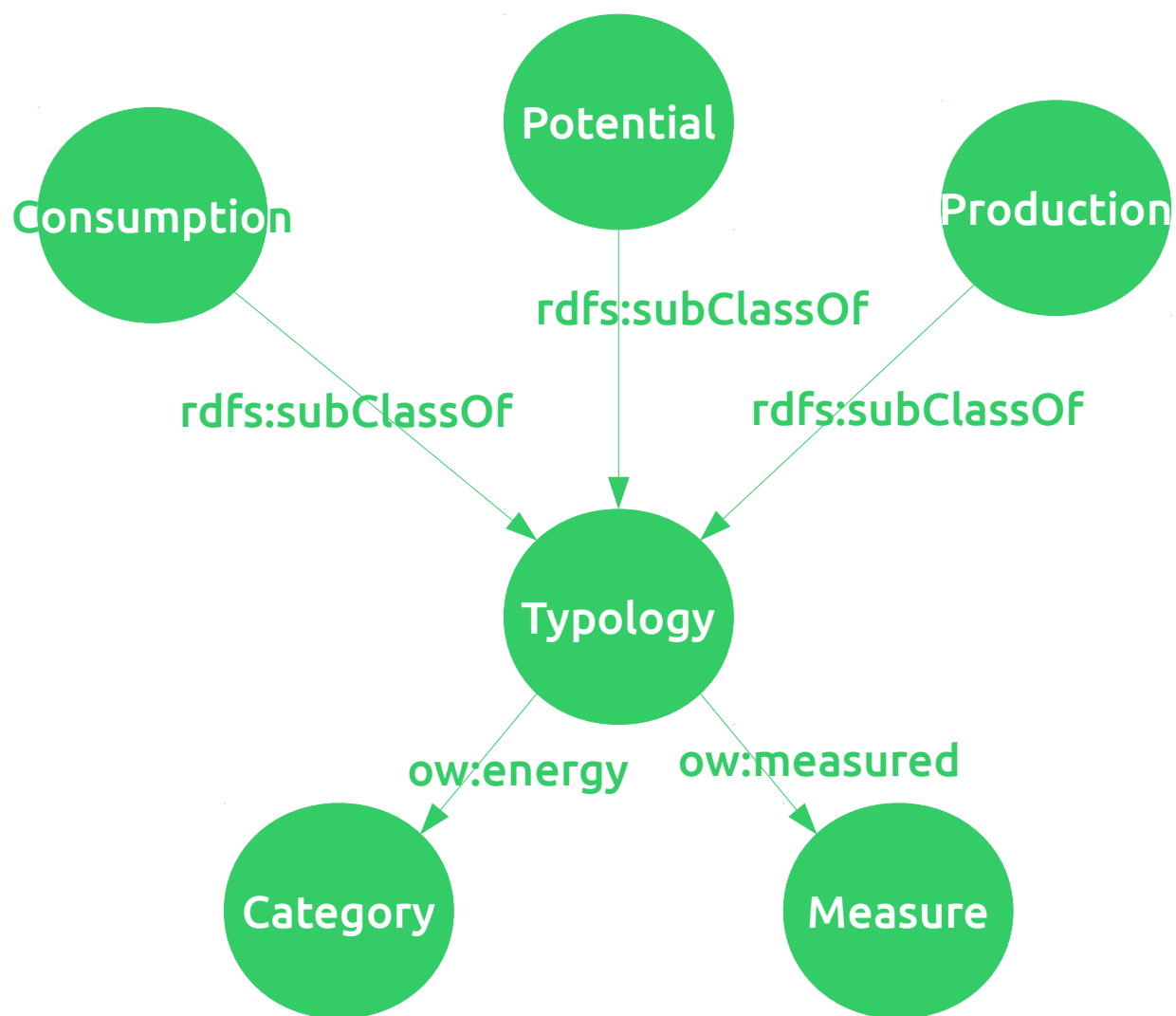




```
<owl:Class rdf:about="Typology"></owl:Class>
<owl:Class rdf:about="Category"></owl:Class>
<owl:Class rdf:about="Measure"></owl:Class>
```

```
<rdf:Property rdf:about="measured">
  <rdfs:domain rdf:resource="Typology" />
  <rdfs:range rdf:resource="Measure" />
</rdf:Property>
```

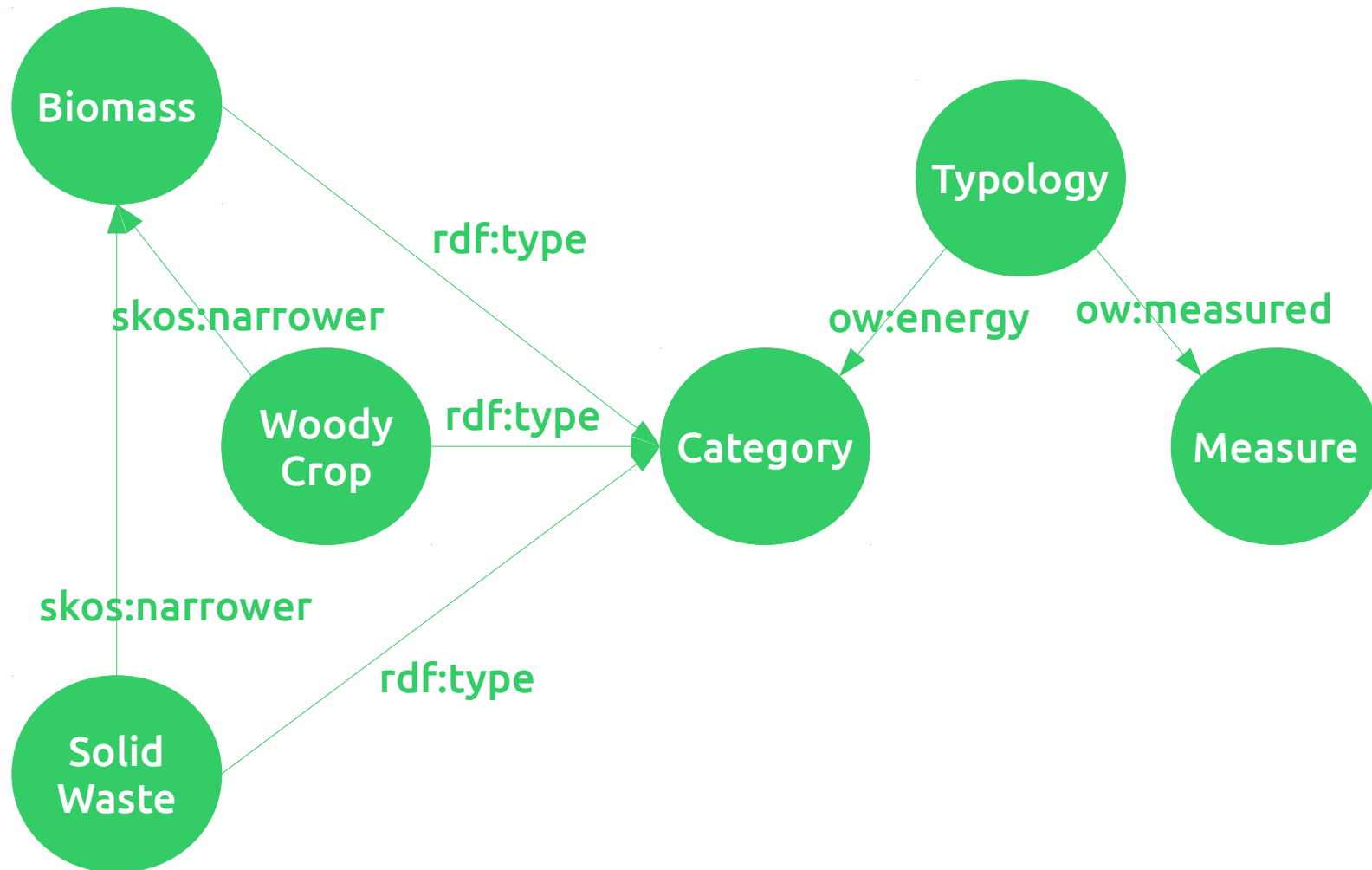




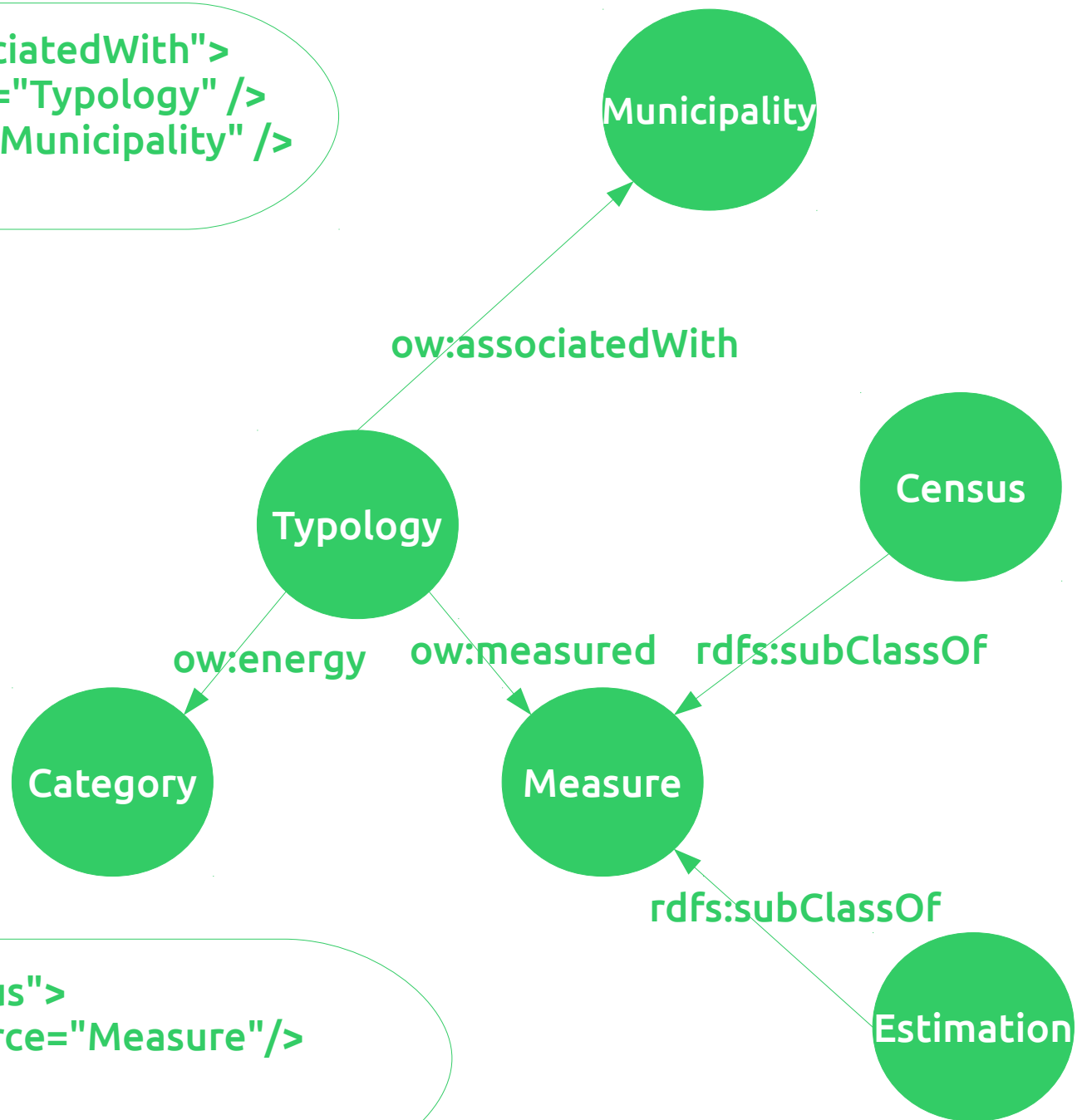
```
<owl:Class rdf:about="Potential">  
  <rdfs:subClassOf rdf:resource="Typology"/>  
</owl:Class>
```

...

```
<ow:Category rdf:about="SolidWaste">  
  <rdfs:subClassOf rdf:resource="Typology"/>  
  <skos:narrower rdf:resource="Biomass" />  
</ow:Category>  
...
```

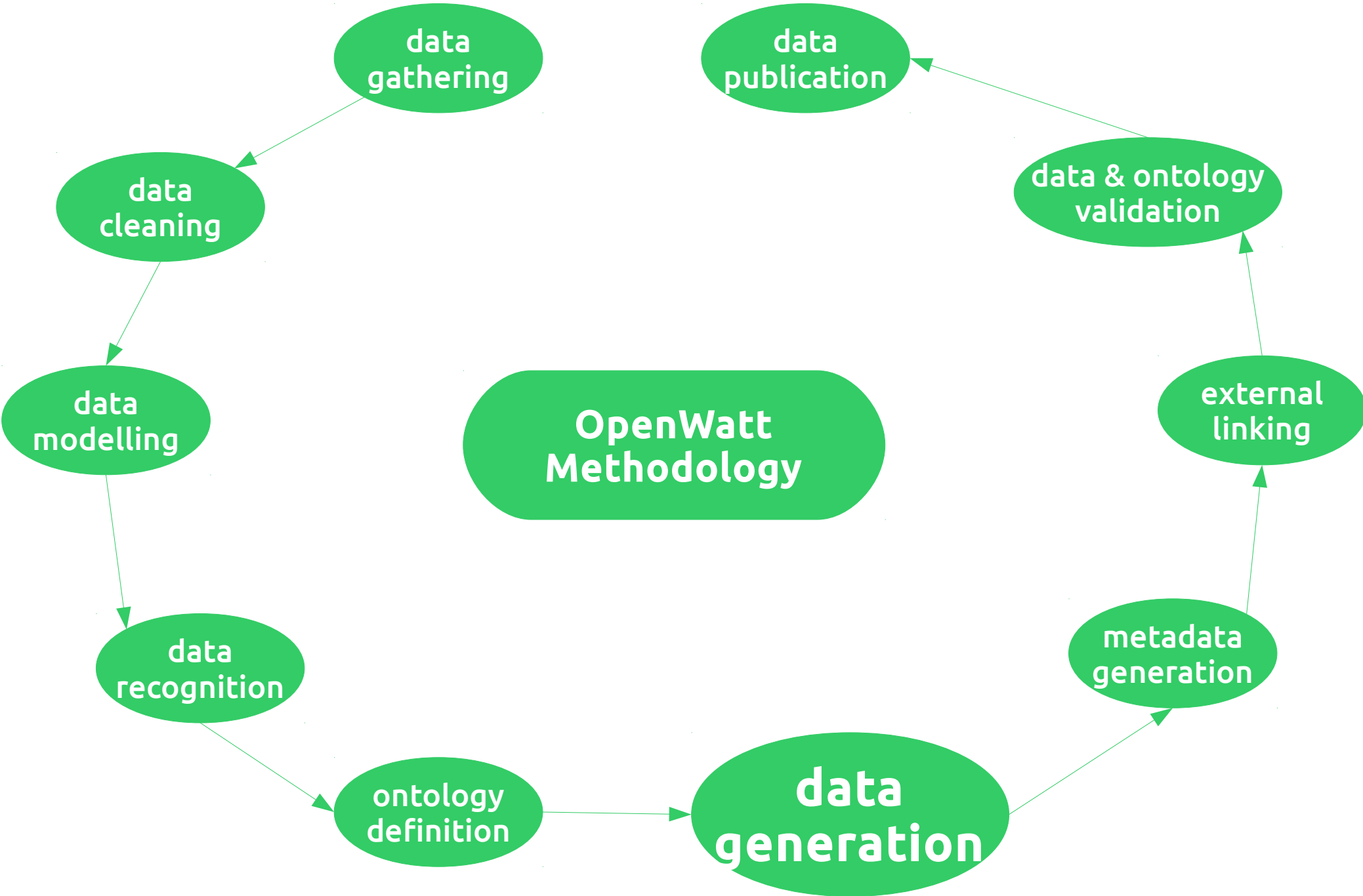


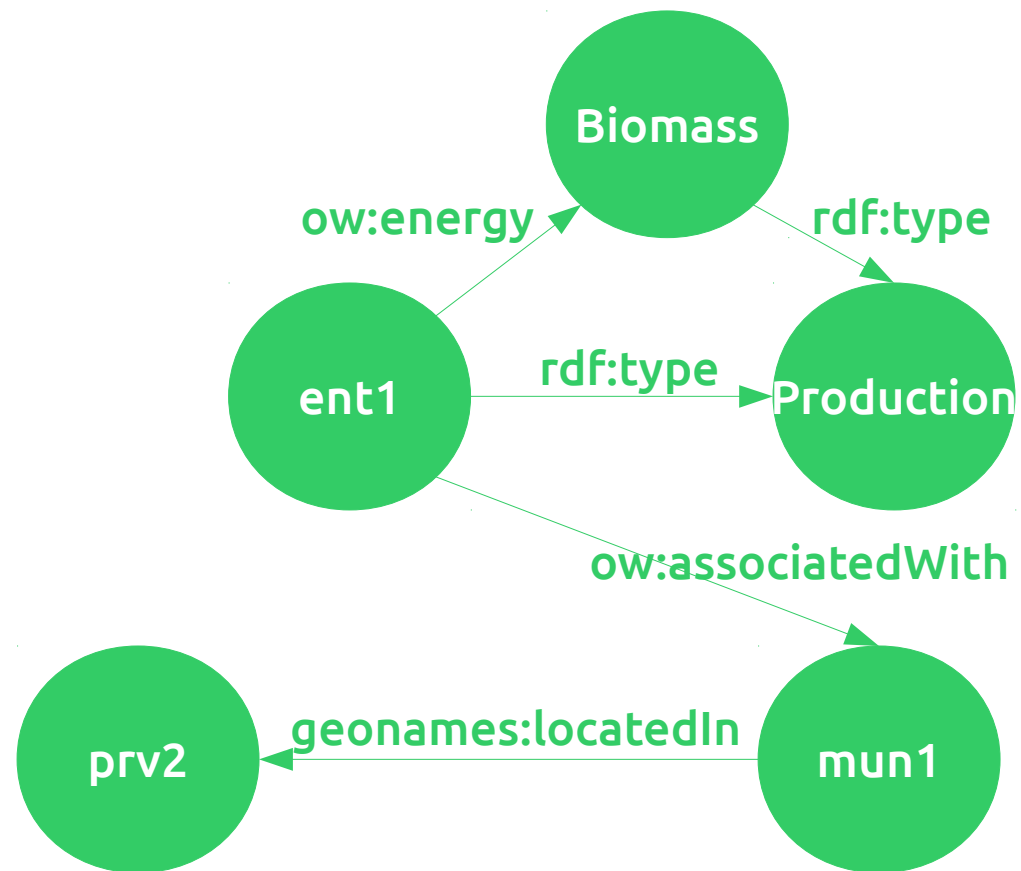
```
<rdf:Property rdf:about="associatedWith">
  <rdfs:domain rdf:resource="Typology" />
  <rdfs:range rdf:resource="Municipality" />
</rdf:Property>
```



```
<owl:Class rdf:about="Census">
  <rdfs:subClassOf rdf:resource="Measure"/>
</owl:Class>
```

...





What is the difference between the production and the potential coming from woody crops in the province <prv2>?

```
select sum(?prod), sum(?potent)
where {
  ?x ow:energy ow:WoodyCrop .
  ?x rdf:type ow:Production .
  ?x ow:associatedWith ?m .
  ?m geonames:locatedIn <prv2> .
  ?x ow:value ?prod .
  ?y ow:energy ow:WoodyCrop .
  ?y rdf:type ow:Potential .
  ?y ow:associatedWith ?m .
  ?y ow:value ?potent . }
}
```

