



# Italy

## Cluster Chimica Verde

Yes

No

**1** Is this a specific bioeconomy strategy?

**X**

**2** If No, what are the key points? How are they being addressed within the bioeconomy?

In Italy, the concept of the “green economy” has greater political prominence than that of the bioeconomy. An area of central importance is the chemical industry’s transition to so-called green or plant-based chemistry. Innovative effort is less focused on agriculture or aquatic resources than in other countries. There is intense debate about biofuels, however, because of competition for land and food, little has been done in practice. Furthermore, genetically modified organisms in agriculture and the food industry are discussed controversially.

Although Italy has been developing a federal bioeconomy research strategy for some time now, no document has yet been published. Important international events relating to the bioeconomy have been and will be hosted in Italy, namely the 3rd EU Bioeconomy Stakeholder Conference in 2014 and the World Fair 2015 focusing on world food security. This might increase political awareness and stimulate the development of a bioeconomy strategy in Italy.

### 3 Who is the author of the strategy?

Not ascertainable

### 4 What measures are used to promote the strategy?

In the scientific area, the state financed universities of Bologna, Milan, Turin and Florence are very active in the bioeconomy sector. In 2012, the Ministry for Education, Universities and Research called for the creation of innovation clusters, which are primarily to be financed by EU programmes, such as the Structural Fund or Horizon 2020. At the end of 2012, the ministry approved the SPRING national biotechnology cluster, which is focused on “green chemistry”. The cluster is supported by eight regions and began its activities in 2014. In 2013, the Ministry for Economic Development set up the Sustainable Growth Fund (Fondo per la Crescita Sostenibile) with the aim of supporting SMEs in particular with total funding of around EUR 300 million for R&D projects, aimed at the key innovation areas of the EU Horizon 2020 programme.

Italy took a pioneering role in market development and banned businesses from providing non-biodegradable plastic bags in 2011. This law seems to have made a significant contribution towards stimulating green chemistry in Italy. Especially in the North, Italian industry is building up parts of a bioeconomy in the area of green chemistry. This is happening by way of a bottom-up approach, without any significant national support but with the help of EU research programmes. Examples are the building of large-scale demonstration plants for biobased succinic acid in Cassano Spinola, or for biobased butanediol near Venice, as well as conversion of the largest fossil-based chemical complex on Sardinia to large-scale biobased production by ENI and Novamont. In this sector there are a number of important collaborations with French, Belgian, Dutch and recently also US industry.

### 5 Is there a time limit on the initiatives?

Not ascertainable

### 6 Are there any identifiable key funding areas within the bioeconomic value chain?

So far, the state has been concentrating on funding research and supporting clusters taking part in

EU programmes in the areas of biotechnology and biobased chemistry.

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### What are the implicit effects/side-effects of the strategy?

The aim is to rapidly modernize key industrial and research sectors. Italian companies should foster their competitiveness by participating in international research networks and technology clusters.

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### Are any quantitative targets specified?

Not ascertainable