Study of the Norwegian Film and Series Incentive Scheme

Final Report to Norwegian Ministry of Culture and Equality by Olsberg•SPI with Proba Research

24th February 2023

OLSBERG·SPI

CONTENTS

GLOSSARY OF KEY TERMS

Automatic incentives are those in which if a production meets the minimum requirements set by governing body of the incentive, they will automatically receive the incentive based on a first come first serve basis.

Cap is the budgetary limit to which an incentive will pay out. For example, the Norwegian incentive's cap is based on how much the Norwegian government is willing to fund the incentive in the current year.

Cost-Benefit Analysis (CBA) is a method of economic evaluation that compares the social/public welfare costs and benefits which arise from a number of different policy options. It measures both costs and benefits of an intervention in monetary terms.

Cumulative results are results that have been summed across a number of different years.

Direct impacts of the economic uplift in terms of the output, value created (GVA) and jobs within the film and television firms resulting from the increase in production expenditure.

Full-time equivalent (FTE) jobs is a consistent measure of employment that accounts for part time and full-time working patterns and temporary or contract-based workers. This is based on a year-round and 'permanent' definition of FTE jobs. This means that if one person is working full time on a three-month contract, this would be counted as 0.25 job. SPI adopt this approach as it enables comparison across industries and countries.

Gross Value Added (GVA) is a measure of the value that is created by economic activity. It is the difference between gross output and intermediate inputs; at a national level, it aligns to Gross Domestic Product (GDP).

Indirect impacts of the economic uplift in terms of the output, value created (GVA) and jobs effects observed in sectors that supply goods and services into the film and television production sector.

Induced impacts of the economic uplift in terms of the output, value created (GVA) and jobs supported by those working in film and television production activity and supply chain spending their wages in the economy.

Net Present Value (NPV) is the difference between the present value of the benefits to the present value of the costs. It is the present value as a discount rate has been applied. When a NPV is positive the benefits outweigh the costs.

Nominal results are those presented in the price year that correspond to the data year.

Output in economics is a measure of the results of an economic process available for sale or use elsewhere and is a measure of activity.

Real results are those presented in a constant price year (e.g. 2022 prices) to adjust for inflation.

Return on Investment (ROI) is a ratio of the net cost of the incentive (total incentive net of direct tax receipts) with the GVA impact effects. It is a measure of GVA return per NOK invested.

1. EXECUTIVE SUMMARY

1.1. Study Overview

In September 2022, international screen sector consultancy Olsberg•SPI ("**SPI**"), in partnership with Proba Research ("**Proba**"), was commissioned by the Norwegian Ministry of Culture and Equality ("**MOC**") to undertake a socio-economic assessment of the Norwegian film and series production incentive (the "**Study**").

The broad assessment also considers the incentive's economic, reputational, and cultural impact, as well as wider impacts on Norwegian film and television workforce and industrial supply chain. Where appropriate, these elements are drawn together into a cost-benefit analysis ("**CBA**"), with a 'Plus-Minus' analysis also presented to overcome key limitations of the CBA.

1.2. Context of Study

Governments around the world are increasingly paying particular attention to the film and television sector, with global production expenditure at near record levels. The growth curve is expected to flatten in the short term, yet forecast to grow thereafter.

The film and television production sector is increasingly recognised as a key component of economic growth strategies. Related activity delivers economic value through the large amount of spend that can be rapidly injected into an economy through a large supply chain. The sector also creates highly skilled, highly paid, mobile employment, with a diverse range of roles that often don't require a university degree to access. Such value is achieved while also typically delivering an attractive economic return on public investment.

There are also wider social and cultural benefits of film and television production. These include using film and television production as part of national branding and leveraging depiction of a country on screen to attract inward investment, trade partnerships and 'screen tourism'. For example, global audiences have been able to watch depictions of contemporary Norwegian life, as well as places, events, and features of great significance to Norway's history and heritage.

Film and television production incentives are a proven, key policy lever to stimulate production activity through attracting inward investment from international productions, as well as serving to stimulate domestic production activity. There are currently more than 100 active automatic incentives across the globe, including 54 at the national level.

1.3. The Norwegian Film and Series Incentive

The Norwegian film and series production incentive is managed by the Norwegian Film Institute ("**NFI**") on behalf of the MOC. Applicants are assessed against specific criteria related to eligible expenditure and production protocols.

The aims of the Norwegian film and series production incentive focus around boosting large international production, stimulating growth and providing opportunities for the workforce to develop. In addition to these economic and industrial aims, the incentive also aims to promote Norwegian culture, identity, history, and nature.

The current incentive allocation varies each year, depending on the overall budget limit (currently NOK 100 million) and the existing commitments. There is a misconception in the industry that there is a NOK 100 million budget limit that works like an incentive 'cap' in other jurisdictions (i.e., that there is NOK 100 million available in incentives each year). The actual available budget is significantly less than that (e.g., NOK 41.3 million in 2023). This causes confusion and unpredictability.

The available incentive allocation is modest compared to other competitor jurisdictions and subsequently the scheme is highly oversubscribed, in 2021 and 2022 only one in four applicants received funding. The value of rejected applications was NOK 900 million in 2021 and NOK 724 million in 2022. Not all of these were lost to Norway, as it includes repeat applications; however many either went elsewhere to shoot or simply did not go ahead. Since 2016, between two and eight projects were supported each year. These tend to be large, international productions shooting on location. There is a roughly even split between feature films and drama series, with recent years having more international drama series receiving the incentive.

While the incentive is recognised as a crucial factor in bringing large international and co-productions to Norway, it is identified by the industry as a critical limiting factor to future growth. A survey of incentive applicants and recipients found that only 7.8% of expenditure by productions which received the incentive would have happened in the absence of the scheme. The modest incentive available limits the growth of the industry in Norway, with the Study providing evidence that significantly more production would be brought (and repatriated) to Norway if the incentive allocation was increased and made more accessible.

1.4. Policy Scenarios: Forecast Expenditure

This study considers the impact of four policy scenarios. Figure 1 provides an overview of these scenarios, including core assumptions.

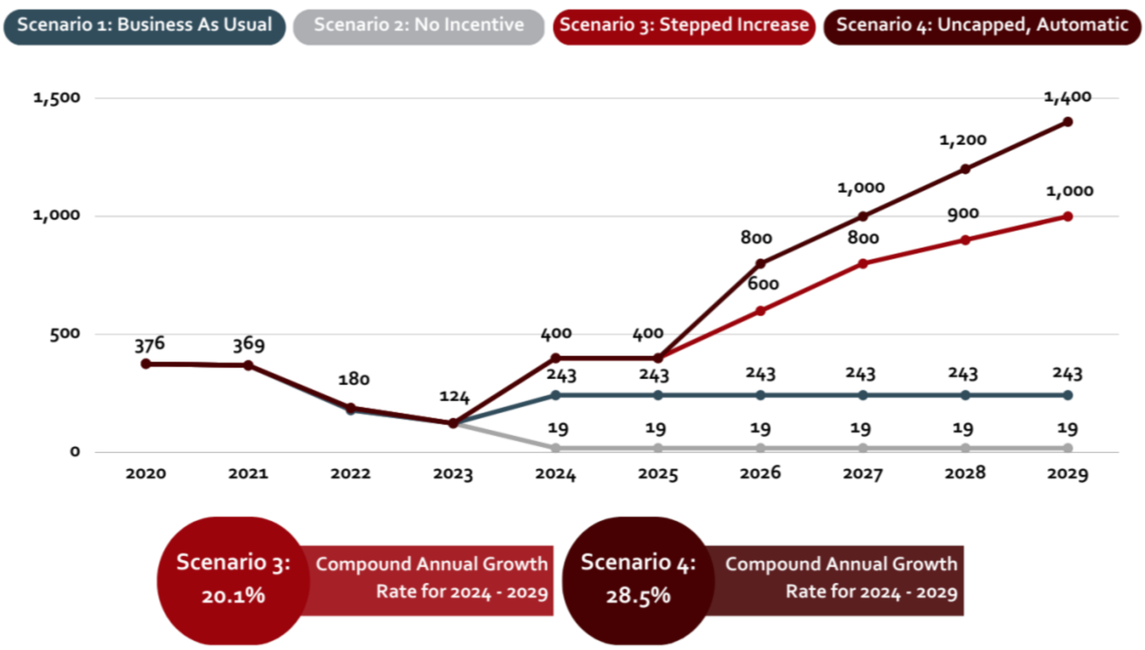
Figure 1 – Overview of Modelled Policy Scenarios

Scenario 1: Business as Usual	Scenario 2: No Incentive
- No change to existing scheme — 25% rate, application process unchanged - Assumes the funding available for the years 2024-2029 would be an average of the annual allocation between 2020 and 2023, and the actual incentive payments are 75% of the allocated.	- Assumes after 2023, the incentive programme is removed, and no significant international or co-productions are supported by the scheme - Assumes the number of international and significant co-productions would reduce dramatically, with less than 10% of expenditure seen under the scenario taking place (evidence for this in chapter 3.7)
Scenario 3: Stepped increase, automatic incentive	**Scenario 4: Uncapped, automatic incentive**
- Uplift of the annual incentive payments to NOK 100 million in 2024 and 2025. Then annual uplift of NOK 50 million in 2026 and 2027, followed by a smaller increase of NOK 25 million in 2028 and 2029 - Assumes all allocation is spent and expenditure is x4 the incentive value and the incentive is automatic — all productions which meet the basic minimum requirement receive the incentive on a first come, first served basis - Commitment made by government on the amount of incentive available for 3-5	- Uncapped scheme to align with many countries with no upper limit on funding budget. Incentives available to all productions which reach a basic eligible spend threshold - Assumes production activity is limited by other constraining factors, including the size and capacity of Norway's current workforce and wider production infrastructure, plus the cost of producing - Assumes production expenditure will grow in line with stepped increase until 2026, after which production would grow by NOK 200 million a year until 2029.

years to de-risk investment and give industry certainty.	

SPI predicts a significant increase in production expenditure as a result of a stepped increase and an uncapped automatic incentive scenario. In contrast, stagnant or potentially decreasing production expenditure is projected under the Business as Usual and No Incentive Scenario, respectively (Figure 2). For the period up to and including 2023 estimated expenditure figures are based on data from the NFI about successful applicants. The policy change is modelled to start in 2024. SPI and Proba have then projected expenditure from 2024 against each scenario informed by previous expenditure patterns, evidence from consultations, a survey of producers and knowledge of the international sector.

Figure 2 – Projected Expenditure under Scenarios, 2020-2029 (NOK, million, 2022 prices)



Source: SPI projections and estimates based on NFI data

1.5. The Incentive's Economic Impacts

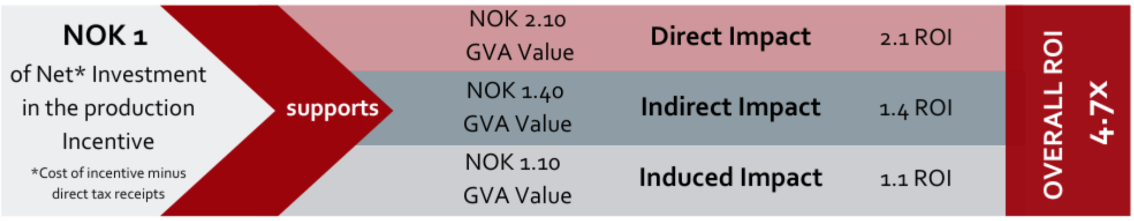
This Economic Impact Analysis ("**EIA**") used an Input-Output ("**I-O**") approach. This uses estimated and forecast production expenditure data to drive a specially developed economic model and builds on previous work on the impact of the incentive in Norway.[1] A full methodology and glossary of terms is found in the appendix.

To date, the Norwegian film and series incentive has had a reasonable economic impact regarding the main economic measures and a strong Return on Investment ("ROI"). In the four years between 2020 and 2023, the incentive is estimated to have supported NOK 967 million in direct output, NOK 638 million in the supply chain (indirect) and NOK 498 million in induced output, caused by the spending of wages in the economy. The total GVA footprint of incentivised productions is estimated to be NOK 848 million, including NOK 390 million in direct GVA, 257 million in indirect GVA, and 201 million in induced GVA between 2020 and 2023. In 2023, it is estimated the incentive will support 69 direct FTE jobs, 46 indirect FTE jobs and 36 FTE jobs through induced effects.

1 Economic Impact of the Norwegian Film Incentive. Olsberg•SPI, 2017

The ROI is a measure of how much economic value (or GVA) is created per NOK 1 million of investment in the production incentive[2]. The ROI figures displayed in Figure 3 show the substantial GVA ROI of the current incentive with each NOK 1 million invested; a return of NOK 2.1 million in direct GVA, NOK 1.4 million in indirect GVA, and a further NOK 1.1 million in induced GVA, creating a combined ROI of 4.7 (figures do not sum due to rounding).

Figure 3 – Economic Return on Investment (Direct, Indirect, and Induced), 2020-2023



Numbers may not sum due to rounding

SPI's economic impact modelling indicates that **an increase in the annual incentive budget would have a significant impact on the output, GVA and FTE jobs supported by the incentive** Figure 4. The total GVA impact for a stepped uplift (scenario 3) would be 2.8 times that of the business as usual (scenario 1), and 3.4 times for an uncapped scheme (scenario 4). The overall economic impact would grow over time in line with the expenditure levels as the supply chain and workforce develop.

Figure 4 – Summary of Economic Impact of Scenarios, 2024-2029 (2022 Prices)

GVA – 2024-2029, 2022 Prices (NOK, million)

	Direct	Indirect	Induced	Total
Scenario 1 Business As Usual	590	390	300	1,280
Scenario 2 No Incentive	50	30	20	100
Scenario 3 Stepped Increase	1,650	1,090	850	3,600
Scenario 4 Uncapped, Automatic	2,100	1,390	1,080	4,560

FTE Jobs – 2029

	Direct	Indirect	Induced	Total
Scenario 1 Business As Usual	150	100	80	320
Scenario 2 No Incentive	10	10	10	30
Scenario 3 Stepped Increase	610	400	310	1,320
Scenario 4 Uncapped, Automatic	850	560	440	1,850

[2] The 'investment' is estimated to the total cost of the incentive payments, minus the direct tax receipts which result from the production activity.

The economic impact methodology does not directly feed into the CBA (chapter 1.7), as many of the economic benefits identified here are not able to be included in a CBA due to assumptions about the substitution of labour. Nonetheless, the results presented in this chapter are included as part of the suite of evidence for policymakers and also to provide an approach that is consistent with practice around the world.

1.6. The Incentive's Wider Impact

1.6.1. Workforce and Competence Development

The current incentive has provided valuable work and training opportunities for the Norwegian industry. SPI's research revealed that incentivised inward productions provide unique developmental experiences that come from working on larger international productions, bringing together highly skilled and connected heads of departments, as well as enabling people to work with cutting-edge working methods and technology.

However, the relatively low volume of incentivised productions being able to access the incentive has limited the potential opportunities for Norwegian crew. Positions on large scale productions are very competitive and not available to all.

The Norwegian workforce would benefit from an incentive design that enabled a higher volume but also wider range of production sizes. A greater number of medium-sized projects would provide valuable continuity and experiences between larger productions shoots, especially for freelancers, as well as being more closely aligned with Norway's current workforce and wider production infrastructure capacity. An automatic incentive with a higher annual budget (as per scenarios 3 and 4) would provide the space for smaller productions to be incentivised to come to Norway. Additionally, in past years crew have emigrated from Norway in search of employment opportunities. Under a scenario with a greater volume of production and larger budget works coming to Norway, much of this workforce is likely to return.

A stepped increase in the incentive allocation would enable the workforce to adapt. Currently Norway's workforce does not have the capacity to handle a rapid increase in inward productions. Therefore, any changes to the incentive should be gradual, to allow for Norway's workforce to respond and grow with increased activity. It was therefore argued that a stepped increase (as per scenario 3) with periodic reviews would be best suited to Norway's current workforce.

1.6.2. Wider Industry Development

The incentive has had some positive impact on the Norwegian film and television production infrastructure. **However, this has been limited by the current conditions**. As with workforce development, an irregular pipeline of incentivised inward productions has hindered the development of ambitious infrastructure plans. Potential private investors would be more confident in their investments in new studio builds or studio expansions if the scale of inward productions was more predictable and of greater scale. A higher annual budget for the incentive (as per scenarios 3 and 4) and the consequent increase in production would help build confidence in investments for new companies, new departments, new services, and new jobs.

There has been some growth in Norwegian businesses servicing the film and television sector. **However, this has also been limited by the current conditions.** The unpredictability of the incentive means it is currently high risk for vendors to invest in permanent staff and new equipment as they can't accurately forecast future business. A higher annual incentive budget (as per scenarios 3 and 4) would help to attract higher levels of production and build confidence in any investments they make to scale their business.

1.6.3. Screen Tourism, National Branding and Cultural Value

Several incentivised productions have attained international reach and acclaim, providing valuable opportunities for national branding and screen tourism through exporting the natural landscape, cultural heritage, and character of Norway internationally. This has also delivered cultural impacts by showcasing Norway's rich heritage nationally and internationally.

Reaching international audiences has meant the incentive has contributed to boosting Norway's attractiveness as a tourism destination. The most notable examples come from big budget productions such as *Mission Impossible: Fallout* (2018), which, despite not being set in Norway, served to advertise Norway's physical beauty to millions of viewers. Such productions led to significant additional interest in the Norwegian locations in which they were filmed.

The low volume and international focus of incentivised productions means there is potential for an enhanced incentive to further support national branding and potential cultural value. While incentivised productions have impact on national branding and cultural value, the potential scope of impact is restricted when the production does not contain identifiably Norwegian elements. A relatively low percentage of incentive funds have gone to Norwegian co-productions and/or productions based in Norway, given the fierce competition for a small allocation of funds. A higher annual budget (as per scenarios 3 and 4) would both increase the volume of productions, but also provide more opportunity for domestic co-productions with Norwegian elements to access the incentive and be used as part of national branding initiatives and provide cultural value to domestic and international audiences. An automatic incentive would particularly reduce the likelihood of Norwegian productions being overlooked or having to be produced elsewhere.

1.7. Cost-Benefit and Plus-Minus Results

There are several methodological and practical challenges in applying the CBA methodology in the context of film and series incentive policies. The approach does not fit well with a policy which seeks to influence the industrial mix of a country as labour market effects are assumed to crowd out activity elsewhere in the economy. Also, the unquantifiable and non-monetisable benefits are excluded. There are no examples of the CBA approach being used successfully in this context and only emerging practice around cultural policies.

Under CBA, there are no scenarios in which an incentive would return a positive Net Present Value ("NPV") score when wider non-quantifiable benefits such as workforce, industrial development and cultural impact are excluded. Scenario 2, the no incentive scenario, returns a zero Partial Net Present Value Score[3] as the overall costs and benefits of the industry cancel each other out. Comparing the three other scenarios, the Partial NPV score is best (least negative) for the scenario 1, the business as usual scenario, and lowest for scenario 4, the uncapped, automatic scheme option. This is because as the expenditure and the incentive payments increase, the incentive payment grows in real terms, worsening the Partial NPV score. This is because many positive impacts which grow with the scale of the industry are not included in this quantified assessment.

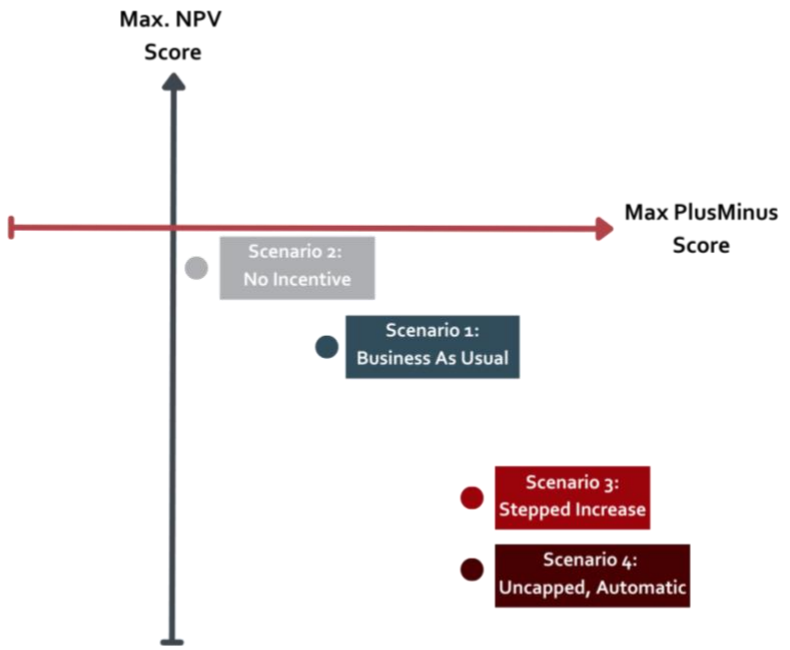
Due to the exclusions and limitations, **the CBA approach is not helpful for informing policy decisions.** Therefore, SPI and Proba undertook a 'Plus-Minus' assessment that focuses on the

[3] The Net Present Value is the difference between the present value of the benefits to the present value of the costs. It is the present value as a discount rate has been applied. When a NPV is positive the benefits outweigh the costs. It is a 'partial' score in this context because it misses unquantifiable spillover benefits which have the potential to be significant.

costs and benefits for which it has not been possible to estimate a monetised figure. The approach is subjective but is used in Norway when CBA analysis is not applicable[4].

Figure 5 summarises the combined results for the CBA and the 'Plus-Minus' method within a quadrant. Note that the scores and values resulting from CBA and Plus-Minus assessment are not directly comparable, as CBA results are in quantified monetary values and Plus-Minus results are scores. However, the quadrant allows the information and ordering of each scenario to be displayed and the scenarios compared.

Figure 5 – Cost-Benefit and Plus-Minus Summary Visual



The CBA results are mitigated by positive Plus-Minus result for scenarios 1, 3 and 4. Scenario 3 and scenario 4 have equal Plus-Minus scoring and scenario 3 has a better NPV score, which suggests that **scenario 3, the stepped uplift, is preferential to scenario 4** at this stage of industrial development.

1.8. Key Recommendations

SPI's key recommendations are set out below. These are in three groups. The first relate to major changes to the incentive, particularly around its level and design. The second set of recommendations are made on the assumption that the current incentive level and design continue, and recommends adjustments to make the existing scheme more effective. The third relate to further data collection and research. Chapter 11 provides further specifics on these recommendations.

1.8.1. Major Improvements: Incentive Level and Design

1. **Implement a significant stepped increase in annual budget allocation, in line with scenario three**, where there is an uplift in annual incentive payments to NOK 100 million in 2024 and 2025, followed by an annual uplift of NOK 50 million in 2026 and 2027, followed by a smaller increase of NOK 25 million in 2028 and 2029. SPI recommend that the subsequent impact on production levels is monitored before each step change.

2. **Remove the annual application deadline and make the incentive automatic**, in favour of rolling applications, as seen in many jurisdictions globally. This needs to align with #1

[4] Including Oslo Economics' 2014 Utredning av insentivordninger for film- og TV-produksjon

recommendation above, with a step change in annual budget allocation to ensure there is sufficient funding available each year. This may not align to the existing budgetary rules; however, SPI recommends this as the best approach for effective policy that aligns with how productions are planned.

1.8.2. Minor Adjustments: Improvements to Current Incentive Scheme

3. **Clarify how the headline annual incentive 'cap' works** for applicants and industry more widely. SPI recommends removing the complicated calculation formulae (which incorporates previous commitments) and presenting a predictable annual budget level of NOK 100 million.

4. **If there is no change in the incentive level and/or selectivity (which SPI recommends in point 1 and 2 above), there is a case to reduce preferable scoring for productions with higher budgets for Norwegian spend**, allowing a mixture of large (over NOK 100 million and mid-sized productions (~NOK 30-40 million) to access the incentive. This will help develop the current level of capacity and capability within the domestic industry, as well as the potential to allow more co-productions to emerge which promote Norway's culture, identity, history, and nature.

5. This study also considered whether the incentive design should be adjusted to promote green production, production in the regions and drama series (chapter 4.3). While there are strong reasons for the incentive to support these objectives, **SPI recommend these are best achieved through alternative methods at the current time**.

1.8.3. Related to Data Collection and Further Research

6. **Undertake a detailed review of the production capacity and capability of the Norwegian film and television industry** and identify how this might need to adapt to service larger and more diverse types of production activity and expenditure.

7. **NFI to work closely with the Regional Film Funds, film centres and regional film commissions to track incentivised and non-incentivised spend in regional parts of Norway**, to evidence a need for any regional preferential incentive measures. The NFI should also support the implementation of tracking of green production and carbon calculators.

8. **Undertake a follow-up Economic Impact Study** two years following any significant incentive design change to assess effectiveness. Key metrics to include changes in incentivised production expenditure in total and in the different regions of Norway, Gross Value-Added (GVA), output, FTE jobs supported, as well as on screen tourism and workforce and industrial development.

Chapter 2:

Introduction

Credit: Moviebird Norway

2. INTRODUCTION

2.1. Research Brief

In September 2021, international screen sector consultancy Olsberg•SPI ("**SPI**") was commissioned, in partnership with Proba Research ("**Proba**"), by the Norwegian Ministry of Culture and Equality ("**MOC**") to undertake an in-depth impact assessment of the Norwegian film and series production incentive (the "**Study**").

The Study is broken into three interrelated elements:

1. **Assessment of the incentive's direct and wider impacts**, including within the following areas:
    - **Economic**: including effects on uplift in production expenditure, output, GVA, FTE jobs, supply chain effects, and screen tourism
    - **Social:** including increased knowledge, skill, and experience for Norwegian workforce; increased international cooperation; effects on national branding
    - **Cultural:** including the telling of stories which promote Norway's culture, history and/or landscape.
2. **A Cost-Benefit Analysis ("CBA") of the incentive scheme, considering:**
    - The current economic and regulatory framework
    - A gradual increase of the scheme
    - An automatic/rights-based scheme.
3. **Assessment of the effects of changes in the design of the scheme**, including how such changes will affect the CBA and attainment of the scheme's goals.[5] The analysis considers the following types of changes: stronger emphasis on green production, stronger weighting of drama series vs. film productions, and higher production rates in given regions.

SPI's assessment covers years 2018 to 2022 for the retrospective assessment of costs and benefits to inform the 'business as usual' projections and other policy scenarios. The economic impact assessments are modelled on years 2020 to 2029. The CBA policy options are modelled on years 2022 to 2028.

2.2. Status of this Report

This is the Study's final report. SPI and Proba thank the MOC for their input in previous drafts.

2.3. Our Approach

SPI, with support from Proba, undertook a wide-ranging programme of research and analysis, including reviewing existing research and through new primary research.

Our approach included:

- **Creation of a Research Framework**. Working with the MOC, this specified the key aims of the Study, identified the policy options to be tested and the key CBA components, as well as the timescales for analysis. This included reviewing over 30 studies and guidance documents from Norway and best practice internationally (see Appendix 3 Bibliography)
- **Review of the production and incentive data** provided by the Norwegian Film Institute ("**NFI**"). This included supported projects, as well as those who applied but were unsuccessful
- **In-depth desk research**, reviewing a wide range of relevant policy and sector reports, including related studies, such as past studies into Norway's film and TV sector and national policies for environmental sustainability and industry innovation

[5] The incentive scheme's goals are detailed in chapter 3.1

- **28 one-to-one confidential consultations** with individuals working in industry, policy, and research, providing valuable qualitative insights and testimonies on the effect the incentive is having, and what impact might be possible with adjustments in the incentive's design
- **An online 'additionality survey' of productions** who applied for and/or have been supported by the incentive, assessing its significance to the scale and viability of their projects
- **Production expenditure and incentive payment modelling** under each policy option
- **Full Economic Impact Analysis**
- **Cost-Benefit Analysis**
- **Write-up of findings and recommendations.**

2.4. Context of Study

2.4.1. Overview of the Growth of the Global Film and Television Production Sector

This Study comes at a time when governments around the world are paying particular attention to the film and television sector as a key component of economic growth strategy and as a vehicle for broader societal impact. Consequently, governments have been actively investing in enhancing the attractiveness of their jurisdictions as locations for production. This increased focus on the sector is the product of four distinct factors:

1. The **intensifying global consumer demand and access to visual content** from Video on Demand ("**VoD**") streamers and traditional studios and broadcasters
2. Government recognition that screen content production plays a **unique role in delivering economic value** through the large amount of spend that can be rapidly delivered to a location and then spread throughout the economy via the significant volume of cast, crew and vendors employed in a production
3. As a specialised and fleet-footed manufacturing activity, screen production creates **modern, highly skilled, productive, and mobile employment**. These jobs are less at risk of being replaced by AI or robotics
4. Film and television production typically delivering an **attractive return on public investment**, alongside a variety of other economic and strategic impacts. These include increasing inward investment, stimulating tourism, helping national branding, and enhancing soft power and cultural impacts.

There has been a 'deluge' of film and television production on a global level in recent years, driven by demand for all types of content from consumers and investors alike. Global production spend marked a record level of US$177[6] billion in 2019, and whilst this was disrupted due to COVID-19, many of the world's major markets have already recovered and surpassed record levels.

The unprecedented growth in production has been tempered to a degree by more recent challenges. Alongside current global economic uncertainty, sector-specific changes have been occurring. Lower than expected subscription growth has dampened ambitious spending plans for some streamers, whilst corporate strategy pivots have in some cases prioritised near-term profitability at the expense of increased content production. At the same time, production costs have been rising across many jurisdictions.

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[6] *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19*. Olsberg•SPI, 25th June 2021. Accessible at: https://www.o-spi.com/projects/economic-impact-studies-research-and-evaluation-lyglh

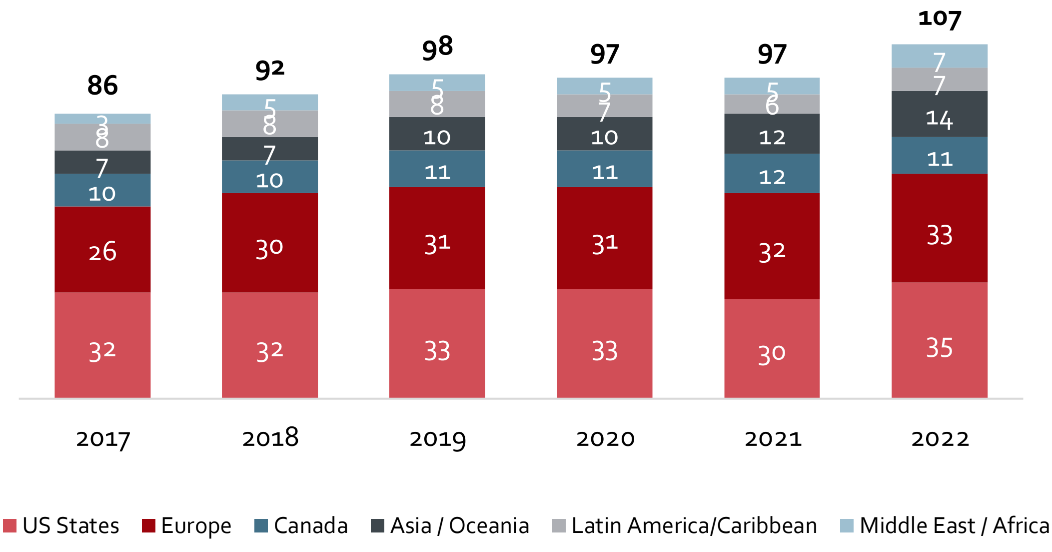
Despite these challenges, production expenditure levels are forecast to continue to grow in the coming years, anchored by resilient underlying demand and intense competition for market share.[7] Indeed, there remains significant consumer growth potential in certain global regions. According to PwC data, the broader global entertainment and media sector is set for strong continued growth over the coming years, with a compound annual growth rate (CAGR) of 4.6% in revenues between 2021 and 2026, quoting, "the vast entertainment and media complex is growing more rapidly than the global economy as a whole. With each passing year, more people around the world are spending more of their time, attention, and money on the complex and increasingly immersive entertainment and media experiences that are available to them."[8]

Appendix 2 provides further insights and data on the growth of the global film and television production sector.

2.4.2. Growth of Production Incentive Programmes

One key policy lever to stimulate production activity has been through the use of film and television production incentives, which play a decisive role in where productions are located around the world, as well as serving to stimulate domestic production activity. Incentives are increasingly recognised by governments as an efficient and strategic tool to attract high-value inward investment, strengthen local production sectors and build skills, employment, and infrastructure. The strategic value of film and television production is underlined by authorities continuing to make improvements to existing incentives or introduce new systems. Indeed, there are more than 100 active automatic incentives across the globe, including 54 at the national level (Figure 6).[9]

Figure 6 – Number of Automatic Incentives Globally, 2017-2022



Source: SPI (2023)

[7] *Content Spending Levels at Top Media Companies: 2023 Forecast*. Variety, 25th November 2022. Accessible at: https://variety.com/vip/content-spending-levels-at-top-media-companies-2023-forecast-1235440145/
[8] *Perspectives from the Global Entertainment & Media Outlook 2022–2026.* PwC, 13th June 2022 Accessible at: https://www.pwc.com/gx/en/industries/tmt/media/outlook/outlook-perspectives.html
[9] Global Incentives Index 2022. Olsberg•SPI, November 2022. Accessible at: https://static1.squarespace.com/static/5f7708077cf66e15c7de89ee/t/63615f3126bb65501aa1b2a4/1667325769870/Global+Incentives+Index+2022-11-01.pdf

The overall aim of an incentive is to attract production. However, this also relies on the interaction of elements within a wider ecosystem in which incentives are just a part. Other key elements include the competence and provision of crew and infrastructure, effective marketing, and promotion, as well as other supporting financial and strategic policies to help determine the desirability of a jurisdiction as a production location.

2.4.3. Overview of the Norwegian Film and Television Sector

Norway has a growing film and television sector, with domestic productions and co-productions successfully reaching international audiences, and a slow, but gradually increasing international inward production output.

Despite its sector still being relatively small in size, Norway has produced several notable titles in recent years. *The Worst Person in the World* (2021) was nominated for the Palme d'Or at the 2021 Cannes Film Festival and Best Foreign Language Film and Original Screenplay at the 2022 Academy Awards; *Troll* (2022) was one of the most streamed non-English language films in its year of release;[10] whilst *Norsemen* (2016) received significant critical acclaim, both domestically and abroad. On the international front, the producers of major Hollywood films such as *No Time to Die* (2021), *Mission: Impossible – Fallout* (2018), and *Dune* (2021) have all chosen Norway as production locations.

Norway's steady growth in production output has been helped by its production infrastructure, a skilled workforce and its production supply chain. Inward productions are particularly attracted to Norway's natural locations and prevalence of English-speaking crew.

As with most countries, much of Norway's film and television industry is concentrated in its capital, Oslo, accounting for 79% of total Norwegian turnover in 2018.[11] Along with being home to many of Norway's production companies, it also has the largest concentration of Norway's crew base and production infrastructure, such as studio facilities and equipment rental.

However, there is less concentration in Oslo and more dispersion across the country when it comes to international inward production. This is due to the appeal of Norway's natural scenery to international productions, with popular locations being found in regions away from the capital. Western Norway is the most significant beneficiary of this, with its fjords, mountains and rivers all being popular settings for productions. But even within inward investment, significant disparities remain, and regions such as Trøndelag and Northern Norway see a disproportionately small level of production activity, with very few international productions made in these locations.

[10] '*Troll' Becomes Netflix's Most Popular Non-English Film.* Variety, December 14th, 2022. Accessible at: https://variety.com/2022/global/global/troll-netflix-most-popular-non-english-film-1235460963/
[11] The storytellers – Ambitions, finances, and structures in the northern Norwegian film industry. Business School of UiT, January 2021.

Chapter 3:

Modelling Changes to the Incentive

Credit: Moviebird Norway

3. CURRENT INCENTIVE SCHEME

3.1. Aims and Operations

The Norwegian film and series production incentive was established in 2016, following consultations with the Norwegian film industry and general public. The policy aims are clearly set out in the regulations for the incentive.[12] The goals can be summarised as follows:

- Increase the number of large international film and production series production in Norway
- Promote Norwegian culture, history and nature
- Increase the experience and knowledge of Norwegian film industry
- Stimulate growth
- Promote a sustainable Norwegian film industry
- Increase international cooperation.

These policy objectives demonstrate the underlying rationale for intervention around – specifically, the opportunity to develop and grow an industry, and to secure a share of a global production sector. This industry development in turn leads to beneficial non-market impacts (externalities), including skills development and cultural and reputational impact.

The scheme is operated by the NFI and offers a 25% cash rebate on eligible expenditure in Norway with the funding provided by the Norwegian Parliament. There is a limited budget available for the incentive. There is also an annual deadline in November for applications wishing to access the following year's budget.

The scheme is selective, and projects are scored against a set of criteria (see Figure 7), with only the top scoring projects being successful. The assessment criteria for the scheme are published on NFI website, however the weighting or prioritisation of these criteria is not publicised. There is a perception in the industry that productions with the largest budgets are prioritised in the selection.

Figure 7 – Norway Film and Series Incentive's Assessment Criteria

- Total budget for the production
- The budget for production in Norway
- The production's international distribution
- Share of private financing
- Share of international financing
- To what extent the Norwegian budget share will strengthen the Norwegian film industry
- Added value beyond the actual production.

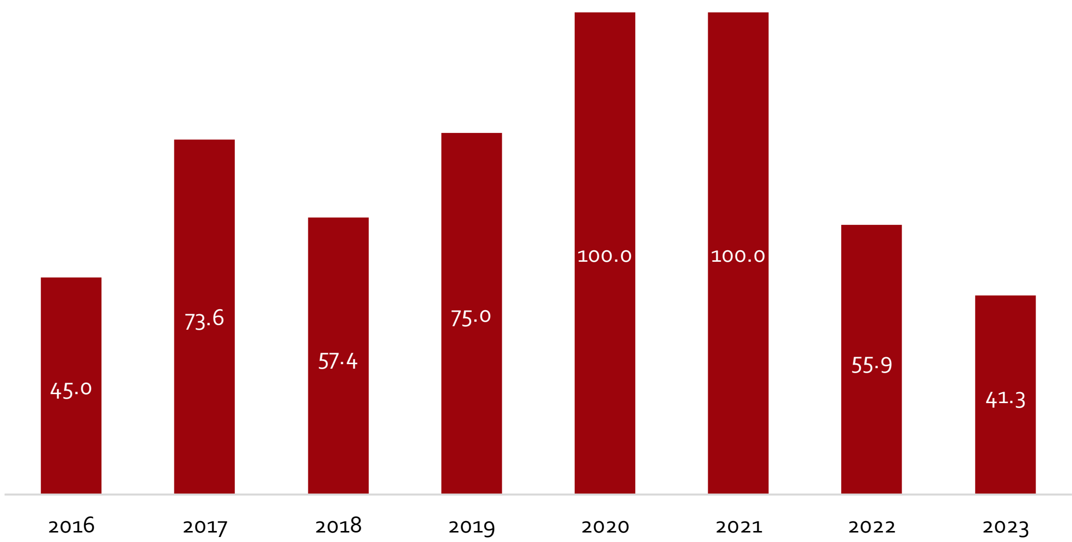
Source: NFI website

[12] *Regulations on financial incentives for the production of international films and series in Norway*. Norwegian Film Institute, 18th June 2021. Accessible at: https://www.nfi.no/eng/grantsfunding/the-incentive-scheme/_/attachment/download/d837a9fa-d958-4455-ab2d-2201f7e9562a:b515201ea3807e2d85f657464b5ed2e552feb8fb/Regulations%20on%20financial%20incentives%20Norway%20(1).pdf

3.2. Available Allocation

In its first year, 2016, the incentive scheme was allocated NOK 45 million by the Norwegian Parliament, and this figure has risen over time so that, in 2020, the total available to allocate to productions was NOK 100 million (Figure 8).

Figure 8 – Allocation Available for New Projects, 2016-2023, million NOK



Source: SPI's analysis of NFI data (2023)

The size of the incentive scheme has changed over time, both regarding maximum new commitments and actual use via payments.

The actual payments from the scheme varied, partly due to variations in the time lag between the commitments from NFI and the activities in the projects that received funding from the scheme.

As from 2021, the financial limitations of the scheme changed. There is now a limit on the fund's total outstanding commitments. The current limit is NOK 100 million, but parliament decides on the level annually as part of the national budget. The fund's capacity for new commitments now partly depends on the time lag between former commitments and the payment of the funds.

The applicants to the fund have no clear incentives to annul a commitment from NFI (i.e., cancel commitments to incentives from previous years), even if the applicant no longer plan to utilise the scheme. In the terms of the scheme, it is stated that the individual commitments by NFI shall be time limited, ensuring that the scheme is not reserved by expired and outdated commitments. However, the new regulation of the scheme, effective from 2021, makes the capacity of the scheme to make new commitments more variable and less predictable than it was before.

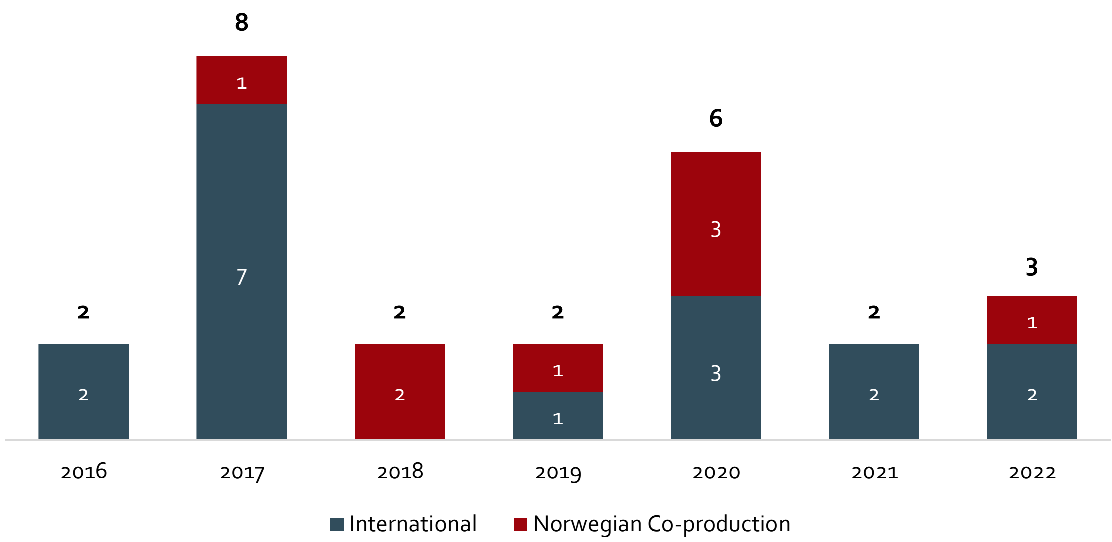
There is a widespread misconception in the industry that the NOK 100 million limit works in the same manner as an incentive 'cap' in other jurisdictions; i.e. a belief that there is NOK 100 million of incentive available each year. The formula for calculating the allocated incentive is too complicated to communicate with industry, with the variable nature of available funding making the sum available to new projects difficult to predict. This makes it very difficult for producers to plan effectively, and instead they are attracted to more predictable incentives in other jurisdictions.

3.3. Supported Projects

The incentive scheme was introduced in 2016, specifically to target large international productions and significant Norwegian Co-productions[13]. **Between 2016 and 2022, 25 projects were successful in their application and ultimately shot in Norway**. This excludes four projects which were successful in their incentive application, but subsequently did not shoot in Norway.

In most years, two or three projects were funded (Figure 9) **–** with the exception of 2017 and 2020. However, 2017 is largely viewed as an anomaly as it was only the second year for the incentive and the timescales for producers were condensed, resulting in a larger number of smaller shoots. **Two-thirds (68%) of all projects supported by the incentive were international projects**. Industry consultees for this Study noted an evident preference for larger scale international projects compared to a higher number of smaller mid-range Norwegian Co-productions during the application scoring process. Consultees saw this as being driven by historically international productions accounting for much higher levels of expenditure in Norway, compared to Norwegian Co-productions.

Figure 9 – Number of Supported Projects by Domicile, 2016-2022



Source: SPI's analysis of NFI data (2023)

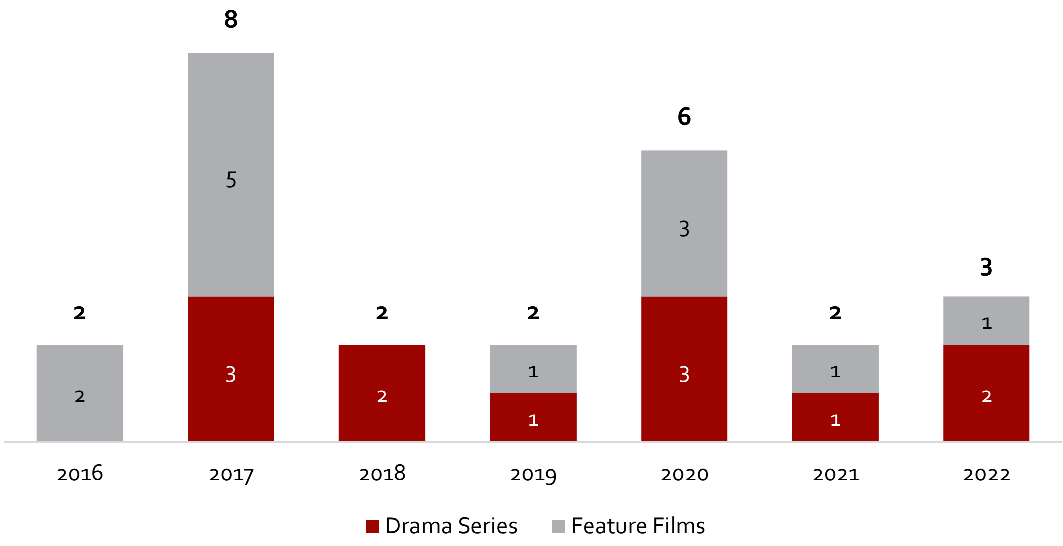
There is a roughly even split between the types of projects supported by the incentive, with 13 feature films and 12 drama series supported up to 2022. To date no documentary films or series or animation have accessed the incentive, despite being eligible.

Incentivised feature film projects tend to be international – 12 out of 13 feature film projects funded by the incentive were international. **Co-productions were predominantly series** – only one feature film co-production was successful, compared to seven series. Between 2020 and 2022, there has been one international drama series each year selected to receive the incentive, after a period when all international productions were feature films. This reflects the increasing investment in drama series by global video-on-demand (VOD) platforms.

[13] In this analysis 'international projects' are those productions with 100% finance from outside of Norway. 'Norwegian Co-Productions' are projects with at least 30% international finance; the minimum required to receive incentive support

There is no noticeable pattern of change regarding the number or split between film and television drama over time when co-productions and international projects are analysed together (Figure 10).

Figure 10 – Number of Supported Projects by Type, 2016-2022



Source: SPI's analysis of NFI data (2023)

3.4. Expenditure in Norway by Supported Projects

The NFI receives data on budgets and estimated expenditure on application. This estimated expenditure is the best source of aggregated usable data on expenditure. However, it is estimated before production takes place and therefore is subject to change.

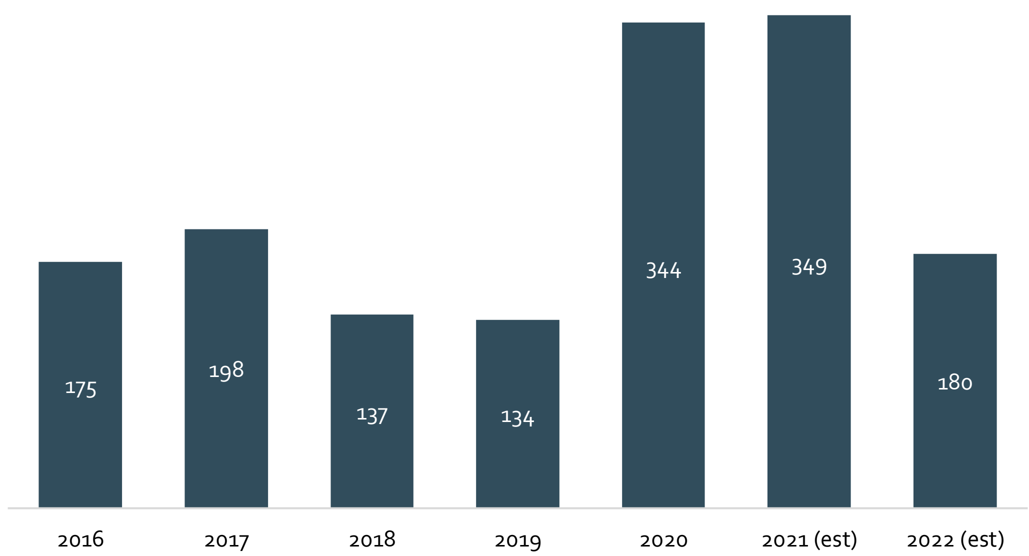
To improve the accuracy of these estimations, SPI has worked with the NFI to identify productions which were allocated incentive but did not ultimately take up the offer of the incentive. Four of these were identified and were excluded from the analysis of successful projects. In addition, there are some productions which scaled back their spending in Norway after being allocated an incentive for a variety of creative, production and financing reasons, resulting in the actual expenditure being lower than the estimated budget on application.

Careful comparison of the allocated incentive amount and the actual incentive payment was subsequently undertaken. Where the actual incentive payment was lower than the estimated amount, the estimated Norwegian expenditure figure was adjusted accordingly, so the estimated expenditure figure and the actual incentive payment align.

Projects funded in 2021 and 2022 are yet to make the final submission for the incentive claim. The projects during this time period included in this analysis all shot in Norway but the exact final incentive payment and expenditure is not known. Between 2016 and 2020, on average 75% of the available allocated incentive budget was paid in incentives each year. It is therefore assumed, for the purposes of estimation, that this relationship continued for 2021 and 2022.

Between 2016 and 2022, an estimated total of NOK 1.5 billion was spent in Norway by incentivised productions (Figure 11).

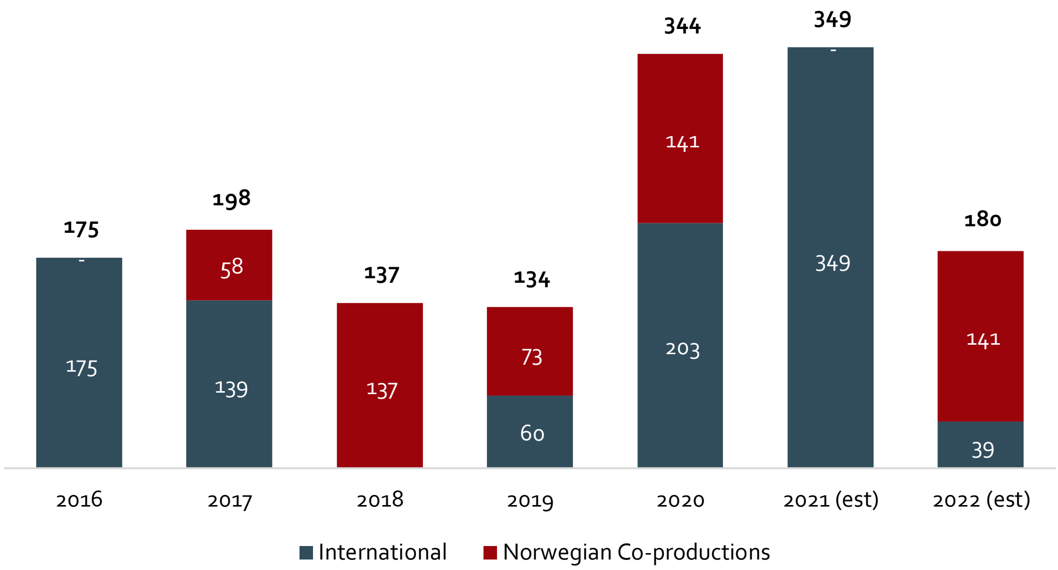
Figure 11 – Estimated Expenditure of Supported Projects, 2016-2022, million NOK



Source: SPI's analysis of NFI data (2023)

The majority of the incentivised expenditure is from international projects (i.e., projects with 100% international finance), accounting for two-thirds (64%) of total spending, compared to 36% by Norwegian co-productions (Figure 12). It's key to note that project expenditure is limited by and dependent on the incentive available each year. This is determined by the cap and budget already committed (see chapter 3.2). The high degree of variability in expenditure between years reflects the varying budget available.

Figure 12 – Estimated Expenditure of Supported Projects, 2016-2022, By Domicile

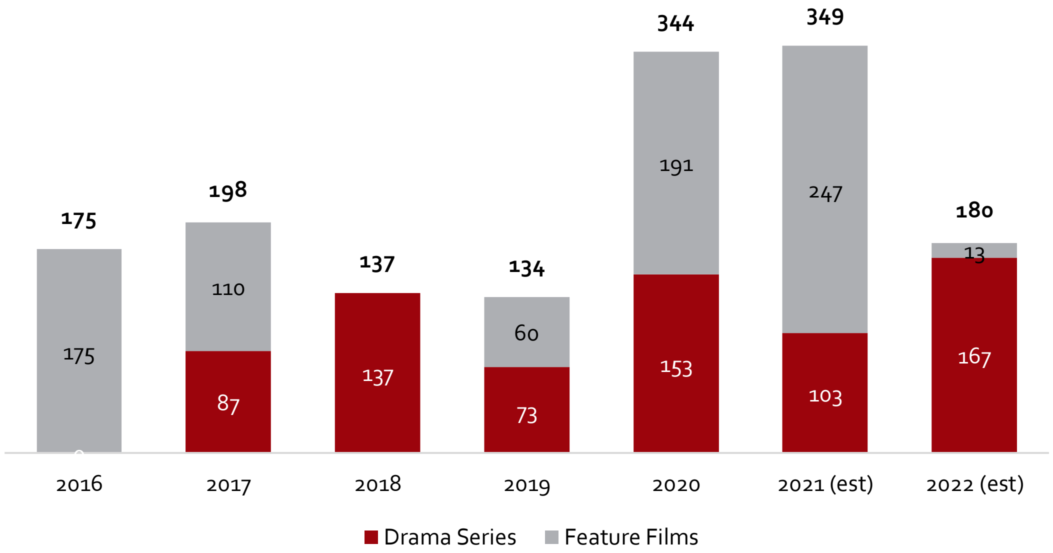


Source: SPI's analysis of NFI data (2023)

Feature films accounted for slightly more than half (52%) of the estimated NOK 1.5 billion spent in Norway by incentivised projects between 2016 and 2022 (Figure 13). Drama series accounted for slightly less than half (48%). The proportion of drama series expenditure to total expenditure varies year to year, without a clear trend, although 2022 was a particularly strong year for drama series.

Between 2016 and 2022, the Norwegian spend per production was NOK 68 million for both feature films and drama series. However, in recent years (2019-2022), the average expenditure by production has increased to NOK 91 million, with feature film expenditure on average reaching to NOK 99 million per project and drama series averaging NOK 84 million per project.

Figure 13 – Estimated Expenditure of Projects Supported by Type 2016-2022 (NOK, million)



Source: SPI's analysis of NFI data (2023)

3.5. Incentive Payments

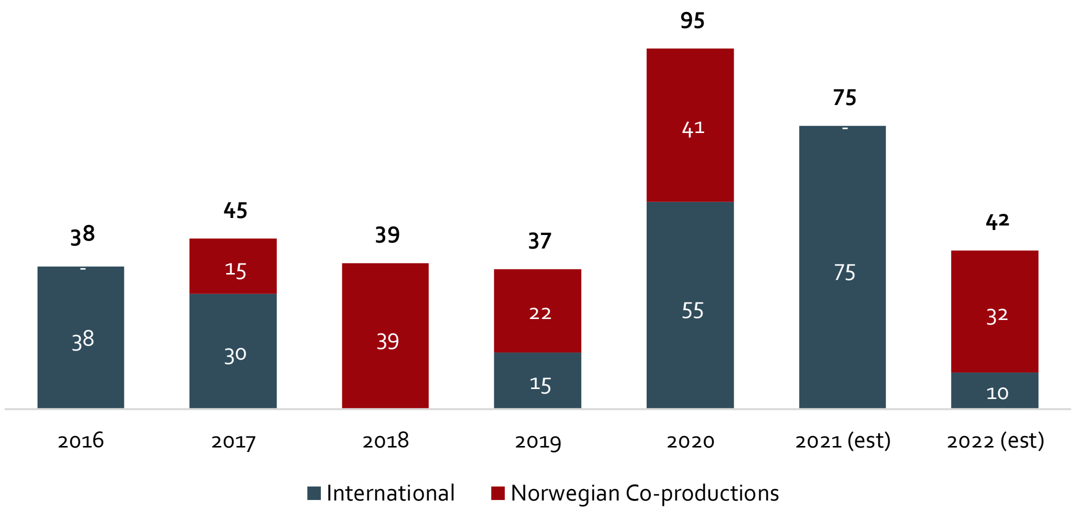
The actual payments from the incentive scheme are contingent on the presentation of documentation of production expenditures in Norway. As set out in chapter 3.2, there is a delay between an incentive being allocated (i.e., a project being 'successful') and the incentive payment. This can be due to delays in production, but also because it takes time for productions to submit the relevant paperwork following the completion of production in Norway. This incentive payment lag is a common feature of production incentives across the world.

As the incentive payment lags production, the analysis here allocates the incentive to the year in which the production shot — not the year the actual incentive payment was made. For projects supported in 2021 and 2022, the payment details are not yet available, therefore for these years the figures are based on the timing projected in the decisions by the Film Fund.[14]

An estimated total of NOK 370 million has been paid (or for 2021 and 2022 is likely to be paid) to production companies under the production incentive scheme, between 2016 and 2022 (Figure 14). Two-thirds (60%) of total incentive payments have gone to international projects. The split between international and co-productions is volatile, with no international project being funded in 2018, but all the available funding going to international projects in 2021.

[14] Based on data from 2016 to 2022, 75% of the overall allocated incentive is claimed, it is assumed that 75% of Norwegian budget forecast at the time of the application to the fund is spent in Norway. It is therefore assumed that for 2021 and 2022, where actual data is not available, that the estimated incentive and expenditure is 75% of what the application states.

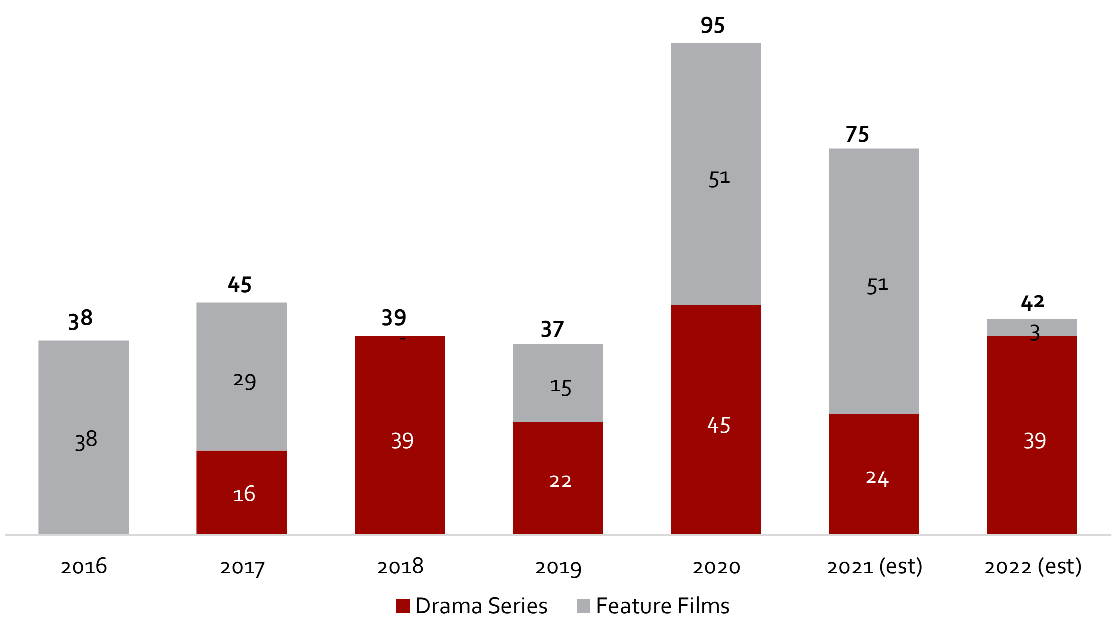
Figure 14 – Estimated Incentive Payments by Project Domicile 2016-2022 (NOK, million)



Source: SPI's analysis of NFI data (2023)

Between 2016 and 2022, half (51%) of the incentive payments went to feature films and half to drama series with each format receiving over NOK 180 million. The split between format varies between years as shown in Figure 15.

Figure 15 – Estimated Incentive Payments by Project Type, 2016-2022, NOK million

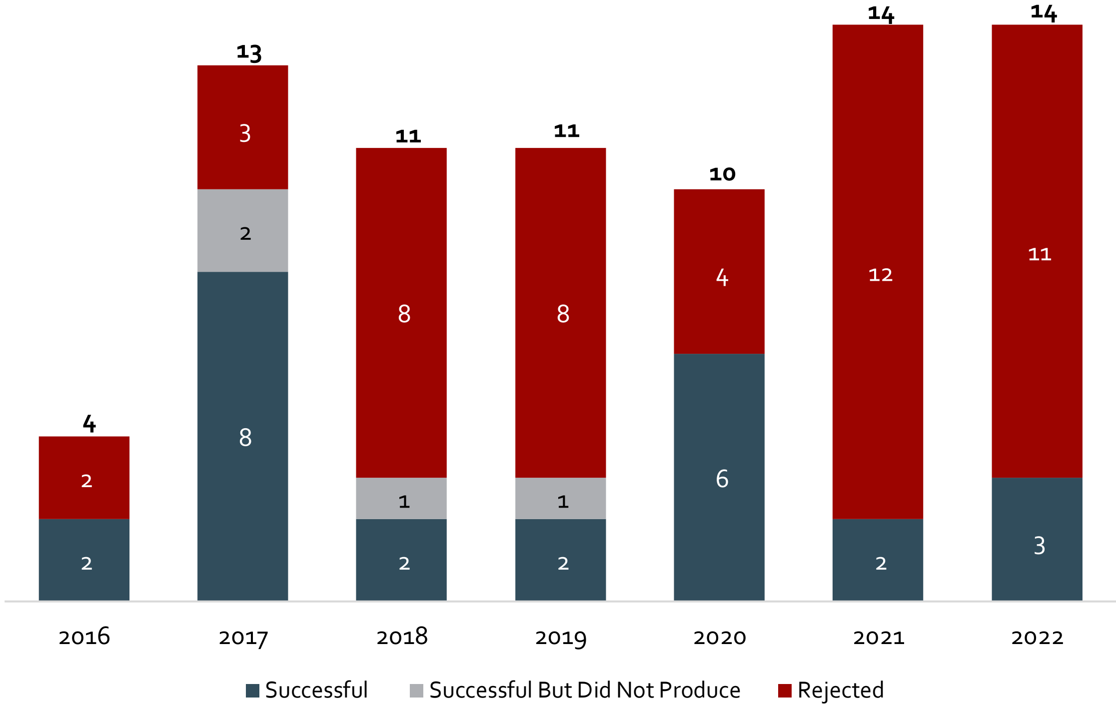


Source: SPI's analysis of NFI data (2023)

3.6. Rejected Applications

The Norwegian incentive scheme is heavily oversubscribed (Figure 16). Between 2016 and 2022, there were 48 rejected applications, an average of 6.9 projects a year. The number of rejected applications is growing over time. 2020 represented a break in this trend, most likely caused by COVID-19 restrictions and uncertainty in global operations. In 2021 and 2022, over three-quarters of applications in each year were unsuccessful (86% in 2021 and 79% in 2022).[15] For 2023, there were seven applications and it's been recently announced that among these, the NFI has awarded support to one episode of *Succession*, VFX to the drama-series *The Last of Us*, shooting of the feature *The Gorge*, postproduction for the feature *Thug*, and finally shooting and postproduction for the drama series *So Long, Marianne*.[16]

Figure 16 – Applications to Incentive, 2016-2022



Source: SPI's analysis of NFI data (2023)

Between 2016 and 2020, expenditure associated with rejected applications totalled NOK 100–300 million a year. In 2021 and 2022, the value of rejected applications was much higher – totalling over NOK 900 million in 2021 and NOK 724 million in 2022 (Figure 17). Over the whole period, the value of rejected applications was over NOK 2.4 billion. **This figure cannot be directly equated to lost revenue for the industry as there might be some productions which applied repeatedly and other productions which were shot in Norway with alternative financing**. Also, if all projects were funded using the incentive, some projects might have been cancelled or scaled back due to capacity constraints in the Norwegian film and TV industry.

Industry consultations, as well as an online survey of rejected applicants indicated that the majority of rejected productions either reduced their production in Norway, moved production in entirety to a different jurisdiction, or the production did not take. Therefore, the rejected application data **supports the argument that a significant amount of production is being lost due to limitations on the current incentive.**

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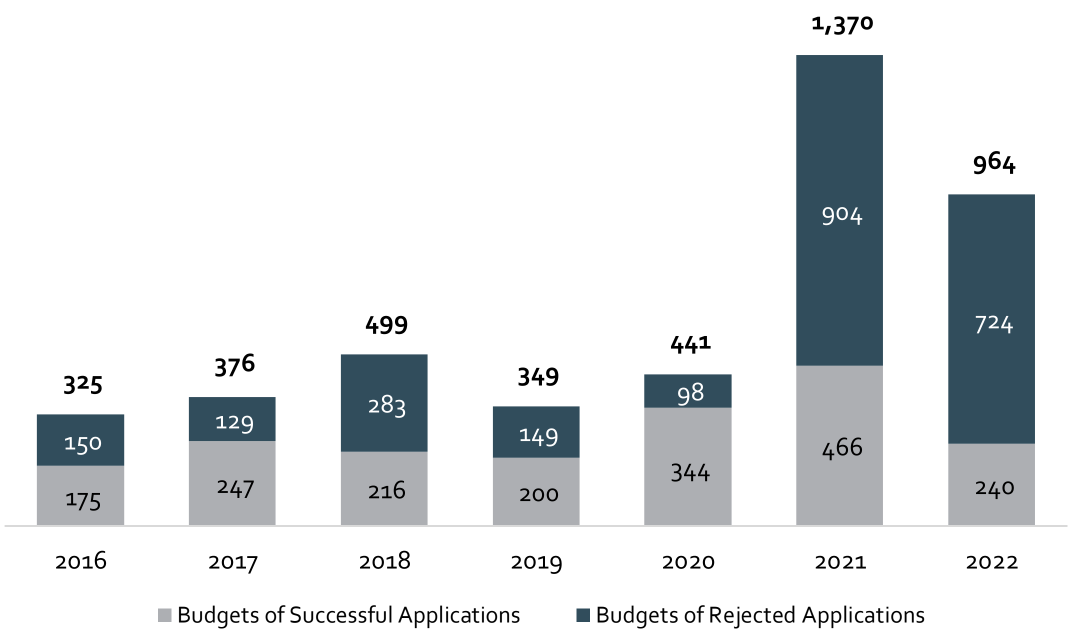
[15] In 2021 there were two application rounds. Where projects applied in both rounds, only one application is counted.

[16] '*Norwegian incentive grants for Succession, the Last of Us and three more projects*'. NFI, 14th February 2023. https://www.nfi.no/eng/news/2023/norwegian-incentive-grants-for-succession-the-last-of-us-and-three-more-projects

On average, the expenditure of successful projects each year accounts for 44% of the total projected Norwegian budgets of all applicants – however this ranged from a low of 25% in 2021 to a high of 78% in 2020.

Figure 17 – Estimated Expenditure of Applicant Projects, 2016-2022, NOK, million



Source: SPI's analysis of NFI data (2023)

3.7. The Significance of the Incentive to Production Companies

As part of this Study, an online survey was conducted with production companies that have accessed and/or applied for the incentive scheme. Combined with individual consultations, this assessed the effects the incentive has in attracting productions to Norway, or preventing domestic productions from shooting elsewhere, as well as to identifying what the key factors production companies consider when deciding to shoot in the country. Respondents included international inward production companies from outside Norway and domestic production companies who have worked on international co-productions.

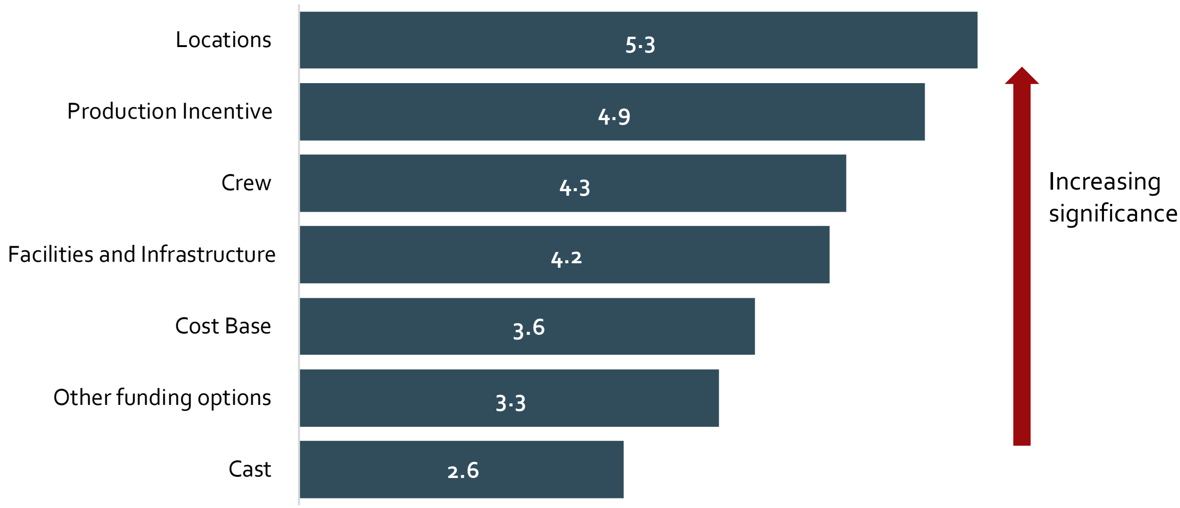
The survey received a total of 21 responses from companies both national and international in nature. **The coverage of these responses regarding total expenditure by incentivised projects was 55.9%,** representing a good proportion of the activity influenced by the incentive. The survey was sent to 45 contacts which applied for the incentive, so the overall response rate was 47%.

The survey asked international respondents to rank in order of importance the factors that affected their decision to produce in Norway. The seven factors were cast, crew, cost base, facilities and infrastructure, location, the Norwegian incentive scheme and "Other funding options". These factors were ranked from 1 to 7, with 7 being the most important and 1 the least important. The results were calculated as a weighted average relating to expenditure of the production company in Norway.

Norway's locations are identified as the most significant factor for international production companies when deciding to shoot in Norway (Figure 18). Consultations confirmed that Norway's landscapes and scenery are a key asset for inward productions. The least significant factor is Norway's available cast, as typically productions will bring their own cast with them, regardless of the production location. **Currently, the production incentive is**

the second most important factor as the limitations to the incentive mean that productions have another motivating factor to produce in Norway. In other jurisdictions for which this evidence is available (e.g., UK, Australia, New Zealand and New Mexico, Australia), the most common determining factor in each is the incentive. This means that these jurisdictions are tapping into the global opportunity for non-location production activity including studio-based production, post-production and virtual production.

Figure 18 – Ranked Decision Factors for Shooting in Norway

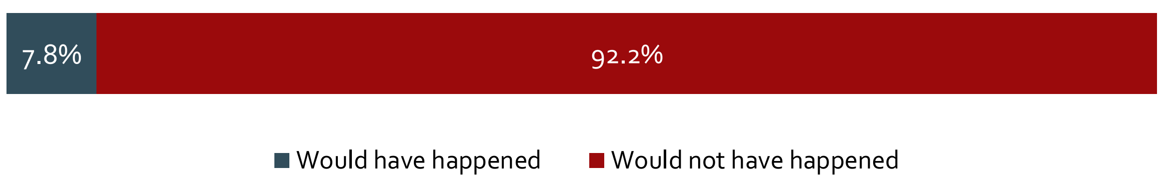


Source: SPI's Additionality Survey (n=12)

When asked specifically about the importance of the incentive when deciding to undertake production in Norway (on a scale of 1-10, where 0 indicates it was not at all a factor and 10 indicates that it was the only factor), the average ranking (as a weighted average relating to expenditure) was 8.13, meaning **most production companies find the incentive to be a critical factor when deciding to shoot in Norway**.

Without the incentive, a significant amount of valuable expenditure would not have happened in Norway. Production companies were asked to estimate to the nearest 10% the proportion of the project that would have been made in Norway in the absence of the incentive (where 100% indicated the exact same expenditure in the country, and 0% indicated no expenditure would have been made in the country at all). The results indicated that only an estimated 7.8% of the current expenditure would be likely to happen in the country without the incentive. **This 92.2% can be thought of as additional activity that can be attributed to the incentive** (Figure 19).

Figure 19 – Expenditure Estimates in the Absence of the Incentive



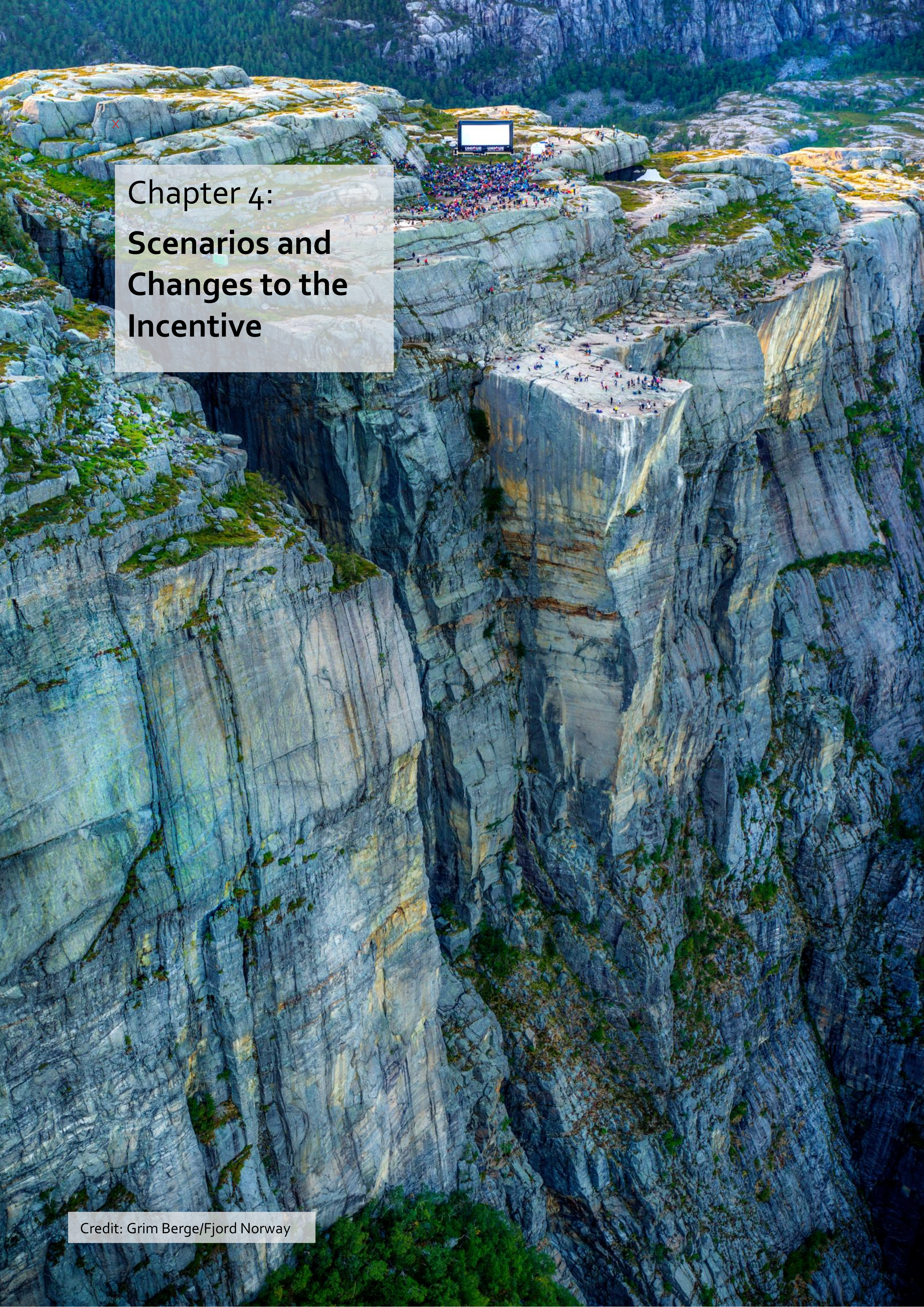
Source: SPI's Additionality Survey (n=9)

The survey (and individual consultations) looked to understand what would happen to Norwegian expenditure if there was more annual incentive available. For this, the survey asked respondents (both domestic and international) how much they would increase expenditure in Norway by 2025 if this were to happen. The results indicated that **75% of respondents would bring more production to Norway if the annual incentive amount was increased**, and that the average increase in expenditure, weighted by current expenditure, would be an additional 37%, although the number of respondents answering this question mean that these results should only be treated as illustrative.

Issues related to production finance were the main reasons given why a production did not go ahead in Norway. The most common reason being the incentive was not available to them, with the second most common being a lack of other types of finance in Norway. This was reflected in consultations.

Chapter 4:

Scenarios and Changes to the Incentive



Credit: Grim Berge/Fjord Norway

4. SCENARIOS AND CHANGES TO THE INCENTIVE

4.1. Introduction

To undertake the cost-benefit and economic impact analysis, it is necessary to develop a set of policy scenarios. The Study's Contract Notice identified a number of options to be assessed and these options have been further developed and refined through the research period. The four policy options/scenarios are:

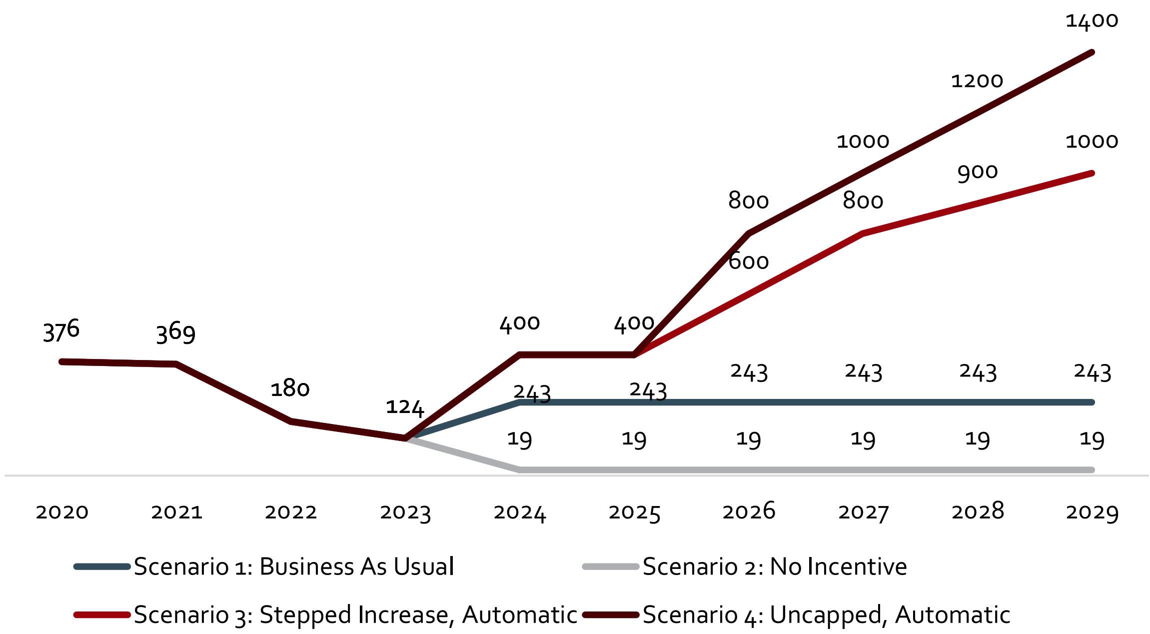
- Business as usual (i.e., no change)
- No incentive
- Stepped increase, automatic incentive[17]
- Uncapped, automatic incentive.

In addition to the policy scenarios, the Study's Contract Notice identifies three potential changes in the design of the incentive – boosting green production, preferential treatment for drama series and supporting regional production activity – to be tested as part of the study. This chapter covers both the development of scenarios and the evidence gathered on the potential impact of the change in the incentive design.

4.2. Scenarios for Incentive Change and Resulting Expenditure

The projected expenditure in Norway under each scenario is summarised in Figure 20. The assumptions underpinning the projections are set out below.

Figure 20 – Projected Expenditure Under the Four Scenarios, 2020-2029, NOK million (real, 2002 prices)



The policy change is modelled to start in 2024. The trajectory of incentive payments and associated production expenditure is the same until 2024. The 2020 figure is the actual incentive payments and associate expenditure. For the years 2020-2022, the incentive payments are estimated to be 75% of the allocated budget (which is the relationship between the actual payments to the allocation for the period 2016-2020). The expenditure associated

[17] Including no annual application deadline with applications being on a 'first come, first serve' basis once they have reached a minimum eligibility threshold.

with the incentive payments is estimated to be 75% of the forecast estimated from successful applications recorded by Norwegian Film Institute (NFI) on application.

For 2023, the expenditure is an estimate based on an assumed refund rate[18] of 25%, with the published budget allocation of NOK 41 million.

4.2.1. Scenario 1: Business as Usual

The business as usual scenario assumes that the incentive rate will stay at 25% and the annual process of application and the selection criteria will be the same. It also assumes that only 75% of the incentive allocation is claimed for any particular year (reflecting the payment to allocation proportion of existing scheme).

As with the current government funding conditions, there will be a limit on the available allocation of funding, which will be determined annually using a calculation that incorporates the national funding allocated by the parliament and the transfer of unspent funding from previous year, deducting outstanding commitments. As with the current system, it is difficult to accurately predict the funding available in any one year given changes in unspent funding and outstanding commitments each year. Therefore, it is assumed that the funding available for the years 2024-2029 will be an average of the annual allocation between 2020 and 2023 and the actual incentive payments are 75% of the allocated.

4.2.2. Scenario 2: No Incentive

This scenario assumes that after 2023, the incentive programme is removed, and no significant international or co-productions are supported by a national incentive scheme.

A 2014 report by Oslo Economics[19] published before the introduction of the incentive indicated that after a long period of growth in the Norwegian film and television industry, there had been a recent tendency towards a small decline. It found that employment in the Norwegian film and TV production industry is in relative decline, growing slower than employment across the whole economy. Oslo Economics concluded that 'the overall impression is that the film and TV industry from 2011 is not a growth industry'. It argues that this is for various reasons including the lack of incentive, with some Norwegian film and television productions moving abroad to jurisdictions with incentives. Since the introduction of the incentive scheme in Norway, other competitor countries (such as Sweden, Czech Republic, Iceland, Austria, Estonia and Poland) have introduced or upped their incentive programme, making the international landscape more competitive.

As part of the current study, an additionality survey was undertaken (see chapter 3.7). Evidence from this and consultations strongly indicate that without the incentive, a relatively small amount of film and television production activity and expenditure would occur in Norway. Respondents to the survey indicated that just 7.8% of production expenditure would have happened in Norway without the incentive (see chapter 3.7).

Both the pattern of decline before the incentive, increased competition from other jurisdictions with incentive and the results of the additionality survey, indicate that Norway would be unlikely to attract significant international productions without the incentive and there would be limited amount of internationally financed production happening without the incentive.

The no incentive scenario therefore uses the results from the additionality survey and forecasts that 7.8% of the 'business as usual' production expenditure occurs under the no incentive

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[18] Refund or intervention rate calculates the amount of incentive that a production can receive based on the budget. A refund rate of 25% means that incentive payment would be 25% of the total eligible budget.
[19] *Investigation of incentive schemes for film and TV production*. Oslo Economics, 10th April 2014. Accessible at: https://www.regjeringen.no/no/dokumenter/Utredning-av-insentivordninger-for-film--og-TV-produksjon/id757435/

scenario. This reflects the anticipated loss of international and significant co-productions if the incentive was removed.

4.2.3. Scenario 3: Stepped Increase, Automatic Incentive

The original contract notification asked this study to model a 'gradual increase' in the incentive. To determine an appropriate level for this, SPI reviewed the incentive budgets/allocations for a range of countries which are competing with Norway for international productions (Table 1). Note that these annual budgets are commonly referred to as 'caps', but as set out previously the cap in Norway is different, therefore SPI has used the term 'budget' to avoid confusion.

In the cases of Ireland and Iceland, for example, the incentive is uncapped. This means that there are no constraints on production expenditure from the incentive, meaning that applications are automatic (except for some eligibility checks) and the budget for the incentive is determined by demand for the incentive rather than budgetary constraints.

This comparison indicates that **the Norwegian budget for the incentive in 2023 is significantly smaller than all the countries with production incentives** and therefore requires substantial increases to be in line with its competitor countries (Table 1). In addition to this, there is evidence that the current Norwegian incentive is highly oversubscribed (see Figure 16), indicating unmet demand for the incentive. For example, applications in 2021 were for NOK 292.1 million, nearly three times the annual budget allocation for that year.[20]

Table 1 International Comparison of Production Incentive Annual Budget and Production Expenditure

Country	Annual Incentive Budget (US$)	Production Expenditure (US$)	Production Expenditure per capita (US$)
Czech Republic	$32 million	$289 Million in 2021	$27.01 per capita in 2020
Denmark	No production incentive	No data available	No data available
Estonia	$5.8 million (2022 Budget)	$15.3 million in 2021	$11.50 per capita in 2021
Finland	$9.3 million	No data available	No data available
Germany	$170.5 million	$804 million in 2021	$9.66 per capita in 2021
Iceland	No cap	No data available	No data available
Ireland	No cap	$570 million in 2021	$112.13 per capita in 2021
Netherlands	$18.8 million	$196 million in 2021	$11.24 per capita in 2021
New Zealand	No cap	$638 million in FY20/21	$124.53 per capita In 2021

[20] Norwegian Film Institute. Accessible at: https://www.nfi.no/eng/news/2021/here-are-the-applicants-for-the-incentive-scheme

Norway	$4.13 million (2023 available budget)	$35 million in 2020[21]	$6.51 per capita in 2021
Poland	$44.3 million	No data available	No data available
Sweden	$8.9m	No data available	No data available

Source: SPI's Global Incentive Index, November 2022

Table 1 also demonstrates how the expenditure per capita figure is significantly lower in Norway than in competitor markets. While a relatively crude measure, this does suggest an opportunity for Norway to capture more internationally mobile production activity, as well as retain Norwegian productions and talent.

Strong evidence from consultations and the additionality survey (see chapter 3.7) also supports the hypothesis that there are productions not coming to Norway due to the small amount of production incentive available and that lifting the available budget would increase production levels. In addition, it would encourage those Norwegian producers who are currently moving to other jurisdictions to access more predictable incentives to repatriate production to Norway.

When incentive budgets have been increased in other jurisdictions, they usually rise by a rounded figure as a stepped increase, rather than a compound percentage increase. For example, Hungary's incentive budget has risen from HUF33bn (2019) to HUF44bn (2022) recently. Similarly, the German Motion Picture Fund has also increased its incentive budget in a stepped manner. This is partly to provide significant signals to the industry and to rapidly address unmet demand for the incentives. This is in part to aide communication of the scheme to industry and to make the incentive easier for large international companies to understand and make quick comparisons to other countries.

With agreement from the client, SPI therefore has chosen to model a stepped increase in the budget available with the introduction of an automatic incentive, in line with standard international practice. The assumptions for this scenario are:

- The annual incentive payments would step up to the NOK 100 million mark in 2024, which is NOK 40 million more than the average estimated incentive payments from 2020 to 2023 and in line with what the industry assumes is the annual budget allocation
- The following year (2025), the incentive payments continue at NOK 100 million. After that the annual incentive payments would increase by NOK 50 million to NOK 150 million in 2026, NOK 200 million in 2027, NOK 225 million in 2028 and NOK 250 million in 2029
- It is assumed that the full budget allocation is assigned and spent, and that the Norwegian expenditure is four times the incentive value, based on the 25% intervention rate
- The incentive is automatic in that all productions which reach a basic minimum requirement (such as minimum qualifying spend amount) are eligible and incentives are distributed on a first come, first served basis until the allocation is used up, rather than an annual deadline. This provides more transparency and certainty for production companies. There have been some teething issues when automatic incentives have been introduced, including in Sweden where the incentive was met with such high demand that the scheme had to close one day after opening[22]. However, the experience from many jurisdictions around the world is that after initial issues around the application process and the allocated budget level are overcome, automatic incentives are attractive to the industry and successful in stimulating growth.

[21] Expenditure of International and Co-productions funded by the incentive

[22] *Sweden fishes out SEK 100 million in first round of 25% cash rebate.* Nordisk Film & TV Fond, 10 November 2022. https://nordiskfilmogtvfond.com/news/stories/sweden-dishes-out-sek100-million-in-first-round-of-audiovisual-production-rebates (accessed 15 February 2023)

- There is a commitment from government to a trajectory of growth in the incentive, enabling the private sector to plan investment in infrastructure and undertake other industry development activities. The balance of evidence suggests that industry capacity would not be an issue given the pace of the suggested increase and the lead-in time suggested.

4.2.4. Uncapped, Automatic Incentive

There are many examples around the world of uncapped schemes, including in Ireland, Iceland, Spain, and Austria[23][24]. These programmes do not have an upper limit on the budget for the incentive and release incentives to all productions which reach a basic eligible threshold. They are paid in arrears after the production has occurred. This type of incentive provides greater certainty for productions but increases the uncertainty of the overall cost of the incentive programme to policymakers.

Under an uncapped scheme, demand for the incentive would increase substantially. An uncapped automatic incentive would provide a strong signal to industry that Norway is 'open for business' to international productions. It would improve predictability for producers and enable them to plan for production in Norway long-term, raising the production activity within Norway and creating a virtuous circle as the sector becomes more aware of what the country has to offer.

Production activity levels would be limited by other constraints, in particular by workforce, studio and supply chain capacity and the cost of producing in Norway. There is evidence from elsewhere in the world that if the industry sees an uncapped incentive scheme as stable, over the longer term private and public sector investment is likely to grow the capacity of the industry. Consultations for this study reinforce this view for the Norwegian industry, including industry suppliers with growth plans in place pending an increase in the incentive budget. Examples of this include the growth and investment in production hubs in New Mexico, aligned investment in workforce development in Ireland and studio expansion in the UK.

SPI's view is that while the Norwegian industry could adjust relatively quickly to a modest increase in incentive level, an uncapped scheme would see the capacity constraints holding back any immediate exponential growth. Similarly, this could lead to a cost inflation, which would deter productions from overseas and create problems for domestic production. Assumptions for the uncapped scenario include:

- Production expenditure grows in line with the stepped increased until 2026. In 2025, the uncapped scheme attracts approximately NOK 400 million, rising to NOK 1.4 billion by 2029
- Between 2019 and 2022, the average Norwegian spend per incentivised production was NOK 91 million. This scenario assumes that by the end of 2029, around 12 additional productions would be attracted to Norway compared to the business as usual scenario.

[23] Austria uncapped as of 2023
[24] Some have caps on the size of individual projects being funded.

4.2.5. *Summary of Projected Expenditure and Incentive Payments for each Scenario*

Table 2 Projected Expenditure of Incentivised Productions, NOK million, 2020-2029 (2022 prices)

Year	Scenario 1: Business as Usual	Scenario 2: No Incentive	Scenario 3: Stepped Increase	Scenario 4: Uncapped, Automatic
2020	376	376	376	376
2021	369	369	369	369
2022	180	180	180	180
2023	124	124	124	124
2024	243	19	400	400
2025	243	19	400	400
2026	243	19	600	800
2027	243	19	800	1000
2028	243	19	900	1200
2029	243	19	1000	1400

Table 3 Projected Annual Incentive Payments, NOK million, 2020-2029 (2022 prices)

Year	Scenario 1: Business as Usual	Scenario 2: No Incentive	Scenario 3: Stepped Increase	Scenario 4: Uncapped, Automatic
2020	105	105	105	105
2021	79	79	79	79
2022	42	42	42	42
2023	31	31	31	31
2024	61	0	100	100
2025	61	0	100	100
2026	61	0	150	200
2027	61	0	200	250
2028	61	0	225	300
2029	61	0	250	350

4.3. Policy Levers for Addressing Additional Objectives

4.3.1. Introduction

In addition to the modelling of the four scenarios above, SPI explored and tested with industry and policymakers the potential of three design changes to the incentive. Each of these design changes are focused on maximising spillover benefits (or minimising spillover costs) of the incentive. For each of these, SPI has considered the possible policy mechanism, the pros and cons of implementation and the likely impact on production levels. These are listed below:

1. **Boosting green production.** The incentive would give preferential treatment to applicants who demonstrated and evidenced a commitment to environmentally sustainable practice during their production

2. **Regional spend**. The incentive would give preferential treatment to applicants who demonstrated and evidenced a production expenditure and opportunities in particular regions of Norway
3. **Drama series.** The incentive would give preferential treatment to drama series applicants.

When it comes to designing preferential treatment or prioritising a certain type of production activity, the three main levers are:

- A higher incentive rate (often called 'an uplift')
- Preferential treatment in the selection process (e.g. exemptions or specific budget allocations)
- Making compliance a requirement for funding.

4.3.2. Boosting Green Production

Norway is recognised, domestically and internationally, as a leading environmentally sustainable and conscious nation. Under the Paris Agreement on climate change, Norway has made a commitment to reducing greenhouse gas emissions by at least 50%, and potentially to 55%, by 2030 as compared to 1990. Its target is to be a low-emission society by 2050. This climate policy is closely linked with EU climate policy, because of Norway's EEA Agreement and it will co-operate with the EU to meet the 2030 target.

The key driver of government policy is the Norwegian Ministry of Climate and Environment's *Action Plan*.[25] The Plan notes that 'the polluter pays principle is a cornerstone of the Norwegian policy framework on climate change. Generally, policy instruments should ensure that reductions in emission are implemented in a way that leads to the lowest cost to society'. Similarly, the Norwegian Ministry of Trade, Industry and Fisheries' *Green Industrial Initiative Roadmap*[26] has its goal 'to make Norway a green industrial and energy giant based on our natural resources, knowledge environments, industrial expertise and historical advantages.' It should be noted that the vast majority of Norway's electricity is from renewable sources, therefore, the Norwegian film and television sector is also powered largely by green sources, including hydroelectric and wind. This is in contrast to competitor locations (many in eastern Europe) which have a much higher dependence on fossil fuels.

SPI's review of Norway's environmental policies found the focus is on reducing industries that have a high environmental impact, and further developing those industries that can make a positive environmental contribution, such as the offshore wind industry, the maritime industry, and the forest industry.

In the cultural sector there is a MoU between the Ministry of Culture and representative of the cultural sector with the shared objective of developing a partnership of climate preservation. Currently action on climate is not targeted to specific sectors within the cultural industry and as such there is not a specific sustainability policy for the film and television sector. However, there is increasing awareness within the Norwegian film and television industry itself, with the use of the Norwegian Green Producer Tool, a best practice guide in ecological practice, which includes recycling props, sets, minimising travel and using renewable energy.

The climate crisis and other environmental concerns are becoming increasingly important for the global screen sector. Such issues have become more visible, supported by a sector

[25] *Norway's National Plan related to the Decision of the EEA Joint Committee*. Norwegian Ministry of Climate and Environment, 25th October 2019. Accessible at: https://www.regjeringen.no/en/dokumenter/norways-national-plan-related-to-the-decision-of-the-eea-joint-commitee-no-269-2019-of-26-october-2019/id2684252/

[26] *The Green Industrial Initiative*. Norwegian Ministry of Trade, Industry and Fisheries, 7th September 2022. Accessible at: https://www.regjeringen.no/en/dokumenter/roadmap-the-green-industrial-initiative/id2920286/

workforce which express support for 'greening' the industry. The rising profile has led to a myriad of different approaches and tools for improving the environmental credential of film and television production.

The European Film Commissions Network feature over thirty different tools, measures, projects and approaches for 'green filming', covering individual countries (e.g., a Manual of Green Filming for the Czech industry), to pan-Europe programmes and platforms[27]. In the United States, the Green Production Guide[28] is a partnership of many of the large studios which provides tools, resources and access to suppliers that help producers reduce their environmental footprint. Netflix has a public 'Net Zero + Nature'[29] commitment which includes production as well as its streaming and content delivery. In the UK the Albert Sustainable Production Certification aims to unite the production sector around a strategy to achieve zero-carbon, zero-waste.[30] There are similarities to all these approaches, although there is not full convergence on the approach or even a definition of 'green production'.

Despite the activity in other areas, there are **few examples globally of using film and television incentive policy to improve the environmental practices of productions or to attract green productions**. Where green production is included in incentive design, it is in a light-touch way. The Norwegian film and television incentive is already one of the few incentives globally with environmental sustainability within its selection terms; applicants are required to provide a sustainability plan as part of the incentive's cultural test. Other examples include Thailand, where applications can be nullified with immediate effect if the production is determined to have created a negative impact on the environment; Germany, where applicants must include a carbon footprint audit, compiled using a suitable carbon footprint calculator and Austria, where the new incentives offer a 5% uplift for those meeting environmental standards.[31]

There are **practical challenges in implementing preferential treatment (in terms of scoring or uplifts) for green production**. The first is defining what is meant by 'green production', for instance it could be in terms of carbon emission per production day or per unit of expenditure. The second is determining the right level to set the standard at; too low and it will not lead to change, and if it is too high will put off producers. The third is ensuring data is collected and monitored by the productions. Currently there is no standardised carbon calculator data for productions in Norway (incentivised or otherwise), which means it is difficult to design the appropriate intervention. Increasing the complexity of the requirements around green reporting could make the scheme less attractive to international productions.

Overall, **there is a clear trend of increasing attention to environmental factors and SPI predicts this becoming more important in the years to come**, as governments and businesses work towards the Paris Agreement targets. It is a central area of policy that the MOC should be considering in the longer term. A commitment to green production may represent a useful marketing advantage when attracting productions from global streamers increasingly concerned with environmental impact. However, at this time, **SPI does not advise implementing a green production clause within the incentive, an uplift or preferential treatment. This is because of the complexities in designing an effective green production incentive policy, as well as the risk of deterring applications based on overly complex requirements for producers**. SPI recommend first collecting better evidence of the current

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[27] European Film Network. Accessible at: https://eufcn.com/green-filming/
[28] *Green Production Guide*. Accessible at: https://www.greenproductionguide.com/
[29] *Net Zero + Nature: Our Commitment to the Environment.* Netflix, 30th March 2021. Accessible at: https://about.netflix.com/en/news/net-zero-nature-our-climate-commitment
[30] Albert. Accessible at: https://wearealbert.org/
[31] Austria's incentive uplift came into effect on 1st January 2023, so effect on demand and achieving environmental outcomes cannot yet be assessed.

environment impact of the sector, ensuring national environmental regulation is appropriate for the industry and using other methods (such as funding, training, and guidance) to build a strong offer around green production for the international industry.

4.3.3. Regional Development Focus

Regional development and distribution of economic activity and population is a key focus of Norwegian national and EEA economic policy. The underlying rationale is to ensure effective public services in the regions, as well as support business activity and residency (and population stabilisation) across Norway, especially outside the greater Oslo region and within rural areas.

The transfer of decision-making powers from national to regional institutions has long been on the political agenda. This was amplified with the 2016 White Paper on regional policies.[32]

This is reflected in Norway's film and television sector by the presence of several regional film commissions, film centres and Regional Film Funds, in addition to its national film and television agencies, such as the Norwegian Film Institute (NFI) and the Norwegian Film Commission. There are five regional film commissions, covering eastern Norway, western Norway, Trøndelag, northern Norway, and Oslo. Each of these film commissions facilitates production in their respective regions, and work in collaboration with the national film commission.

The Regional Film Funds and regional film commissions have developed gradually, driven by local and regional initiatives.[33] They have different profiles, but their main function is the training and management of financial support to makers of documentary and short films and data games. The centres are co-financed by the NFI and regional councils. The Regional Film Funds are financed by the national parliament, but there is requirement for regional co-financing for the projects/films they invest in.

In select few cases, the Regional Film Funds have participated in projects with financing from the incentives scheme, however this is rare.

Currently incentivised production is concentrated in location shoots in west of Norway, and through businesses based in the Oslo region. The location of film and television businesses broadly reflects this pattern. **Consultation evidence indicates that much of the rest the country** (including the northern and Trøndelag parts of Norway) **is not seeing the benefit of production expenditure from large incentivised international production and/or co-productions**. This pattern reflects the dominance of the Oslo based industry, as well as limitations in infrastructure, crew, and suppliers in other parts of the country, as well as higher cost base in some other areas, less public sector support and/or connections within an area.

There is **no comprehensive data currently available on production and related expenditure in regional locations**. Therefore, it is difficult to assess the current pattern and change over time in the pattern of regional spend. SPI recommends that NFI, in partnership with the regional film commissions and Regional Film Funds, track regional expenditure from incentivised productions to inform future policy decision-making.

It is within this context, that the MOC commissioned SPI to assess the potential for the incentive to increase regional film and television production expenditure. Supporting regional development within the film and television sector is an appropriate and justifiable policy objective.

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[32] *Urban sustainability and rural strength – in brief — Meld. St. 18*. Government of Norway, 17th February 2017. Accessible at: https://www.regjeringen.no/no/dokumenter/meld.-st.-18-20162017/id2539348/

[33] *"For eon neve dollar mer" Eni evaluering av den statlige støtten til regionale filmfond. Ryssevik*. Justin and Turid Vaage 2011. Accessible at: https://www.ideas2evidence.com/nb/publications/evaluering-av-regionale-filmfond

There is some precedence for incentives encouraging regional production activity elsewhere in the world. In Ireland, for instance, the national incentive offers an additional 2% 'uplift' for projects substantially produced in the regions outside Dublin/Wicklow and Cork City and County. This has proven popular, although it is too early to determine overall effectiveness and regional impact and the regional uplift has been combined with other regional funding mechanisms. Similarly, the Ireland's regional uplift is built on an uncapped incentive policy that has been key in developing the overall Irish industry into the strong position it has today. Croatia currently has a regional uplift which is being phased out[34]. Arguments in favour of preferential treatment for regional production include levelling the playing field, as regional production can incur higher costs (via transport and accommodation requirements) and also enabling regional areas to benefit from the workforce development and infrastructure investments that emerge from a growing industry.

However, **on balance, prioritising or providing an additional incentive to regional production would not be advisable at this time**. First, it is unlikely that a relatively small incentive uplift is likely to sway production location decisions significantly. The most important decision factor for international productions is locations (see chapter 3.7), while the most critical limiting factor for international production is their ability to access the incentive. Therefore, tweaks within the incentive rate are unlikely to influence production decisions. Second, there are supply and capacity constraints within the regional industries. The crew-base and supply chains would need to be further developed before it could facilitate large international productions in a sustainable way.

SPI's assessment is that prioritisation of regional spend in Norway should only be considered once the industry is in a stronger position supported by a larger incentive budget allocation.

Film and television tax incentives are not the only way to grow regional industries. In the UK, where there is an established, uncapped incentive, there has been significant growth in regional production in hubs such as Bristol, Leeds, and Cardiff, despite regional spend not being given preferential treatment within the incentive structure. The success here lies in the rapid expansion of production around London and the southeast of England (supported by a stable and significant incentive), rippling out into the regions. Accompanying policies for workforce and infrastructure investments in regional hubs and via sector development organisations like the British Film Institute (BFI), has also contributed. Another model is found in Finland and Australia which has a national incentive with no regional uplift but there are several regional funds which offer top-up incentives.

In Norway, there is an existing structure of Regional Film Funds, film centres and film commissions, which are well-positioned to make targeted investments into production (including top-up incentives), crew training and infrastructure to address specific issues within the local industry. This devolution of power and resources to regions aligns with the Norwegian approach to regional policy making and SPI's assessment is that this should be the primary mechanism for regional development in the sector at this stage.

4.3.4. Drama Series

There is precedence for preferential treatment for drama series in production incentives in other jurisdictions. The underlying arguments for these preferential measures relate to enhanced spillover effects compared to feature films. The justification is that the production of a drama series is more likely to establish itself within a location for an extended time,

[34] The first Kvarner film meetings: HAVC proposes strengthening the Incentive Program in favour of domestic production; MKiM welcomes the idea. Croatian Audiovisual Centre, 4th April 2022. Accessible at: https://havc.hr/infocentar/novosti/prvi-kvarnerski-filmski-susreti-havc-predlaze-osnazivanje-programa-poticaja-u-korist-domace-proizvodnje-mkim-pozdravlja-ideju

shooting multiple episodes and series based around a establish story or location – rather than for a few scenes of a feature film. This extended production period means continued production activity and related expenditure. Similarly, local cast and crew are given the opportunity to be more involved in the whole value-chain in series than in features. In addition, globally, much of the recent growth in the industry has been driven by high budget drama series, with jurisdictions looking for ways to capitalise on this growth.

New Mexico, which contains one of the top production hubs in the United States (and attracted over $850 million in production expenditure in fiscal year to June 2022[35]), is an example of preferential treatment for drama series. Under the New Mexico incentive, series television and stand-alone pilots receive an additional 5% uplift (in addition to the 25% base rate) on production expenditure. This adds to the suite of incentives aimed at large producers and global streamers who are investing in large scale developments in New Mexico (e.g., Netflix and NBCUniversal). They are attracted by the production incentive (which in some cases in uncapped) and aligned incentives to invest in studio construction.

There are reasons to question the policy aim of supporting drama series over feature film and whether it will effectively lead to the desired outcome of increased production activity and more spillover effects in Norway. First, arguably it is repeat production, rather than the format that creates wider spillover effects. Norway has successfully attracted repeats from high profile feature films, including the *Mission: Impossible* franchise. It may be a more appropriate policy to use an Icelandic model in which productions that stay longer and use more local resources (regardless of whether it's a drama or a feature) receive a higher uplift. Second, a preference for one format over another could adversely affect the industry's ecosystem. The Norwegian industry is dynamic and evolving rapidly, setting up preferential treatment for one format over another may inherently limit competitiveness of the incentive in the international market, as well as limit cross format innovation opportunities. Similarly, the feature film industry across Europe has been struggling compared to series, so such a policy could potentially further emphasise these challenges.

In the absence of any preferential treatment, the incentive is already attracting and enabling drama series to be produced in Norway, with an even split between feature film and drama series being supported by the Norwegian film and television incentive. Between 2016 and 2022, the incentive supported 13 feature films and 12 drama series. This aligns with incentive payments, where half (51%) of the incentive payments go to feature films and half (49%) to drama series. The split between format varies between years as shown in Figure 15 in chapter 3.5. In fact, in recent years there has been more international drama series being funded by the programme, with the NFI recently announcing that two of the five productions funded for 2023 are drama series – *Succession* and *The Last of Us*. This bucks the trend noted by Oslo Economics in their 2014 assessment of the incentive scheme.[36]

Therefore, overall, **prioritising drama series production is likely to have a limited impact on overall production expenditure and the spillover benefits.** Expenditure by incentivised international drama productions is already increasing without any preferential treatment and a raise in the overall incentive budget allocation would allow more drama series to be shot in the country without additional complexity for incentive applicants.

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[35] *'Cleaning Lady,' Netflix, Other Big Players Keep New Mexico Production on Growth Curve*. Variety, 29th November 2022. https://variety.com/2022/film/spotlight/new-mexico-1235444573/

[36] *Utredning av insentivordninger for film- og TV-produksjon*. Oslo Economics, 10th April 2014. Accessible at: https://www.regjeringen.no/no/dokumenter/Utredning-av-insentivordninger-for-film--og-TV-produksjon/id757435/

Chapter 5:

Economic Impact Analysis (EIA)

Credit: Francisco Munoz

5. ECONOMIC IMPACT ANALYSIS

5.1. Overview of Methodology

Economic Impact Analysis uses an Input-Output (I-O) approach. It uses estimated and forecast production expenditure data to drive a specially developed economic model. The model uses national data sources from Statistics Norway, the national statistics authority in Norway and from OECD, to model the interconnections between the film and television production industry and other industries, and the relationships between key metrics, including as output, Gross Value Added ("**GVA**") and Full-Time Equivalent ("**FTE**") jobs.

The methodology and the results presented here builds directly on the work undertaken in Norway by SPI, updating, and improving the method used. The methodology is based on a large number of sector studies SPI has undertaken around the world and it is consistent with international best practice, including studies in the UK, many US states, New Zealand, Australian and within Europe. See chapter 15.2 for examples. In addition, it is the approach recommended by Ernst & Young in its *Best Practice Guide for Evaluating the Effectiveness of State Film Tax Credit Programs*[37].

The economic impact methodology does not directly feed into the Cost-Benefit Analysis (chapter 10) as many of the economic benefits identified here cannot be included in a CBA due to assumptions about the substitution of labour. Nonetheless, the results presented in this chapter are included as part of the suite of evidence for policymakers and also to provide an approach that is consistent with practice around the world.

To calculate the total economic impact, SPI calculated and summed the following three effects:

- **Direct impacts** of the economic effects in terms of the output, value created (GVA) and jobs within the film and television firms resulting from production expenditure
- **Indirect impacts** of the economic effects in terms of the output, value created (GVA) and jobs observed in sectors that supply goods and services into the film and television production sector
- **Induced impacts** of the economic effects in terms of the output, value created (GVA) and jobs supported because of the wage effects of those working in the film and television production sector.

The approach is based on the estimated forecast expenditure in relation to four different scenarios, as detailed in chapter 4.2:

- Scenario 1 – Business as usual
- Scenario 2 – No Incentive
- Scenario 3 – Stepped increase, automatic incentive
- Scenario 4 – Uncapped, automatic incentive.

As with any study of this nature there are limitations to the methodology and the practical application of the methodology. In addition, Input-Output modelling relies on a static model which assumes no supply side constraints, constant return to scale and a fixed input structure. There are also some gaps in information and there may be some sensitivity around some of the assumptions used such as the self-reported nature of the additionality survey.

A full detailed methodology can be found in chapter 12, Appendix 1.

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[37] *Evaluating the Effectiveness of State Film Tax Credit Programs.* Ernst & Young. https://deadline.com/wp-content/uploads/2012/05/motion-picture-assoc-film-credit-study__120510071748.pdf

5.2. Impact of Incentive 2020 to 2023

To date the Norwegian film and series incentive has had a reasonable economic impact regarding the main economic measures and a strong Return on Investment.

The results[38] presented in this chapter are the combined impact of the incentive for the four years between 2020/21 and 2023/24 unless otherwise stated.

Between 2020/21 and 2023/24, the incentive in Norway has contributed a total of NOK2.1 billion in economic output (Figure 21). This includes NOK967 million in direct output, NOK 638 million in indirect and NOK 498 in induced output. In terms of GVA, the incentive contributed a total of NOK 848 million (Figure 22). This is broken down into NOK 390 million of direct GVA, NOK 257 million in indirect and NOK 201 million in induced GVA.

Figure 21 – Output Supported by the Incentive 2020/21 to 2023/24 (NOK million, real)

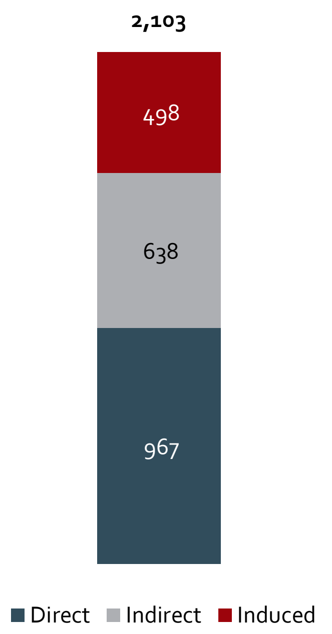
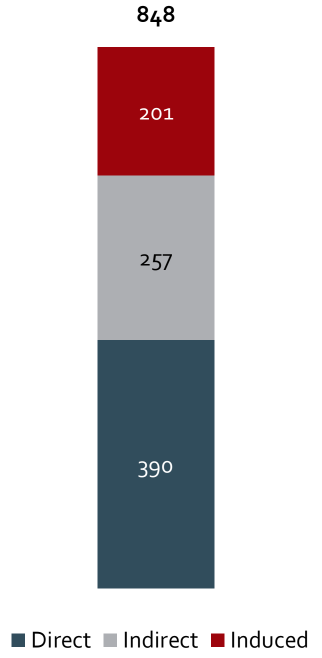


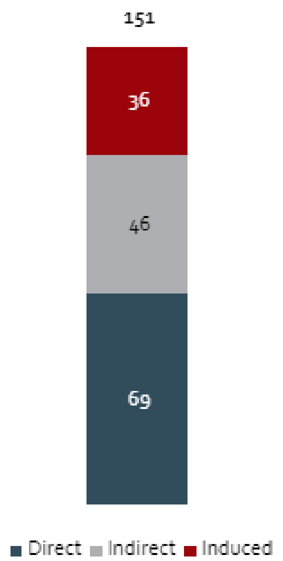
Figure 22 – GVA Supported by the Incentive 2020/21 to 2023/24 (NOK million, real)



The incentive is responsible for supporting 69 direct FTE jobs in 2023/24, 46 indirect and 36 induced FTE jobs (Figure 23).

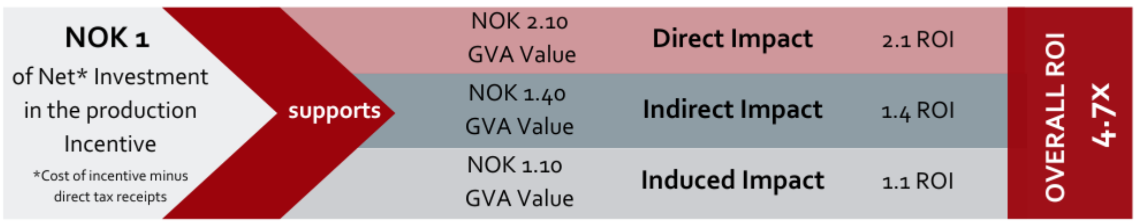
[38] Figures presented in this chapter are considered "net" values, where additionality has been considered when analysing the data.

Figure 23 – FTE Jobs Supported by the Incentive 2023



The ROI is a measure of how much economic value (or GVA) is created per NOK 1 million of investment in the production incentive[39]. The ROI figures displayed in Figure 3 show the substantial GVA ROI of the current incentive with each NOK 1 million invested; a return of NOK 2.1 million in direct GVA, NOK 1.4 million in indirect GVA, and a further NOK 1.1 million in induced GVA, creating a combined ROI of 4.7 (figures do not sum due to rounding).

Figure 24 – Economic Return on Investment



Numbers may not sum due to rounding

5.3. Impact of Scenarios: Output

An increase in the annual budget for the incentive will have a notable uplift in the total output from film and television productions. As shown in Figure 25, a stepped increase in annual budget (i.e., scenario 3) will create nearly three times the level of total cumulative output for the years 2024-2029, creating NOK 8,920 million in output, compared to the business as usual option (i.e., scenario 1) of NOK 3,170 million. In the case of an uncapped, automatic scheme (i.e., scenario 4), SPI calculates that there will be over x3.5 the total cumulative output over the same period (compared to scenario 1), creating NOK 11,310 million in output. In the absence of an incentive (i.e., scenario 2), the total cumulative output for the same period will be significantly less, at NOK 250 million. Figure 25 also illustrates that direct output contributes just less than half the total impact.

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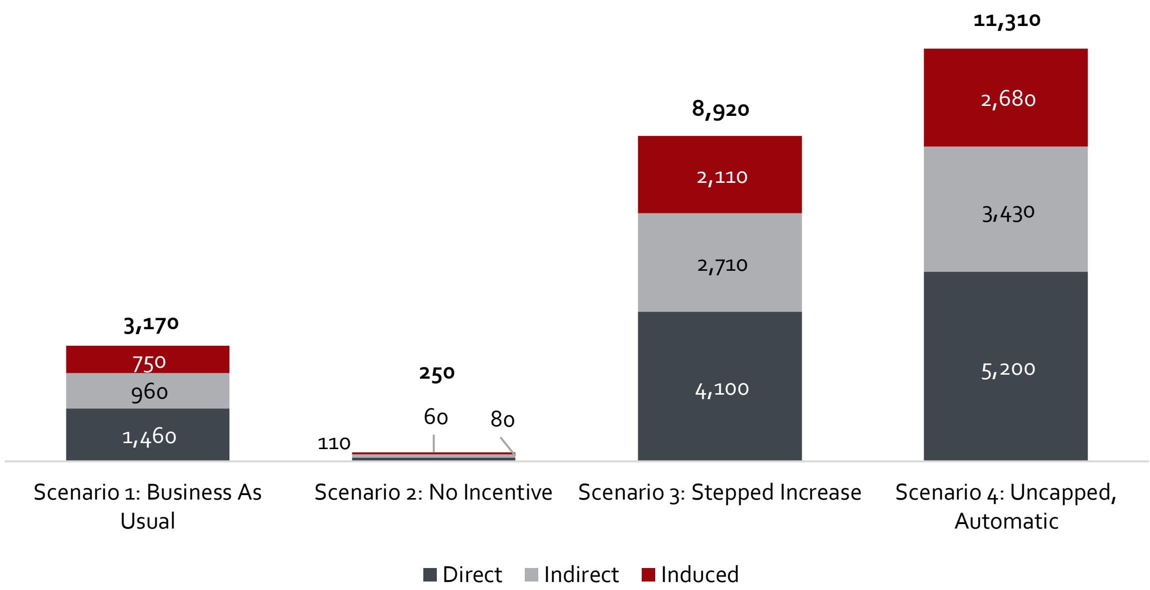
[39] The 'investment' is estimated to the total cost of the incentive payments, minus the direct tax receipts which result from the production activity.

Table 11 in the appendix (chapter 12.2) provides a breakdown of the cumulative output for each scenario by year.

Figure 25 – Cumulative Output, 2024-2029, NOK million (2022 prices)

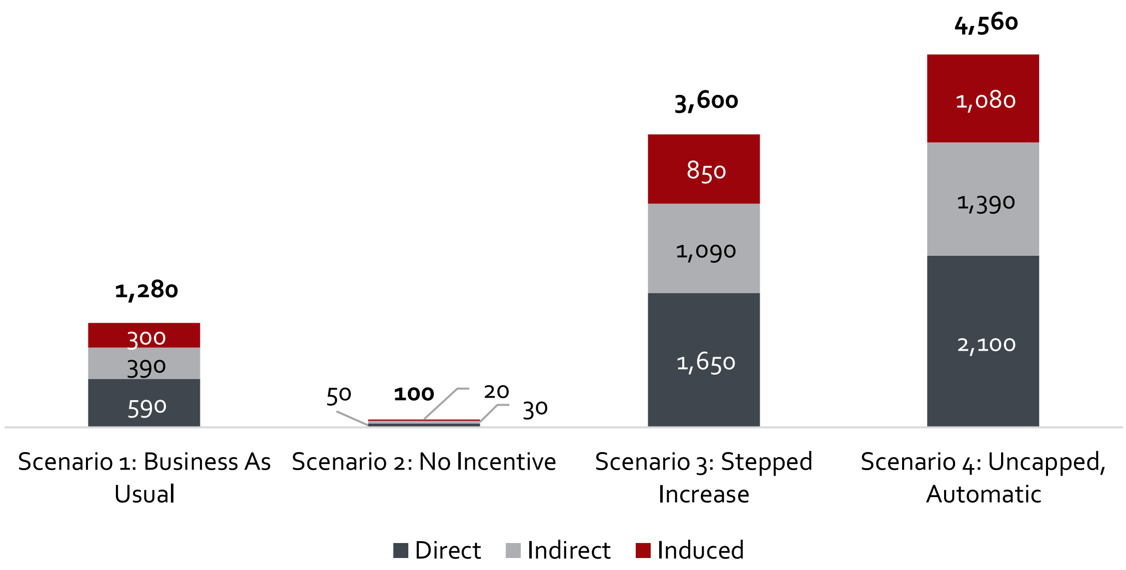


5.4. Impact of Scenarios: GVA

GVA associated with incentivised productions would be significantly higher with an uplift in the annual budget for incentives. As shown in Figure 25, a stepped increase in annual budget (i.e., scenario 3) will create nearly three times the level of total cumulative GVA for the years 2024-2029, creating NOK 3,600 million in GVA, compared to the current level (i.e., scenario 1) of NOK 1,280 million. In the case of an uncapped, automatic scheme (i.e., scenario 4), SPI calculates that there will be over x3.5 the total cumulative GVA over the same period, creating NOK 4,560 in GVA. In the absence of an incentive (i.e., scenario 2), the total cumulative GVA for the same period will be significantly less, at NOK 100 million. Figure 26 also illustrates that the total GVA will be chiefly created through direct GVA, followed by indirect GVA, and then induced GVA.

Table 11 in the appendix (chapter 12.2) provides a breakdown of the cumulative GVA for each scenario by year.

Figure 26 – Cumulative GVA, 2024-2029, NOK million (2022 prices)



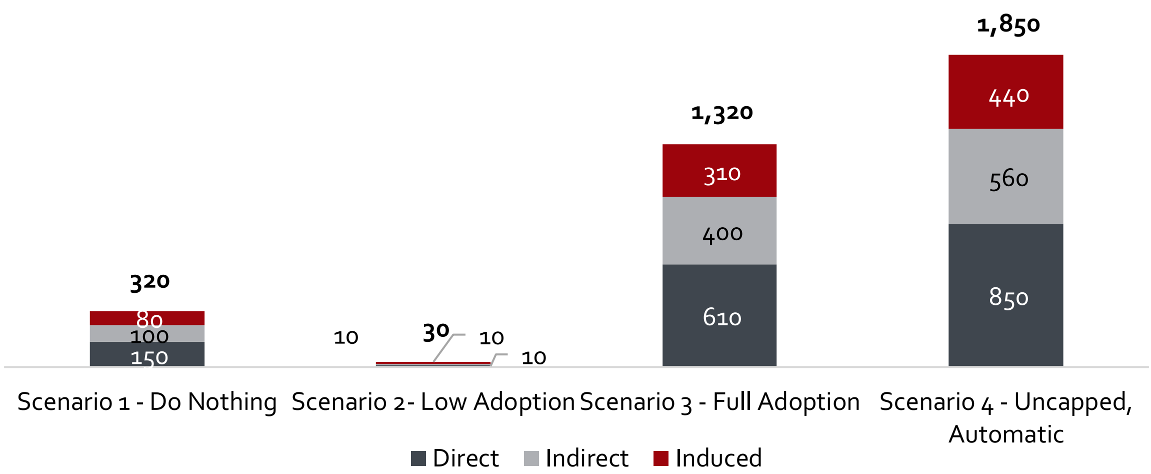
5.5. Impact of Scenarios: FTE Jobs

An increase in the annual budget for the incentive would lead to a significant uplift in the total FTE jobs supported by incentivised film and television productions. As shown in Figure 27, a stepped increase in the annual budget (i.e., scenario 3) will mean by the year 2029, over four times the amount of total FTE jobs will be supported by incentivised production than under a business as usual scenario, accounting for 1,320 FTE jobs compared to 320 FTE jobs. These figures include direct jobs within production companies, activity in the supply chain and the impact of spending of wages in the economy.

In the case of an uncapped, automatic scheme (i.e., scenario 4), SPI calculates that there will be over x5.5 the amount of total FTE jobs supported by the incentive (1,850 FTE jobs). In the absence of an incentive (i.e., scenario 2), SPI predict a notable drop in FTE jobs associated with in-coming international productions, to 30 FTE jobs in 2029.

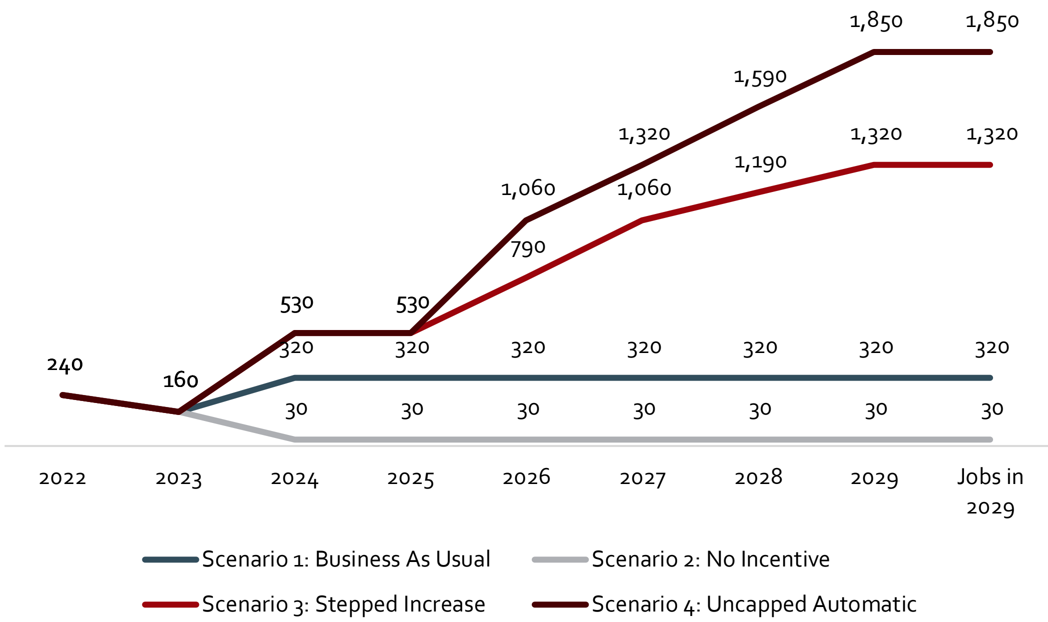
Table 11 in the appendix (chapter 12.2) provides a breakdown of the projected FTE jobs supported for each scenario by year.

Figure 27 – FTE Jobs Supported by Incentivised Productions for 2029 (direct, indirect, and induced)



In scenarios 3 and 4, the number of FTE jobs supported by the incentive is forecast to grow significantly over the time period; from 160 in 2023 to between 1,320 and 1,850 in 2028 – see Figure 28.

Figure 28 – Total FTE Jobs Supported by Incentivised Productions for 2029



5.6. Return on Investment

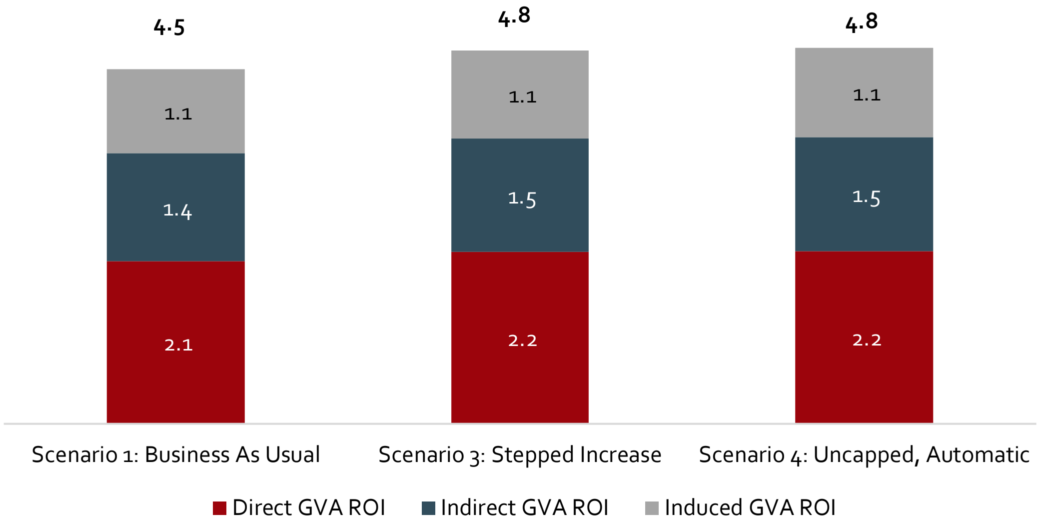
The GVA Return on Investment (ROI) is a measure of how much economic value (GVA) is created per NOK 1 million of investment in the production incentive. The 'investment' is estimated to be the total cost of the incentive payments, minus the direct tax receipts which result from the production activity.

To calculate the ROI, the production expenditure which is forecast to happen in the absence of the incentive (in this case scenario 2) is subtracted from the forecasts for the other scenarios; this is so the ROI calculates the additional activity generated by the incentive.

SPI's calculations show a positive and significant return on investment for all incentives (Figure 29). The Business As Usual incentive has a total ROI of 4.5, which means that for each NOK 1 of invested in the scheme, returns NOK 4.5 in terms of GVA uplift.

As the allocated incentive grows, so does the ROI although at a diminishing rate, meaning the difference between the ROI between scenario 3 and scenario 4 is very small (masked by rounding). The underlying relationships between the incentive payment, expenditure and GVA generated within the economic model are linear. The differences between the ROI figures are as a result of the base case (scenario 2), which is netted off, becoming a smaller proportion of the impact as the incentive and expenditure rises.

Figure 29 – GVA Return on Investment, 2024-2029



Chapter 6:

Workforce and Competence Development

Credit: Trond Elisassen, Storyline Nord

6. WORKFORCE AND COMPETENCE DEVELOPMENT

6.1. Introduction

In addition to the economic and cultural value, film and television production provides hugely valuable opportunities for workforce and competence development. Combined with, or as an alternative to formal college and university training, aspiring and established cast and crew can gain first-hand experience on real life projects, gaining skills, exposure, and credentials for their own portfolio. These jobs are highly skilled, highly paid and mobile, with previous SPI analysis suggesting that production employment is often highly satisfying and meaningful.

This chapter provides an assessment of the extent to which the Norwegian incentive is having an impact on the domestic film and television workforce, including how the current incentive design and wider industry factors might be limiting this impact.

6.2. Norway's Film and Television Workforce

The Norwegian film and television workforce consists of talented professionals including actors, directors, producers, screenwriters, cinematographers, and editors. The industry is supported by the NFI and the Regional Film Funds, which provide funding and resources for local productions. The country has a strong tradition of storytelling and a thriving film and television industry, producing both commercial and art house content. Norway is also known for its innovative use of technology in film and television production.

Norwegian film and television have received international recognition, with several films and shows winning awards at major film festivals and receiving critical acclaim. *The Worst Person in the World* (2021) was nominated for the Palme d'Or at the 2021 Cannes Film Festival, and Best Foreign Language Film and Original Screenplay at the 2022 Academy Awards; *Kon-Tiki* (2012) was nominated for the Academy Award for Best Foreign Language Film; while *Norsemen* (2016) received significant critical acclaim, both domestically and abroad. On the international front, the producers of major Hollywood films such as *No Time to Die* (2021), *Mission: Impossible – Fallout* (2018), and *Dune* (2021) have all chosen Norway as production locations, supported by the Norwegian workforce. Norway is known for its distinctive visual style and its commitment to producing high-quality content. The NFI provides support through grants for the development, production, and distribution of films, as well as promoting the country's film and television industry internationally.

Over the last decade, the Norwegian film and television industry has steadily grown, with a stream of local and international co-productions. This has been through a combination of enhanced public investment, such as through the establishment of the NFI, Regional Film Funds and film commissions, as well as a global uplift in film and television production (see chapter 2.4,1).

Despite this steady industry growth, there are prevailing challenges around a 'brain drain', both within Norway to other sectors and to more populated regions, as well as to an increasing number of competing international markets. This has led to capacity issues within specific roles, especially in more senior positions, such as Heads of Departments. Aspiring domestic filmmakers in more rural locations often see the need to relocate, typically from the Midgard and Northern parts of Norway to Oslo and the surrounding areas for work opportunities. Similarly, many consultees observed that Norway is losing talent to nearby markets, where there are more consistent and higher levels of production activity, to gain experience and employment; for example Ireland, UK, Czech Republic, and other countries in the Nordic region. The upshot of this is that inward productions frequently bring in their own cast and crew.

There has been a growing focus on diversity and inclusion, both on and off-screen. This includes initiatives by the NFI, where applicants for production, promotion and distribution grants are required to fulfil a diversity standard. The standard includes demands for inclusion and representativeness on-screen and behind the camera. Similarly, the NFI has introduced mandatory reporting for producers on the diversity and inclusion of their supported productions. The aim is that producers are encouraged, at an early stage, to make conscious choices in terms of relevance, audience orientation and sustainability.

6.3. Norway's Film and Television Training Provision

Norway has a variety of training provisions in place to develop its film and television workforce. These include specialist higher education programmes (Table 4), professional development programmes, and on-the-job training within productions.

Table 4 Examples of Norway's Higher Education Establishments Specialising in Courses Related to Film and Television Production

Higher Education Establishment	Location	Number of Students
The Westerdals Department of Film and Media	Oslo	500
The Norwegian Film School	Lillehammer & Oslo	108
The Nordland School of Arts and Film	Kabelvag, Nordland	15

Formal training from higher education establishments is still the most common route into the film and television industry. A significant proportion of entrants into the film and television sector are graduates from higher education courses, particularly in above-the-line or other non-craft roles. Norway has a diverse range of offerings on this front, with higher education institutions providing courses with their own distinct structures and approaches.

The School of Arts, Design and Media, at Kristiania University College in Oslo is the largest artistic education department in Norway. Amongst its offerings is the Westerdals Department of Film and Media, with around 500 students and 35 employees. Each year, hundreds of students graduate, with a high percentage going straight into employment in the sector. Due to its size, the department is able to cover most parts of the creative value chain of production, offering students a range of insights into the demands of filmmaking.

The Nordland School of Arts and Film is a much smaller course with a markedly different approach. It offers a bachelor's programme that enables students to work as independent filmmakers through their own artistic practice, practical experience, and critical reflection. The course treats filmmaking education as a guided, interactive, exploratory process, with learning through experience as its core focus, supplemented by workshops and lectures from internationally acclaimed filmmakers sharing ideas and methods. Given its relatively small size, with 15 students admitted a year, the course is able to offer more freedom of learning than is standard and a high proportion of students go on to make their own small independent films. The course is unique, not just in Norway, but amongst filmmaking courses internationally.

The Norwegian Film School has 108 students. The bachelor's degree programme is located in Lillehammer, while the master's degree programme, the fellowship programme and the continuing and further education programmes are located in Oslo. The school is highly regarded with the vast majority of students entering the sector, including several alumni going on to receive significant accolades and many going on to work as heads of department. The school takes a holistic approach to teaching, incorporating experiential learning, situational learning and project-based learning, with faculty who themselves are active in the industry. Students divide their time between working on projects and in workshops.

Shorter, more targeted training provisions also exist in Norway. For example, the Norwegian Film Institute offers training programmes such as UP 2.0, a development programme for under-represented filmmakers in the Norwegian film and television industry. The programme lasts 18 months and allows 12 promising filmmakers the chance to get access to relevant professional and personal development through workshops, training, process-meetings, and coaching. Additionally, shorter courses, workshops and other training events often arise across Norway for young people. These are offered through various providers, such as the Norwegian Film Institute, production companies, and regional film commissions. Opportunities also exist for training programmes that run as an adjunct to ongoing productions, whereby crew are provided formal on-the-job training within productions (see chapter 6.4 for a further discussion).

However, Norway lacks a comprehensive, coordinated strategy at the national level for increasing the quality, and particularly depth, of its workforce. Existing workforce provisions are not overseen in a co-ordinated way, with a lack of focus on developing Norway's overall workforce such that it would be sufficiently prepared for potential increases in demand. As well as training existing crew, an important function of this is ensuring a sufficient pipeline of new crew into the industry, particularly for craft, technical and specialist roles, areas where film schools are less likely to be of significant benefit. The range of roles required for production is highly varied, in many cases relying on skillsets that are distributed across demographic groups, regions and qualification levels. Several other countries have been putting structures in place alongside incentives to ensure the strength of their crewbases, including recruiting crew with transferable skills from declining sectors.[40]

6.4. Effect of the Incentive on Skill Development, Training and Related Career Opportunities

Along with formal training provision, an **important source of skill and competence development comes from the experience of being employed on larger, commercial productions** that are typically attracted to a market by an effective incentive. Such knowledge transfer allows crew to put their training into practice and exposes them to additional filmmaking demands that may not necessarily be captured in a formal training environment. Often crew can develop their skills rapidly under these conditions. They are also able to add internationally known productions to their CVs to help attract future work. In some cases, more formal training components are also included as an adjunct to the production process.

In Norway, as with other territories, the existence of large-scale international production provides unique development opportunities over and above those present in domestic productions. Along with simply adding to the volume of production experience opportunities, these productions have distinct development opportunities, as they require very high standards of professionalism and efficiency, as well as incorporating cutting edge techniques and working methods.

These productions also enable learning due to the highly experienced crew brought in from elsewhere to work alongside Norwegian crew, as well as fostering network building across borders. Additionally, more specialised or craft roles, such as those within set design, props, and visual effects may not exist in smaller productions, and crew working in these areas rely more heavily on larger productions. Of the survey of 11 incentivised productions, ten provided training opportunities for Norwegian crew. This included one production that initially brought

[40] *How Europe is addressing skills shortages to keep up with the production boom.* Screen Daily, 2nd April 2019. Accessible at: https://www.screendaily.com/features/how-europe-is-addressing-skills-shortages-to-keep-up-with-the-production-boom/5138054.article

Norwegian film and television workforce in as junior roles into all departments, and with increasing responsibility they are now working as heads on production.

Another production did not have an official training programme for Norwegian crew, but largely worked with the same crew across the three shoots, providing ongoing work and skill opportunities.

> *Being exposed to this level of feature film production is in itself a learning experience. I have seen the Norwegian crew develop and understand the requirements and skills needed for this level of film making.*

Larger international incentivised productions do not tend to hire Norwegian crew across the broad spectrum of available crew roles, but rather within specific, more junior roles. They bring in their own directors and writers, as well as other heads of department. Additionally, whilst the incentive has had some impact in increasing the prevalence of these development opportunities, its **impact has been limited due to the relatively low volume of international incentivised production** in Norway. For most crew, the opportunity to work on these types of productions is rare and many have never had the opportunity to do so. The problem is more acute in some regions than others, with crew in Northern Norway notably unlikely to have worked on incentivised productions.

Similarly, the number of incentivised productions is very low, especially compared to other jurisdictions. This low base is limiting the extent to which these productions can serve as a meaningful source of employment for Norwegian crew. Due to the freelance nature of crew roles, a threshold of consistency and continuity of work is important. With the current volume of incentivised productions, this threshold is not being met. Even for members of Norway's workforce who are able to secure positions on these productions, the lack of volume means that they cannot be relied upon as a consistent component in individuals' rotations of work.

The type and scale of incentivised production are also important factors in the productions effectiveness for enabling valuable workforce skill and competence development. Consultees believe that while indigenous crew are equipped to work on a higher volume of international productions with internationally renowned filmmakers, a large number of smaller mid-sized productions (~NOK 30-40 million) were more valuable to them. Such productions were better aligned with the industry's current capacity and capability. It was argued that changes in the incentive's design should have the objective of attracting a wider range of sized productions to Norway, especially in the mid-range. This would be hugely valuable for developing the level of crew capacity and capability within the domestic industry through giving them more regular work on smaller productions, rather than valuable but irregular work on fewer and more competitive large-scale productions. It was argued that, over time, this would help grow the Norway's domestic industry's ability to service a higher number of larger productions.

Chapter 7:
Wider Industry Development

Credit: Aimee Spinks

7. WIDER INDUSTRY DEVELOPMENT

7.1. Introduction

Film and television production has a wide range of benefits. Primarily the value can be found in the individuals and production companies working directly on productions, in the form of (typically higher than average) wages, as well as business turnover and growth. However, the process of film and television production relies on and draws from a wide-reaching supply chain, including vendors and service businesses.

This chapter provides an assessment of the extent the Norwegian film and series incentive is having an impact on the development of the wider industry, including how the current incentive design and wider industry factors might be limiting this impact.

7.2. Incentive Supported Investments in Production Infrastructure

Norway has a vibrant film and television industry with several production studios and facilities available for filmmakers to use. These studios and facilities offer a range of services, including pre-production, filming, post-production, and distribution. Some of the most well-known studios and facilities in Norway include FilmCamp in Øverbygd and Storyline Studios AS in Oslo. These facilities provide a wealth of resources for filmmakers, including state-of-the-art equipment, experienced professionals, and a supportive creative environment.

The Norwegian film and series incentive has had a positive impact on the Norwegian film and television production infrastructure. However, the impact has been limited by the current conditions and effects of an irregular pipeline of inward productions.

As detailed in chapter 3.7, the incentive has encouraged greater levels of international productions to shoot in Norway. Consultees noted how the presence of these productions and related investments have assisted in improving and expanding the production infrastructure, which in turn has helped in making the industry more efficient and cost-effective and support the growth and competitiveness of the sector long-term.

However, as shown in chapter 3.3, the incentive is typically helping to attract investment into the industry through a small number of irregular large-scale productions each year, with the established studios and production facilities deriving the majority of their business from Norwegian productions, or smaller productions which didn't access the incentive.

Industry consultees spoke of how potential private investors would have more confidence in investing in new studio builds or studio expansions if the scale of potential inward productions was more predictable. It was thus argued that a higher annual budget for the incentive and the consequent increase in production would help build confidence in investments for new companies, new departments, new services, and new jobs.

> “ *It's hard to know how much to invest because the amount of production is sporadic.*

7.3. Incentive Supported Investments in Vendors and Support Businesses

There has been some growth in Norwegian businesses servicing the film and television sector. However, as with other aspects of Norway's film and television production infrastructure, the incentive has the potential to increase this further.

As detailed in chapter 3.7, the incentive has encouraged greater levels of international productions to shoot in Norway. As well as providing business for studios and production facilities, these productions have also given business to other companies servicing the international productions, such as equipment hire, hospitality and accommodation. In addition, the investment the incentive is attracting provides more resources for production vendors to work with. This can help to support the production of high-quality content and can improve the competitiveness of the industry.

Established equipment hire vendors, such as Storyline and Dagslys, have been able to enlarge their businesses to service the demands of larger inward productions, beyond the domestic market. However, as with studios and other production facilities, these vendors spoke of the unpredictability of the incentive, especially because the very small size of the funds available means projects are frequently rejected. This means it is high risk for them to invest in permanent staff and new equipment as they can't accurately forecast future business. Vendor consultees, therefore, similarly argued for a higher annual budget for the incentive, which attract high levels of production and builds confidence in any investments they make to scale their business.

Chapter 8:

National Branding and Screen Tourism

Credit: Johan Moen/NordicStories Nord

8. NATIONAL BRANDING AND SCREEN TOURISM

8.1. Introduction

As discussed in chapter 7, film and television production delivers a wide range of benefits. Along with direct economic and financial value (e.g., wages, business turnover and growth) and supporting a wider industrial ecosystem, there are wider social and cultural benefits. These include using film and television production as part of national branding and leveraging depiction of a country or culture on screen to attract inward investment and tourists.

This chapter provides an assessment on the extent the Norwegian film and series incentive is having an impact on Norway's national brand and enticing tourists, including how the current incentive design and wider industry factors might be limiting this impact.

8.2. National Branding

National branding refers to the act of a country promoting and shaping how it is perceived internationally, generating positive interest in its attributes, values, and outputs.

There is a growing recognition from governments around the world that film and television can be a powerful vehicle to support national branding through its ability to export the image and character of a country widely and accessibly across the world.

Ireland, with a population size of 5 million, comparable to Norway's population of 5.4 million, is an example of a country that has increasingly relied on the film and television industry in this way. In the Irish Government's *Global Ireland 2025*[41] strategy, the role of its film and television sector in projecting a positive view of Ireland was specifically highlighted as an objective. In SPI's 2023 study for Screen Ireland, *The Cultural Dividend Generated by Ireland's Section 481 Film and Television Incentive*,[42] survey analysis showed that 58% of survey respondents agreed that Irish film and television promotes Ireland internationally, with only 17% disagreeing. Domestic productions like the *Banshees of Inisherin* (2022) and *The Quiet Girl* (2022), both nominated for Academy Awards in 2023, feature Irish history and heritage whilst showcasing its creative capabilities. Additionally, international productions such as *Vikings: Valhalla* (2022) and *Star Wars: The Force Awakens* (2015) display its natural scenery and ability to facilitate large-scale productions.

Similarly, South Korea has benefitted from the national branding impacts of its film and television success. Following the 1997 Asian financial crisis, the South Korean government oversaw deep investment in its film and television sector,[43] whilst paying particular attention to how this and other cultural exports can enhance its national brand[44]. Since this time, it has gone from having production output that attracted little international appeal, to producing an Academy Award Best Picture winner in *Parasite* (2020) and Netflix's most streamed show to date in *Squid Game* (2021), establishing its film and television sector as one of the world's most iconic. Analysis in 2020 showed that Korea's recent wave of cultural output has a significant economic knock-on effect on international demand for South Korean exports in other industries, such as tourism, cosmetics, foods, fashion and electronics.[45]

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[41] *Global Ireland: Ireland's Global Footprint to 2025*. Government of Ireland, June 2018. Accessible at: https://www.gov.ie/en/campaigns/globalireland/

[42] *The Cultural Dividend Generated by Ireland's Section 481 Film and Television Incentive.* Olsberg SPI, January 2023. Accessible at: https://www.o-spi.com/projects/ireland-incentive-impact-study-cultural-dividend

[43] *The Appeal of Korea*. Blythe Worthy, Steve Choe, Sangjoon Lee, Benjamin Nickl, Emma Rayward and Lee Sung-Ae, 2020

[44] Film as cultural diplomacy: South Korea's nation branding through Parasite. Seow Ting Lee, 2019

[45] *The Korean Wave*. Jin, D. Y, May 26th, 2020. Accessible at: https://www.gjia.georgetown.edu/2020/05/26/the-korean-wave/

The Norwegian film and television incentive's cultural test includes elements that promote nation branding. These include the criteria for the film or series production to reflect Norwegian or European values, culture, identity, customs or traditions. Similarly, another criterion is that the storyline, screenplay, central theme of the film is based on events that are a part of Norwegian or European culture or history.

Norway's film and television sector has drawn growing acclaim in recent years, with several incentivised productions attaining international reach, and many help national branding. *Occupied* (2015-2020) is a Norwegian political thriller available to stream in 19 territories, as well as having broadcast rights sold in numerous countries. The prescient series depicts a near future in which the Norwegian government has stopped oil and gas exports, prompting the Russian government, with the support of the EU, to occupy Norway to end a Europe-wide energy crisis. The story situates Norway right at the heart of global geopolitics and international relations, depicting Norway as having an important part of world affairs and consequently of significant national standing and influence. The series exhibits places, events, and features of great significance to Norway's history and heritage, such as Constitution Day, the Royal Guard, the PST, the Norwegian monarchy, the Storting, the Supreme Court, as well as numerous towns and cities across Norway. The series also manages to show some of the real-world institutional functions within Norway, its socio-economic circumstances, and some of its cultural complexities.

***Troll* (2022), an incentivised Norwegian produced thriller, was released on Netflix and quickly attracting a global audience, becoming Netflix's highest viewed non-English language film for a period after its release**. The film was inspired by Norwegian folklore and fairytales and depicts Dovre and downtown Oslo, including Norway's Royal Palace. The film's producer, Kristian Strand Sinkerud, described the film as being "very deeply rooted in Norway" and noted the importance of showing the world that it was a "Norwegian and Scandinavian production"[46]. Similarly, *Ragnarok* (2020) draws from Norse mythology and reached audiences across the globe, with streaming availability currently in 31 countries. In both cases, these productions served as examples of Norway's deep and rich history and heritage and put them on display for global audiences, whilst projecting an image of Norway as a creative place with a distinct identity. With an even wider reach, *Mission Impossible: Fallout* (2018), amongst the ten highest grossing films globally in its year of release, showcases Norway's natural scenery. The film was partly shot in Pulpit Rock (Preikestolen), in Strand, Rogaland, serving to advertise Norway's physical beauty to millions of viewers, although this was limited as the film's story wasn't set in Norway and didn't explicitly refer to Pulpit Rock or Norway itself. Nevertheless, the film led to an increase in tourism to the site (see chapter 8.3) and an entire locations tour dedicated to it, offering tourists the chance not just to see the location itself, but also to visit surrounding attractions, get immersed in Norwegian culture and heritage, and become more familiar with its way of life.

However, due to the low volume of productions accessing Norway's production incentive, there is a limited impact that the incentive has had on national branding to date. Moreover, whilst productions shot in Norway can have an impact on national branding without having a Norwegian setting, the potential scope of impact is restricted when the production does not contain a Norwegian setting, story, characters, or other identifiably Norwegian elements. In previous years, a high percentage of incentive funds have been awarded to productions using Norwegian locations, but less in the way of other distinctly Norwegian elements.

8.3. Screen Tourism

Screen tourism refers to the phenomenon of people traveling to locations that have been featured in films or television shows. SPI has undertaken a number of studies into the economic value generated by screen tourism, including for Tourism Northern Ireland, which analysed the economic effects of tourist visiting locations depicted in the *Game of Thrones* series had to the economy, and for Creative England[47], which estimated the value of international core screen tourists visiting locations in rural parts of England.

Norway has been featured in a number of popular movies and television shows, **which has led to an increase in screen tourism in the country.** The country's stunning natural landscapes, historic architecture, and cultural heritage have made it a popular destination for tourists seeking to experience the locations they've seen on screen. Notable examples include a notable increase in visitors to the Preikestolen cliff edge in Rogaland following its depiction in *Mission: Impossible - Fallout* (2018), as well as the Juvet Landscape Hotel being consistently fully booked ever since its first depiction in *Ex-Machina* (2014) nearly a decade ago. Other popular screen tourism destinations in Norway include the city of Bergen, which was used as a filming location for *Spectre* (2015), and the Røros region, which was used in the production of *The Snowman* (2017).

In recent years, Norway has embraced screen tourism as a way to promote its natural beauty and cultural heritage. Visit Norway regularly uses shots and testimonies from the productions as part of its marketing campaigns for Norway, to both attract screen tourists, but also for inward investment into Norway. Traffic to their website tripled after the premiere of *Frozen* (2013), with a page with *Frozen*'s banner experienced 10 times more visits than other pages in the period. Visit Norway also advertise popular guided tours of filming locations. Similarly, the Northern Norway Film Commission commissioned a dedicated study into the current and potential value of screen tourism to the larger remote region.

Norway's film and television industry continues to grow and attract international attention, and **film tourism is expected to become an even more significant part of the country's tourism industry in the years to come**.

[47] *Quantifying Film and Television Tourism in England*. Olsberg SPI, 2015. Accessible at: https://www.o-spi.com/projects/blog-post-three-m3jd2

Chapter 9:
Cultural Value

Credit: Håvard Schei / Rein Film Finnmark AS

9. CULTURAL VALUE

9.1. Introduction

As part of film and television production incentive schemes globally, it is common to have a 'cultural test' as a prerequisite for incentive applications. Cultural tests vary from jurisdiction to jurisdiction, but all have their own cultural criteria which need to be met by all incentive applicants, often on a points scoring basis.

These cultural tests are very common in EU or EEA member states, as they are part of the State Aid framework which is regulated in the EU by the European Commission and in the EEA[48] by the EFTA Surveillance Authority (ESA). Film and television production incentives are seen as key tools for supporting national cultural expression. Amongst countries with cultural tests in place are the UK, Malaysia, France, and Germany.

In line with this, the Norwegian film and series incentive scheme specifies a cultural test as part of its application regulations. The test evaluates various aspects of a production to determine whether it is sufficiently relevant to Norwegian culture and identity. The several metrics assessed are split into two categories, 'cultural criteria' and 'production criteria'. The former is concerned with direct cultural relevance, containing metrics such as the use of Norwegian language, the depiction of Norwegian culture and history, and the use of Norwegian characters. The latter contains a broader set of production criteria, such as the use of Norwegian cast and crew, contributing to the development of the production's genre, and having a strategy for sustainable and green recording. Both components of the test must be passed, but a minimum of four points is needed to pass the cultural criteria component, whilst 20 points is needed to pass the production criteria component.

It's important to initially lay out the specifics of the cultural test ahead of SPI's cultural value assessment, as the cultural test is a mandatory part of the incentive programme, helping to ensure that the financial support provided by the government is being used to promote the growth and development of the Norwegian film and television sector. By requiring productions to demonstrate a strong cultural connection to Norway, the cultural test helps to ensure that the industry is producing content that is representative of the country and its people.

9.2. The Cultural Impact of the Norwegian Incentive

In previous studies on cultural impact for other jurisdictions, such as in Ireland and Australia, SPI has utilised a framework proposed by John Holden of the Demos thinktank, which defines **three kinds of cultural value**. These are intrinsic - relating to aesthetic excellence and individual enjoyment; instrumental - relating to the indirect cultural impact on further social goals; and institutional - relating to effects on the promotion and recognition of a country internationally. Film and television production has the power to exhibit all three types of cultural impact.

Institutional value, through the promotion and recognition of Norway as a means of national branding, has been discussed in chapter 8. In addition to this, there is also the potential for an incentive to contribute to the two other aspects of cultural impact; individual enjoyment and appreciation of aesthetic excellence amongst the Norwegian population; and underpinning social cohesion in Norway by positively challenging attitudes and increasing the profiles of certain areas of culture.

Welcome to Utmark (2021) is a Norwegian HBO Europe series available to stream across much of the Nordic region. The show is a modern western surrounding conflict amongst contrasting characters within a small, remote town, and is set on the northern margins of Norway on indigenous Sápmi region. The screenwriter, Kim Fupz Aakeson, describes the film as being

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[48] Which Norway is a member state, along with Iceland, Liechtenstein, and Switzerland

“simply about human beings trying to get along in the world”[49] as circumstances push them apart. Whilst the series explores universal themes, it also manages to capture and display to audiences some of the realities particular to those living within very small, secluded communities; in this case, the northern margins of Norway, which Norwegians perceive as being the edge of civilisation. As it is set in the Sápmi region, the series manages to depict a distinct part of Norway which is under-represented in other areas of media, governance, and institutions, one which has a unique and diverse, culture and heritage.

Beforeigners (2019-) is a Norwegian Science Fiction drama series; the first produced for HBO Nordic. The series concerns the "beforeigners", people from past time periods who suddenly appear in the present, and attempt to integrate into 21st-century Norway, with characters emerging from the Stone age, the Viking era, and the 19th century. The series incorporates elements of Norse history, and the creators of the show paid particular attention to the accuracy of its depictions, contacting researchers and professors to maximise the accuracy of pronunciation of Old Norse used in the series. The series also creatively explores the issues of xenophobia, migration, and the Norwegian welfare state, with the creator of the show describing it as an allegory for the refugee crisis.[50]

Whilst the incentive has contributed to supporting productions with cultural value, other incentives globally are able to contribute to supporting a broader range of productions that tell stories from a broader range of perspectives, communities, and demographic groups, thereby having greater cultural impact. Ireland’s film and television sector, has demonstrated significant cultural impact in recent years, with a notable degree of contribution from low budget to mid-budget productions. SPI’s 2023 study for Screen Ireland on the national incentive’s *Cultural Dividend*[51] found that the Irish film and television sector has generated positive outcomes in areas such as educating society, driving debate, and educating children.

The Quiet Girl (2022) is an Irish language film supported by the tax incentive which offered a non-anglicised view of Irish people, telling the story of a girl from a troubled home. The film attracted audiences both young and old, and the interest it aroused in the Irish language, which despite government efforts has remained in spare use, has led to schools showing the film in lessons to students studying Irish language and taking students on school trips to see the film. This low-budget film was nominated for an Oscar in 2023; evidence of its creative and aesthetic excellence. Several other examples exist of the significant cultural impact of Irish film and television across a broad range of production types and a broad range of cultural value.

Such breadth of impact is made possible in Ireland and other jurisdictions due to incentive schemes supporting a greater number of production types, outside of predominantly supporting large scale international productions. These incentives usually have higher budget caps and automation in acceptance processes.

9.3. ‘Willingness-to-pay’ Studies Comparison

Outputs from the cultural sector may have the properties of a public good, in that they are “non-rivalry” (i.e., one person’s consumption does not crowd out that of others) and “non-exclusive” (i.e., it is not always possible to exclude people from access). Because of this public good element, the value of some cultural goods is not fully reflected in their market price. As

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[49] ‘HBO Europe’s Sami Western ‘Welcome to Utmark’ as Broken Down by Writer Kim Fupz Aakeson’. Variety, 1st February 2021.
[50] ‘*Beforeigners” Anne Bjornstad on HBO’s First Norwegian Original Series*. Variety, 23rd August 2019. https://variety.com/2019/film/festivals/beforeigners-anne-bjornstad-hbo-first-norwegian-original-series-1203310317/https://variety.com/2019/film/festivals/beforeigners-anne-bjornstad-hbo-first-norwegian-original-series-1203310317/
[51] *The Cultural Dividend Generated by Ireland’s Section 481 Film and Television Incentive*. Olsberg SPI, January 2023. Accessible at: https://www.o-spi.com/projects/ireland-incentive-impact-study-cultural-dividend

evidenced in the previous chapters, it suggests there is intrinsic value in screen content with high cultural value which is not connected to people's actual viewing habits.

There are a number of ways to measure this additional value (or consumer surplus) created by non-market benefits. These methods first emerged from the environmental economics sector but are, in some places, being applied to the cultural sector. The methods are called 'contingent valuation' and include stated preference and willingness to pay methods. This involves surveys to ask individuals their willingness to pay ("**WTP**") for a non-market good, or willingness to pay an additional amount. This can be done through a contingent valuation method which directly asks consumers their willingness to pay or through a ranking of alternatives exercise. This methodology is susceptible to response bias and the results can be highly context specific and sensitive to small changes in question wording. They involve extensive primary survey work and are therefore expensive to run and the methodology is not without its critics.

Even when primary WTP fieldwork is not possible (as is the case in this study), the environmental sector has an approach called 'benefit transfer' when values estimated in one context can be applied sensitively into a different context.

SPI and Proba undertook an extensive search for relevant WTP studies. There were no examples of WTP for Norway as a film location or on the cultural value of Norwegian content. There are some examples of surveys related to cultural heritage sites, but as they are not permanent, they are not very relevant for analysis of WTP for film locations.

The only WTP-survey from Norway related to an event is Heum, et.al (2014). The survey was used in a CBA of the hosting of the Winter Olympics 2022 in Oslo. In their analysis, they refer to a survey on WTP among the general population.[52] Approximately 35% of the population was willing to pay extra tax to finance the event. On average, they were willing to pay NOK 895 (approximately £75 at present rate). The context and focus of this study is significantly different to the policy considered in the Heum et al study and therefore does not provide a useable transfer value; however it does exemplify the large values coming out of such studies.

A search for WTP studies in the film and television sector internationally only resulted in one result, a study by Sapere for the New Zealand Ministry of Business, Innovation and Enterprise in 2018 to evaluate the New Zealand Screen Production Grant[53] which is the New Zealand incentive programme. This study undertook a survey of the adult population of New Zealand and asked a series of contingent valuation (WTP) questions. The study noted that the sample size of responses was relatively small and therefore the results should be treated as 'indicative rather than exact'. This study found that:

- Use value: People were willing to pay an average of between $0.51 and $2.94 more to watch a film made in New Zealand than one made outside. Note that the variation is caused by a small number of outliers, therefore the $0.51 figures was deemed to be more accurate
- Existence value: The study asked respondents to the survey whether they would be willing to pay a donation to ensure that New Zealand films continued to be made. The average (excluding outliers) was $14.71, with 77% indicating they would not contribute anything
- The average price respondents were willing to pay for a monthly subscription with no New Zealand content was $20.30. For a subscription that included New Zealand content, respondents were willing to pay $22.00 on average. This gives an implied premium of $1.70 per month or $20.37 per year

[52] Point of view – Jan Grund: Trust and social economy. Dagens Perspektiv, February 2014
[53] *Evaluating the New Zealand Screen Production*. Grant Sapere, 2018. Accessible at: https://www.srgexpert.com/wp-content/uploads/2018/06/Evaluating-the-NZ-Screen-Production-Grant-Final-June-2018.pdf

- When asked to imagine a scenario where government funding for television production was reduced, respondents said they would be willing to donate $12.40 on average each year to the cost of New Zealand television productions (that they may or may not watch)
- This analysis in the study concludes by stating, '*the value placed by the public on their own use of film and TV is not sufficiently high to justify the funding available. However, consistent with the notion of cultural value, the existence and public support values are significant. We consider the existence value sufficient to justify the grant'.*

Overall, the results were sensitive to outliers and had a small sample size, so we do not think it is appropriate to transfer the values into the Norwegian context. However, this study does illustrate that people can place significant use and existence value on domestically produced content. And when these values, particularly the existence value, are included in an analysis, they can result in monetised valuations which are large enough to justify public expenditure on an incentive.

Chapter 10:

Cost-Benefit Analysis

Credit: Oystein Fixe

10. COST-BENEFIT AND PLUS-MINUS ANALYSIS

10.1. Introduction

Cost-Benefit Analysis or 'CBA' assesses the social/public welfare costs and benefits which arise from a number of different policy options.

A CBA is applicable when there is expected to be differences in the social costs and social benefits of shortlisted options. The methodology undertaken in this study is in line with Norwegian guidance for a CBA and, where relevant, best practice internationally (see chapter 14 for list of reviewed documents).

The approach involves the following steps:

Methodological Steps for a CBA

- Define rationale for intervention and goals of policy
- Develop a list of options to analyse, including a business as usual and do nothing (or do minimum) option (i.e., the deadweight)
- Identify all costs and benefits of each option, including those that are unintended. Include in this 'externalities' (i.e., non-market benefits)
- Where possible quantify and ideally assign a monetary value to each cost and benefit
- Where appropriate undertake distributional analysis of costs and benefits
- Employ a discount rate to account for social time preference
- Calculate the benefit to cost ratio of each option and compare
- Undertake sensitivity analysis to assess the different sensitivity of results to assumptions and uncertainty.

The policy rationale and the list of options have been set out in chapter 4. Chapters 6-9 set out a wide range of benefits from the incentive programme, providing quantitative and qualitative evidence.

The remainder of this chapter draws together the analysis into a structured CBA, setting out the main methodological considerations and limitations of the approach, as well as results. Further specifics on the key conception considerations can be found in the study's full methodology note in Appendix 1.

To overcome the limitations of the CBA (see chapter 10.1), SPI and Proba undertook a 'Plus-Minus Assessment' (section 10.5).

10.1. Limitations of the CBA Approach

There are a number of methodological and practical challenges in applying the cost-benefit methodology in the context of film and series incentive policies.

First, CBA does not provide a tool to effectively incorporate the interventions through an industrial strategy which seeks to adjust or influence the industrial mix of the country, with a view to long term resilience or re-focusing. In a CBA, labour market effects are effectively excluded, as any uplift in employment or wages is assumed to be offset equally by a reduction of economic activity elsewhere in the economy.

Second, there are unquantifiable benefits to film and television production activity which cannot be monetised and it is not possible to include in the formal CBA framework. These include the benefits set out in chapters 6-9 – industrial development, infrastructure investment, workforce capability development and added cultural value.

The drawbacks to the CBA approach are apparent because few, if any, examples of this approach being used successfully in the cultural and creative industries generally around the world, as well the screen sector more specifically (see chapter 14, Appendix 3 for list of reviewed documents).

The only comparable CBA study available regarding the analysis of a similar incentive was carried out by the Department of Finance in Ireland, analysing its Section 481 incentive.[54] This study, by the government's own Department of Finance, states that:

> *'Given the broad economic, social, and cultural objectives, it is timely to note that, while the CBA captures many benefits of Section 481[55] relief, it does not capture all the ensuing benefits, particularly the social, cultural, and human capital returns it provides. It is not possible to quantify these benefits, which range from increased tourism connected with film locations to the promulgation of Irish and European culture. However, this intangible cultural benefit, or 'cultural dividend' should be considered in addition to the standard CBA of Section 481'.*

Overall, the Ireland study found a negative CBA in the central case and in the vast majority of sensitivity testing. Despite this, the Finance Ministry nonetheless argues for a continuation of investment in the incentive programme, probably in part because of the considerable and non-measurable economic benefits, as SPI outlines in chapters 6-9 in this report).

It concludes that 'the net economic cost identified by the CBA may be considered to be the revealed value of the social and cultural dividend provided by the Section 481 film relief'.[56]

There was also a CBA-like analysis undertaken by Sapere on the New Zealand incentive.[57] However, this study does not align to the Norwegian guidance and is therefore of limited use as a comparable methodology.

10.2. Estimating Costs

To frame the logic for the CBA it is useful to focus on the production company within Norway which produces the film or series. The Norwegian production budget/expenditure figure is the cost of producing the film or series (relevant to Norway). Regarding income for the companies ('sales'), SPI assumes that the investment for the film comes into the company from outside and SPI assumes that there is no profit made. This investment is made up of private funds (75%) and the incentive (25%).

There are three components of economic costs that can be identified and estimated (Table 5). These vary across the scenarios tested.

Table 5 Quantifiable Components of Economic Costs

Cost of producing films and series	That is the total expenditure on production. The estimated expenditure of productions under each of the scenarios is set out in chapter 3, along with the assumptions that underpin the forecasts.
Tax Wedge Cost adjustment[58]	As set out above, assumed to be 20% of the incentive payment amount. The estimated incentive payments for each scenario are set out in chapter 3.
Cost of administering the incentive	This includes the staff costs, marketing costs and where appropriate policy evaluation. Exact figures for administering the incentive are not available, however based on

[54] *Budget 2023 – Report on Tax Expenditures 2022*. Department of Finance, 2022
[55] Section 481 is the name of Ireland's production incentive.
[56] Budget 2023 – Report on Tax Expenditures 2022. Department of Finance, 2022, 41
[57] *Evaluating the New Zealand Screen Production Grant*, Accessible at: https://www.mbie.govt.nz/dmsdocument/1079-evaluating-screen-production-grant-pdf
[58] Further details of the Tax Wedge Cost adjustment are available in the Appendix 13.2.

	information from the NFI and others, we estimate that the current cost of administering the incentive programme is in the region of NOK 1 million each year. It is therefore relatively small and therefore not materially important in the overall CBA assessment. The current selective aspect of the scheme is resource intensive for a period around selection each year. The higher the degree of selection, the more costly the administration will be. **Scenario 1:** It is assumed that the cost of administering the incentive remains constant in real terms until 2029. **Scenario 2:** It is assumed that there is no cost of administering the incentive. **Scenarios 3 + 4:** The selection element of the incentive is removed under both of these scenarios. It is assumed that there is a fixed cost of administer the scheme of NOK 1 million, up to incentive payment of NOK 100 million after which the administration cost rises by NOK 10,000 for each additional NOK 10 million in incentive.

There is an **environmental cost** – particularly a carbon impact – of most economic activity. There are strong grounds based on Norwegian and other international guidance for the inclusion of such environmental costs within the Cost-Benefit Analysis. However, practically, this analysis would require significant primary data on the environmental impact of productions, which is unlikely to be available. For most options, the environmental cost is likely to be directly proportionate to the scale of economic activity, although a discussion of the possible impact of a Green Production eligibility criterion is discussed in chapter 4.

10.3. Estimating Benefits

Firm Level Benefits

The benefit to the firm is the 'sales' value. In practice here that is the private funds received to undertake the production, which is the value of total expenditure in Norway minus the incentive payment, which is roughly 25% of the total production expenditure budget. For each scenario the firm level benefits are calculated using the Norwegian expenditure projections and the estimated incentive payments set out in chapter 3.

Wider Benefits

There are clearly very many wider benefits from filmmaking in Norway which are not possible to quantify using CBA. This is one of the reasons the use of CBA is so unsuccessful and, therefore, rare around the world. These include benefits such as workforce and industry development, national branding, screen tourism and cultural impact. Chapter 9.3 highlights however, that using a willingness to pay approach can lead to reasonably large and significant values for the cultural value of locally produced content, although there are very few studies on which to make a robust assessment that can be used in the quantified CBA here.

10.4. Summary of Cost-Benefit Analysis Results

Table 6 provides a summary of the final CBA results. The first thing to note is that for all scenarios (apart from scenario 2: no incentive), the CBA result is that the Partial Net Present

Value Score[59] is negative, meaning that the quantifiable and monetizable benefits are less than the costs (i.e., there is a net economic cost of the scheme). Scenario 2, the no incentive scenario, returns a zero Net Present Value as the overall costs and benefits of the industry cancel each other out.

The Partial NPV score is best (least negative) for the scenario 1, the business as usual, scenario and worst for scenario 4, the uncapped, automatic scheme option. This is because as the expenditure and the incentive payments increase, the 25% incentive payment grows in real terms worsening the Partial NPV score. This is a feature of the CBA modelling and reflects the fact that very many positive impacts, including the spillover benefits, are not included in this quantified assessment. **Under CBA, there are no scenarios in which an incentive programme would return a positive NPV score when wider non-monetisable benefits are excluded.**

SPI's findings are in line with what, as previously noted, the Irish Ministry of Finance found when applying a CBA to their screen production incentive. As set out above, to overcome this, the Ministry of Finance in Ireland indicates that the net economic cost of the incentive could be considered the revealed value of the social and cultural impact of the incentive. If this same line of logic is followed here, it indicates that under any scenario chosen the implicit value of non-monetisable benefits to the incentive are equal to the net economic cost.

These theoretical arguments and the partial CBA results are not very insightful for informing policy decisions. Therefore, the SPI and Proba team undertook a less objective, but more inclusive 'plus-minus' analysis (see chapter 10.5).

Table 6 Quantifiable Components of Economic Costs (NOK, million, 2022 prices)

	Scenario 1 – Business as Usual	Scenario 2 – No Incentive	Scenario 3 – Stepped Uplift	Scenario 4 – Uncapped, Automatic
Costs				
Costs to producing firms (Production expenditure)	1,459	114	4,100	5,200
Cost of administering incentive	6	0	6	7
20% tax wedge of incentive costs	73	0	205	260
Total Cost (Present Value, adjusting for discount rate)	1,343	99	3,682	4,640
Benefits				
Firm level benefits	1,094	114	3,075	3,900
Spillover benefits	Unquantifiable	0	Unquantifiable	Unquantifiable
Total Benefits (Present Value, adjusting for discount rate)	956	99	2,626	3,310
CBA Results				

[59] The Net Present Value is the difference between the present value of the benefits to the present value of the costs. It is the present value as a discount rate has been applied. When a NPV is positive the benefits outweigh the costs. It is a 'partial' score in this context because it misses unquantifiable spillover benefits which have the potential to be significant.

Partial Net Present Value Score – Annual Average	**-65**	**0**	**-176**	**-222**

10.5. Plus-Minus Analysis

The 'Plus-Minus Assessment' method has been developed to overcome some of the issues around Cost-Benefit Analysis (CBA) (see chapter 10.1). This approach focuses on those factors (costs and benefits) for which it has not been possible to estimate a monetised figure. The approach is a subjective assessment which combines a score for 'significance' and the 'degree of change' to compare the likely impact of different set of scenarios.

The assessment of significance and scope was undertaken in a collaborative group comprising all the researchers from SPI and Proba involved in the study. The reason and justification for the assessments are outlined in this chapter.

10.5.1. Dimensions of Impact

This study has identified a range of impacts (both costs and benefits) connected to the Norwegian film and series production incentive. Listed below are the impacts that cannot be quantified or monetised, and are therefore excluded from the formal Cost-Benefit Analysis:

1) Environmental cost
2) Workforce development
3) Wider Industry development
4) National branding and screen tourism
5) Cultural value.

10.5.2. Significance to Norway

The Plus-Minus method demands that an assessment of the 'significance' or importance of these impacts to Norway and the Norwegian society are assessed. The rating scale used here aligns with that used by Oslo Economics[60] - low, medium, or high. This assessment was made independently of the 'degree of change' assessment (see chapter 10.5.3). Table 7 outlines the justification for SPI's rating.

Table 7 – Significance Scores

	Significance to Norway (low, medium, high)	Justification
Workforce development	High	An explicit policy object of the incentive programme
Wider industry development	High	An explicit policy object of the incentive programme
Environmental cost	Medium	Although not significant regarding the objectives of this policy, for Norway the environmental costs of a policy are important
National branding	Medium	Objective of policy, but secondary to economic impact

[60] *Utredning av insentivordninger for film- og TV-produksjon*. Oslo Economics, 2014. Accessible at: https://www.regjeringen.no/no/dokumenter/Utredning-av-insentivordninger-for-film--og-TV-produksjon/id757435/

Cultural value	Medium	Objective of policy, but secondary to economic impact
Screen tourism	Low	Tourism is both promoted in the country and also limited in certain areas, therefore screen tourism lower priority than other elements

Source: SPI and Proba Assessment

10.5.3. Degree of Change

The 'degree of change' assessment is a comparative assessment of the scale and direction of impact compared to a 'base case'. For this assessment, the base case is the 'no incentive' (i.e., scenario 2) (see chapter 4.2.2).

Table 8 assesses the scale and impact using the following categories, which align with Oslo Economics' impact assessment[61]:

- Large negative (- - -)
- Medium negative (- -)
- Small negative (-)
- No scope (i.e., no change or on balance) (0)
- Small positive (+)
- Medium positive (+ +)
- Large positive (+ + +).

The justification for the scoring of each dimension is described alongside.

Table 8 – Degree of Change Scores

<table>
<tr><th>Dimension</th><th>Scenario 1 – Business as usual</th><th>Scenario 3 - Stepped Increase, Automatic Incentive</th><th>Scenario 4 - Uncapped, Automatic Incentive</th></tr>
<tr><td rowspan="2">Workforce development</td><td>+</td><td>+++</td><td>+++</td></tr>
<tr><td colspan="3">Scenarios 3 and 4 will attract larger productions and related expenditure. This will lead to more workforce development opportunities, as well as opportunities for strategic investment aligned to skill development.</td></tr>
<tr><td rowspan="2">Wider industry development</td><td>+</td><td>+++</td><td>+++</td></tr>
<tr><td colspan="3">Wider industry development very closely related to workforce in terms of impact, therefore scoring of scenarios align to that.</td></tr>
<tr><td rowspan="2">Environmental cost</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td colspan="3">The CBA analysis is built on the assumption that increased film production crowds out other production. There is no evidence to suggest that Norway's film and television production industry is more or less polluting than the overall economy. Therefore, it is assumed to be zero across all scenarios.</td></tr>
<tr><td rowspan="2">National branding</td><td>+</td><td>++</td><td>++</td></tr>
<tr><td colspan="3">National branding impact is related to the scale of production, but has a less direct relationship compared to impact on workforce and industry</td></tr>
</table>

[61] *Utredning av insentivordninger for film- og TV-produksjon*. Oslo Economics, 2014. Accessible at: https://www.regjeringen.no/no/dokumenter/Utredning-av-insentivordninger-for-film--og-TV-produksjon/id757435/

	development. There is more uncertainty and/or need for aligned activity/investment.		
Cultural value	+	++	++
	Cultural value has some alignment with scale of production, but is also dependent on other mechanisms (e.g., selection criteria). There is also an element of unpredictability in achieving high cultural value. However, projects with cultural impact are more likely to be achieved when there is overall more production activity.		
Screen tourism	+	++	++
	The screen tourism impact is relatively aligned with the scale of the production, but has a less direct relationship than the workforce and industry development, as there is more uncertainty and/or need for aligned activity/investment.		

Source: SPI and Proba Assessment

10.5.4. Plus-Minus Results

The Plus-Minus Assessment leads to a 'consequence' score'. This is a combination of importance and scope for each scenario, and there is no prescriptive way to combine scores. Table 9 summaries the combined scores from the Plus-Minus Assessment. It clearly shows the beneficial value of scenarios 3 and 4 compared to the base case (scenario 2) and scenario 1.

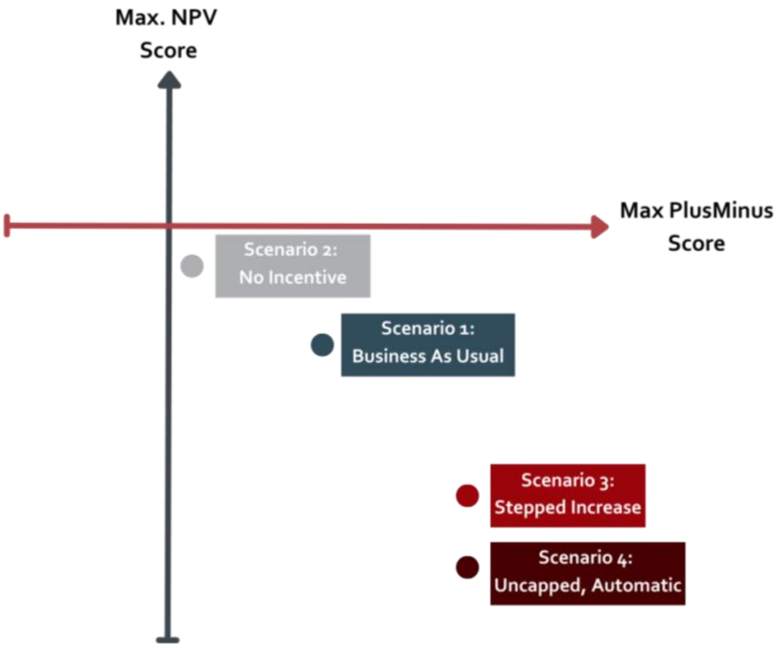
Table 9 – Consequence Scores

	Scenario 1 - Business as usual	Scenario 2 – No incentive. (i.e., Base Case	Scenario 3 - Stepped Increase, Automatic Incentive	Scenario 4 - Uncapped, Automatic Incentive
High	+, +	0	+++, +++	+++, +++
Medium	+, +	0	++, ++	++, ++
Low	+	0	++	++
Total	5	0	12	12

Source: SPI and Proba Assessment

Figure 30 summarises the combined results for the CBA and the 'Plus-Minus' method on a quadrant. Note that the scores and values resulting from CBA and Plus-Minus assessment are not directly comparable, as CBA results are in quantified monetary values and Plus-Minus results are scores. However, the quadrant diagram allows the information and ordering of each scenario to be displayed and the scenarios compared.

Figure 30 – Cost-Benefit and Plus-Minus Summary Visual



The CBA results are mitigated by positive Plus-Minus result for scenarios 1, 3 and 4. Scenario 3 and scenario 4 have equal Plus-Minus scoring and scenario 3 has a better NPV score, which suggests that **scenario 3, the stepped uplift, is preferential to scenario 4** at this stage of industrial development.

Chapter 11:
Recommendations

Credit: Inge Wegge

11. RECOMMENDATIONS

Below are SPI's key recommendations. These are in three groups. The first relate to major changes to the incentive, particularly around its level and design. The second set of recommendations are made on the assumption that the current incentive level and design continue, and recommends adjustments to make the existing scheme more effective. The third relate to further data collection and research.

11.1. Major Improvements: Incentive Level and Design

Recommendation 1: Implement a significant 'stepped' increase in annual budget allocation, in line with scenario three. This change would deliver an uplift in annual incentive payments to NOK 100 million in 2024 and 2025, followed by an annual uplift of NOK 50 million in 2026 and 2027, followed by a smaller increase of NOK 25 million in 2028 and 2029.

SPI predicts that this will attract an immediate increase in applicants for the incentive. Implementing a stepped change is preferable to one large-scale immediate increase or removing the cap, as demonstrated by the results of the Plus-Minus and Cost-Benefit Analysis. The overall effect of a stepped increase would be similar to an uncapped programme while keeping tighter control on the overall cost of the programme.

This approach would enable the Norwegian industry to respond and grow its capacity in line with the increased activity, through workforce and infrastructure investments, as well as the potential repatriation of Norwegian crew. The commitment of budgetary allocation into the future would enable industry to plan and invest with more certainty. SPI recommends that the impact of the increased budget allocation on production levels is reviewed before increasing the annual budget allocation by another stepped change.

Recommendation 2: Remove the annual application deadline and make the incentive automatic, in favour of rolling application seen in many jurisdictions globally.

This needs to align with the #1 recommendation above, with a significant increase in annual budget allocation to ensure there is sufficient funding available each year. This rolling application approach aligns better with industry planning, is more transparent and decreases uncertainty for production companies. Globally, those countries with leading incentive systems operate in this 'industry friendly' manner. The current arrangement of annual applications does not provide the necessary flexibility for a fast-paced commercial industry and discourages applications.

There may be short-term teething issues around ensuring sufficient funding, but these can be resolved in the medium term. This rolling application approach aligns better with industry planning, is more transparent and decreases uncertainty for production companies. This may not align to the existing budgetary rules; however, SPI recommends this as the best approach for effective policy.

11.2. Minor Adjustments: Improvements to Current Incentive Scheme

Recommendation 3: Clarify how the headline annual incentive 'cap' works for applicants and industry more widely.

There is a widespread misconception in the industry that the NOK 100 million limit works in a similar manner as an incentive 'cap' in other jurisdictions; i.e. that there is NOK 100 million of incentive available each year. The formula for calculating the allocated incentive is too complicated to communicate with industry, with the variable nature of available funding making the sum available to new projects difficult to predict. This makes it very difficult for producers to plan effectively, and instead they are attracted to more predictable incentives. Reducing uncertainty around the budget would make marketing and communicating the incentive more effective.

Recommendation 4: If there is no change in the incentive level and/or approach to project selection (which SPI recommends in points #1 and #2 above), there is a case to reduce preference scoring for productions with higher budgets.

The incentive is structured to attract large international productions and it has been successful in doing so, attracting a relatively small number each year. These undoubtedly bring significant budgets, a high profile for Norwegian locations and opportunities for the local workforce. Nonetheless, there would be complementary benefits through providing funding to attract more mid-sized productions (NOK 30-40 million) to locate in Norway.

The importance of mid-sized productions is vital for crew development. Such productions would expand the current level of capacity and capability within the domestic industry by providing people with more regular work on smaller productions and more chance to move up the hierarchy and have creative input. In the long run, this may also allow more co-productions to emerge which promote Norway's culture, identity, history, and nature.

Recommendation 5: The potential policy objectives of promoting green production and regional production should be pursued using alternative policies and programmes to the incentive at this time.

This study considered whether the incentive design should be adjusted to promote green production, production in the regions and drama series. There is a strong case for promoting green production because of the climate crisis and the global sector becoming increasingly concerned with the issue. However, a 'greener' incentive is unlikely to attract further productions, with other industry-led protocols and measures more likely to be effective at achieving the desired environmental outcomes. Other mechanisms, including working on carbon reporting and monitoring while in production should be prioritised over changing the incentive rules at this point.

As with many jurisdictions, production in Norway is concentrated around the capital and there is an opportunity for the regions to benefit from the economic impact. At this stage of development, SPI believes that regional development is most likely to take place through investment in and from the Regional Film Funds, film centres and film commissions, especially with a low industry base in rural locations. Increasing the incentive allocation overall is likely to mean some positive spillovers into regional areas.

There is less of a strong case for focusing on drama series at this stage. Drama series will inevitably be boosted by a higher budget for the incentive and higher levels of productions overall, as drama series already account for half of incentivised productions.

11.3. Related to Data Collection and Further Research

Recommendation 6: Undertake a detailed review of the capacity and capability of the Norwegian film and television industry.

This study has considered capacity and infrastructure in relation to the current incentive level and various future scenarios. Through this analysis, SPI has identified some gaps in the data and evidence around the current workforce, capacity and infrastructure in the screen production sector which would benefit from further study. There is, for instance, no nationwide mapping of screen skills or crew. This type of assessment would provide invaluable insight for the development of a screen workforce strategy and would provide further useful evidence on industry capacity to inform the level at which the incentive allocation is set in the future.

Recommendation 7: NFI to work closely with the Regional Film Funds, film centres, and film commissions to track incentivised and non-incentivised spend in regional parts of Norway.

Currently there is no comprehensive data of regional expenditure or activity tracking. Improving this would deliver new insights into the regional screen sector and would enable the impact of the incentive in rural areas to be determined, potentially providing evidence to inform a future decision around a regional uplift to the incentive or similar. The NFI should also support the implementation of tracking of green production and carbon calculators and continue to monitor global industry developments in the area of green production.

Recommendation 8: Monitor the implementation and impact of change in policy closely, including undertaking a follow-up Economic Impact Study.

The success and impact of any policy change will be dependent on its design, implementation and then the communication of the reforms. There will also be external factors within the broader economy and global screen industry which will have an influence, including the increasing importance of Net Zero targets and the rise of Virtual Production. SPI recommends any change in the incentive policy be reviewed in depth two years after implementation to assess the wider economic effects of the design changes and overall effectiveness. Key metrics should include changes in incentivised production expenditure in total and across Norway, Gross Value-Added (GVA), output, FTE jobs supported, screen tourism and workforce and industrial development. The industry's experience of the change and confidence in Norway as a production hub will also be important.

12. APPENDIX 1 – FULL ECONOMIC METHODOLOGY AND RESULTS

12.1. Economic Impact Analysis (EIA) Methodology

This Study employs an Input-Output (I-O) approach to economic impact modelling. It uses estimated and forecast production expenditure data to drive a specially developed economic model. The model uses national data sources from Statistics Norway, the national statistics authority in Norway and from the OECD, to model the interconnections between the screen production industry and other industries and the relationships between key metrics including as output, GVA and FTE jobs.

The methodology is based on a large number of sector studies SPI has undertaken around the world and it is consistent with international best practice, including studies in the UK, many US states, New Zealand, Australian and within Europe.

12.1.1. Expenditure Data

Historical production expenditure data was provided by the NFI. Estimated future production spend has been based on underlying assumptions for each of the four scenarios. These have been informed by the past pattern of applications, wider industry research, consultations and an industry survey.

12.1.2. Key Data Sets and Sources

The underlying assumptions within the economic model have been primarily informed by data within Norway Statistics' Input-Output model (part of Norway's National Accounts). The data is drawn from the 2020 Input-Output model. Alongside this, SPI has drawn assumptions underpinning the estimates of associated tax income from the OECD (see further detail in chapter 12.1.3).

The ratios are sector specific where derived. This encapsulates 'motion picture, video and television programme production activities, sound recording and music publishing' (sector classification 59) and 'Programming and broadcasting services' (sector classification 60).

12.1.3. Input-Output Methodology

This study employs an Input-Output (I-O) approach to economic impact modelling. This uses national data sources to build a picture of the interconnections between the film and television production industry and other industries, and the relationships between key metrics such as output, GVA and jobs.

I-O determines the total economic impact of a particular investment or activity. This total is the sum of the direct, indirect, and induced effects.

Across all areas, the I-O analysis produces multipliers which allow SPI to assess the impact of spending associated with the motion picture and video industries sector, reflecting the three phases of economic activity in a standard impact study:

Estimating direct impacts

Direct output is equivalent to production expenditure. This model uses the relationship between output and GVA that has been derived from the Norway I-O tables for the relevant sector. This has been derived by setting value added against output for the relevant sector (as noted above – at basic prices).

The ratio of direct GVA to direct output that has been used in this analysis is on average c0.403.

Calculating indirect and induced effects

The Norway I-O tables also include a matrix of coefficients which are used to derive the Leontief inverse for each sector, from which sector specific multipliers can be derived. From these SPI can calculate type I (indirect) and type II (direct + induced + induced) output multipliers (Table 10). Note that the model uses the same multiplier assumptions for both output, GVA and employment.

Table 10 Derived Multipliers - Average (2020 I-O)

	Type I	Type II
Output	1.661	2.176

To estimate the tax impact of the scenario-based production spend SPI has used data derived from the OECD.[62] SPI has used the 3-year average in Norway of overall tax revenue as a % of output (GDP). The 3-year average encapsulates the period 2018-2019 and 2021. It excludes 2020 given the specific impact of COVID-19 on the economy (and associated tax take) in that year.

The ratio of tax income output that has been used in this analysis is on average 0.178. The Norway I-O tables include data on sector-specific tax on production ('taxes less subsidies on products' and 'other net taxes on production'). However, these are considered on a net tax basis (i.e., they already take into account subsidies within the sector, including the incentive scheme under consideration through this work). They do not include wider tax flows as a result of economic activity e.g., income taxes.

Therefore, SPI has utilised data from the OECD on total tax as a proportion of output, which also includes income as well as production-based taxes. SPI recognise that this is a relatively wide definition of tax income, but it is consistent with the approach taken in other studies.

12.1.4. Other Variables

In addition to the multipliers, the economic model also utilises key ratios and relationships that estimate GVA and FTE jobs from direct output (production spend).

These jobs, and those presented in the economic impact chapter (chapter 5), are annualised jobs which account for the short-term nature of some of the employment in film and television production sector. For example, a three-month contract would be counted as 0.25 jobs. This enables comparison to other industries on a more consistent basis.

It is standard practice in studies like this to estimate the full-time equivalent (FTE) job impact. This accounts for the extent of part-time workers within the total workforce allows comparison across sectors. SPI used statistics from Norway Statistics to calculate the FTE jobs figure from the employment headcount – specific to the wider sector.[63] The adjustment made is that FTE equates to 94% of employment headcount.

12.1.5. Deadweight and Additionality

Additionality is assessed by setting each of the incentive-based scenarios against the do-nothing assumption – effectively represented as Scenario 2 'No incentive'. This assumes that some production spend will occur in Norway even without an incentive scheme being in place. This is called the deadweight. The economic impact estimates for each scenario are set out in gross terms, i.e., the total footprint of the particular scenario – to enable comparison between the scenarios, including scenario 2. The only indicator where the deadweight is accounted for the RoI figure where RoI for scenarios 1, 3 and 4 are calculated by netting off the GVA supported under scenario 2.

[62] OECD Stats: Accessible at: https://stats.oecd.org/index.aspx?DataSetCode=REV
[63] This data is taken employment by broad division. Therefore, this relates to broader 58-63 Information and Communication – in which the motion picture sector sits within.

12.1.6. Return on Investment (RoI)

The GVA RoI measure aligns with the economic development objectives of the incentive. The economic return on investment (RoI) compares the net cost of the incentive (total incentive net of direct tax receipts) with the GVA impact. To reiterate, this is based on the 'net' impact (i.e., taking account of the deadweight as represented from the 'no incentive' scenario) and therefore is only included for scenarios 1, 3 and 4, as scenario 2 is the deadweight.

12.1.7. General Limitations of Input-Output Approach

Input-Output Analysis is a commonly used method of establishing the economic contribution or economic impact of a particular firm, investment, or wider sector. It is used around the world by government and the private sector to communicate the significance of a sector and the effect of investments and policies. SPI's approach to undertaking economic impact studies is aligned to international best practice.[64]

As with all modelling approaches, there are limitations to the approach. Specifically Input-Output Analysis makes the following assumptions:

- **No supply constraints.** I-O assumes there are no restrictions on inputs, raw materials, and employment. This means that modelling a change in the industry, needs to be undertaken sensitively given this assumption might not hold. In this study SPI has identified potential supply constraints and indicated where action is necessary to mitigate these.
- **The model is not dynamic.** There are no embedded feedback loops or price effects dampening demand. I-O does not account for the counteracting or balancing effects of a change being offset or counter acted by a change in another industry.
- **Constant returns to scale**. The same quantity of inputs is needed per unit of output, regardless of the level of production.
- **Input structure is fixed**. It is assumed that changes in the economy will affect the level of inputs and outputs but not the mix.

12.2. Economic Impact Analysis (EIA) Results

[64] For example, *Evaluating the effectiveness of state film tax credit programs: Issues that need to be considered.* Ernst & Young, 2012. Accessible at: https://deadline.com/wp-content/uploads/2012/05/motion-picture-assoc-film-credit-study__120510071748.pdf

Table 11 – Summary Table of Economics Impact Analysis (EIA) Results

Output	Scenario 1	2024	2025	2026	2027	2028	2029	Total 2024-2029 (6 years)
	Direct	240	240	240	240	240	240	1,460
	Indirect	160	160	160	160	160	160	960
	Induced	130	130	130	130	130	130	750
	Total	530	530	530	530	530	530	3,170
	Scenario 2							
	Direct	20	20	20	20	20	20	110
	Indirect	10	10	10	10	10	10	80
	Induced	10	10	10	10	10	10	60
	Total	40	40	40	40	40	40	250
	Scenario 3							
	Direct	400	400	600	800	900	1,000	4,100
	Indirect	260	260	400	530	590	660	2,710
	Induced	210	210	310	410	460	520	2,110
	Total	870	870	1,310	1,740	1,960	2,180	8,920
	Scenario 4							
	Direct	400	400	800	1,000	1,200	1,400	5,200
	Indirect	260	260	530	660	790	920	3,430
	Induced	210	210	410	520	620	720	2,680
	Total	870	870	1,740	2,180	2,610	3,050	11,310
GVA	**Scenario 1**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**Total 2024-2029 (6 years)**
	Direct	100	100	100	100	100	100	590
	Indirect	60	60	60	60	60	60	390
	Induced	50	50	50	50	50	50	300
	Total	210	210	210	210	210	210	1,280
	Scenario 2							
	Direct	10	10	10	10	10	10	50
	Indirect	10	10	10	10	10	10	30
	Induced	-	-	-	-	-	-	20
	Total	20	20	20	20	20	20	100
	Scenario 3							
	Direct	160	160	240	320	360	400	1,650
	Indirect	110	110	160	210	240	270	1,090
	Induced	80	80	120	170	190	210	850
	Total	350	350	530	700	790	880	3,600
	Scenario 4							
	Direct	70	160	320	400	480	560	2,010
	Indirect	50	110	210	270	320	370	1,330
	Induced	40	80	170	210	250	290	1,030
	Total	160	350	700	880	1,050	1,230	4,370
FTE Jobs	**Scenario 1**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**Jobs in 2029**
	Direct	150	150	150	150	150	150	150
	Indirect	100	100	100	100	100	100	100
	Induced	80	80	80	80	80	80	80
	Total	320	320	320	320	320	320	320
	Scenario 2							
	Direct	10	10	10	10	10	10	10
	Indirect	10	10	10	10	10	10	10
	Induced	10	10	10	10	10	10	10
	Total	30	30	30	30	30	30	30
	Scenario 3							
	Direct	240	240	360	490	550	610	610
	Indirect	160	160	240	320	360	400	400
	Induced	130	130	190	250	280	310	310
	Total	530	530	790	1,060	1,190	1,320	1,320
	Scenario 4							
	Direct	240	240	490	610	730	850	850
	Indirect	160	160	320	400	480	560	560
	Induced	130	130	250	310	380	440	440
	Total	530	530	1,060	1,320	1,590	1,850	1,850

12.3. Cost-Benefit Analysis - Key Conceptual Considerations

Opportunity Costs

Opportunity costs are 'the value which reflects the best alternative use a good or service could be put to'.[65] Effectively this measures the cost of choosing one course of action over another and reflects the fact that investing in the incentive means that public funds are not available to spend on alternative resources. Implicitly the concept assumes that the alternative use of such public funds would also provide a benefit to the wider economy. Practically, it can be difficult to include in an assessment. In Norway, this tends to be framed as the 'tax wedge cost' (also called the 'deadweight cost of taxation') which is the loss to utility from taxation. This is estimated to be 20%. This implies that for each NOK 1 paid out through the incentive, costs NOK 1.20 to society.

Cost of Labour Substitution

There needs to be an adjustment that reduces some of the labour (wage) benefits because there is very limited surplus labour; meaning that new activity in one part of the economy transfers resources from another – a labour substitution effect.

SPI understands the Norwegian labour market is very tight, which would imply a high rate of labour substitution. SPI's assumes labour substitution would be 100% and therefore all the labour market (wage) effects will be entirely discounted (i.e. not included in the CBA). It may be argued that the international nature of the film industry means that it is normal for the workforce to travel internationally for contracts, however the effect of people and jobs moving abroad is out of scope for this analysis which is concerned only with costs and benefits within the national border.

Deadweight / Additionality

Deadweight aims to estimate the activities that would have happened in the absence of the incentive. Practically, in economic impact studies, this means that the overall benefits are adjusted downwards because some of the productions would have taken place without the government support. Production that would not have happened without the incentive is the 'additional' activity. In the CBA the issue of deadweight is covered by the 'no incentive' scenario which assumes no incentive is available.

Obtaining accurate deadweight figures for screen incentives is challenging. It is not possible to do a meaningful comparison with a territory without an incentive, as most of the comparable jurisdictions around the world have incentives already. The standard method of using a control group is generally not viable due to the largely automatic nature of many of the incentives. However, in Norway, the selective nature of the existing incentive may provide an opportunity for some consultation or a survey with unsuccessful applicants. One 'policy-off' comparison could be the pattern of production in Norway prior to the policy being introduced in 2014, which is covered in chapter 3.

The final way to assess deadweight/additionality is through a survey of stakeholders. Although this is imperfect (as there is no incentive for producers to give accurate estimates), it provides the best possible evidence in this case. SPI undertook a quantitative survey and qualitative interviews with stakeholders to explore additionality and inform the expenditure scenarios in chapter 3.

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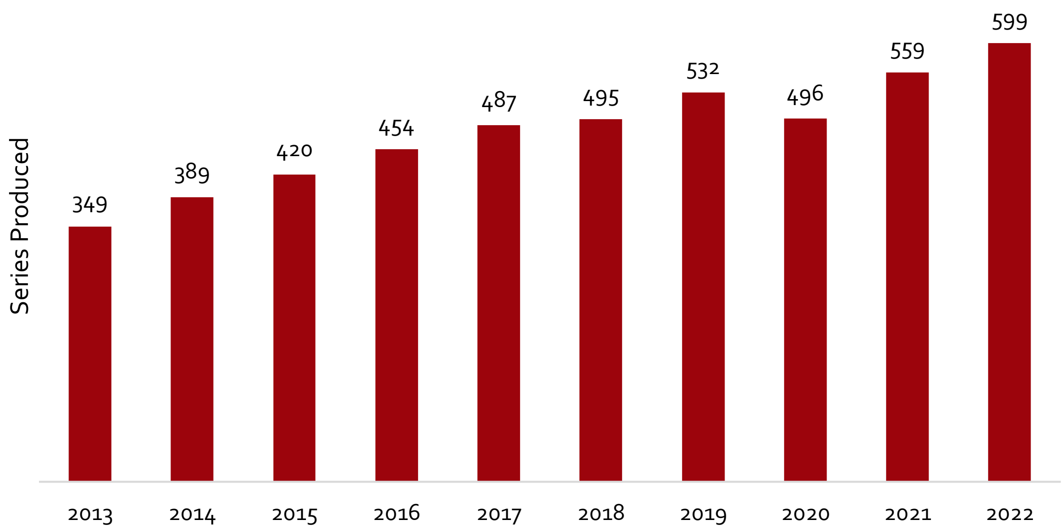
[65] *Green Book*. UK Government HMRC, 2022. Accessible at: https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020#:~:text=The%20Green%20Book%20is%20guidance,before%2C%20during%20and%20after%20implementation.

13. APPENDIX 2 – THE GLOBAL SCREEN PRODUCTION DELUGE

Globally, investment in film and television production has been at unprecedented levels in recent years, with a global 'deluge' of film and television production driven by demand for all types of content from consumers and investors alike – which include newer entrants such as the streamers, as well as established broadcasters and US studios. Global production spend reached a record level of US$177 billion in 2019,[66] and whilst this was disrupted due to COVID-19 restrictions on travel and trade, many of the world's major markets have already recovered and surpassed record levels.

Much of the growth has been within television series production (Figure 31). Note the 2020 dip in series production related to COVID-19 restrictions that limited the rate of production. Feature film production has also been gradually increasing (Figure 32).

Figure 31 – Scripted Original Series Production in the US, 2012 – 2021

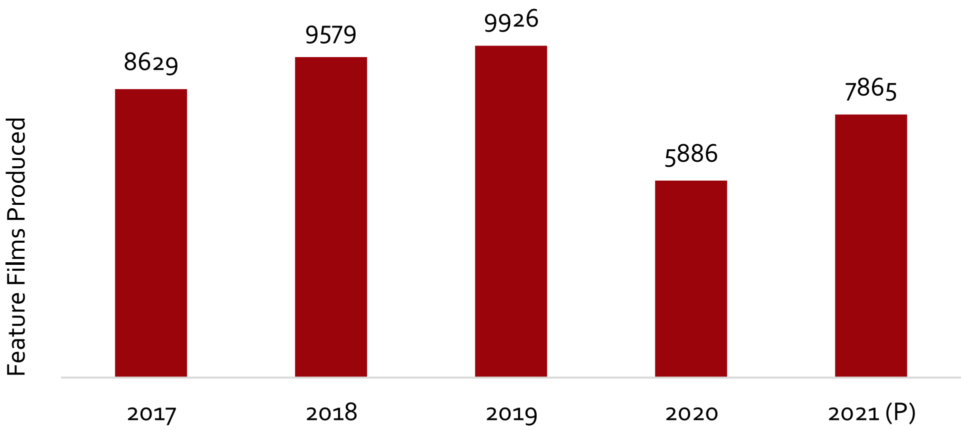


Source: FX Networks Research (2022)[67]

[66] *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19*. Olsberg•SPI, 25th June 2021. Accessible at: https://www.o-spi.com/projects/economic-impact-studies-research-and-evaluation-lyglh

[67] *Peak TV Tally: According to FX Research, A Record 559 Original Scripted Series Aired in 2021*. Variety, 14th January 2022. Accessible at: https://variety.com/2022/tv/news/original-tv-series-tally-2021-1235154979/

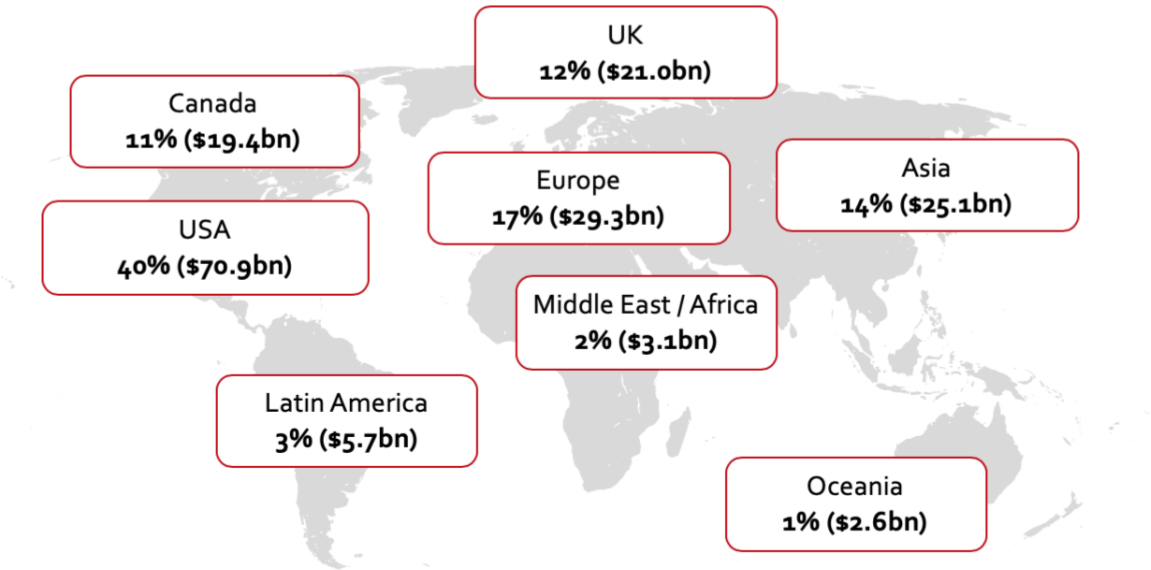
Figure 32 – Worldwide Feature Film Production, 2017 – 2021



Source: European Audiovisual Observatory

Subscription OTT services and streaming companies have been the main driver of investment growth, with spend reaching nearly US$50 billion of investment in 2021. Netflix continues to dominate SVoD content investment, spending $16.8 billion on content last year, however, other newer, well capitalised players have rapidly increased spend since entering the market. Amazon Prime Video, Discovery+, Apple TV+, Disney+, HBO Max, Peacock, and Paramount+ are all streaming services created by tech giants or legacy media companies in recent years. These newer entrants now account for over half of the volume of original content made, and collectively saw a nearly sixfold increase in volume between 2019 and 2022.[68]

Whilst much of global production investment originates in the US (65%), a large percentage of where the investment gets spent is spread across non-US regions, amounting to 60% of total expenditure investment.



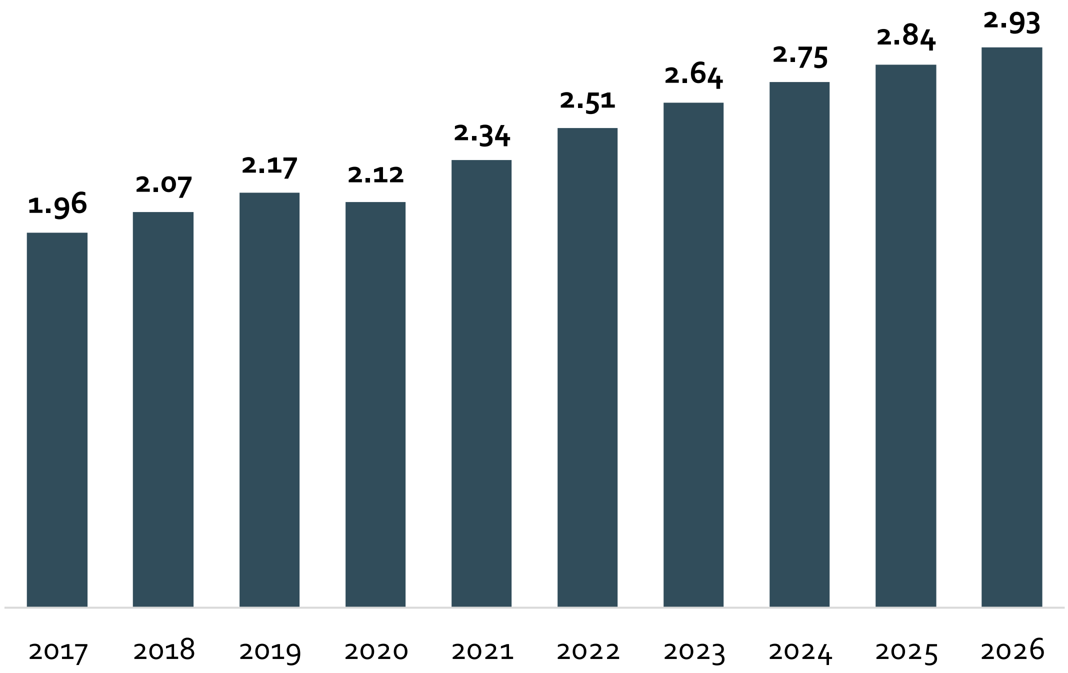
Source: Olsberg•SPI

According to PwC data, the broader global entertainment and media space is set for strong continued growth over the coming years, with a compound annual growth rate (CAGR) of 4.6%

[68] Content Spending Levels at Top Media Companies: 2023 Forecast. Variety, November 25th, 2022

in revenues between 2021 and 2026: "The vast entertainment and media complex is growing more rapidly than the global economy as a whole. With each passing year, more people around the world are spending more of their time, attention and money on the complex and increasingly immersive entertainment and media experiences that are available to them."[69]

Figure 33 – Global Entertainment and Media Revenues, 2017-2026 ($ trillions)



Source: pwc, Omdia.
Note: 2021 is the latest available data. 2022–2026 values are forecasts

[69] *Perspectives from the Global Entertainment & Media Outlook 2022–2026.* PwC, 2022. Accessible at: https://www.pwc.com/gx/en/industries/tmt/media/outlook/outlook-perspectives.html

14. APPENDIX 3 – BIBLIOGRAPHY

- *'Beforeigners" Anne Bjornstad on HBO's First Norwegian Original Series*. Variety, 23rd August 2019. https://variety.com/2019/film/festivals/beforeigners-anne-bjornstad-hbo-first-norwegian-original-series-1203310317/
- *'Cleaning Lady,' Netflix, Other Big Players Keep New Mexico Production on Growth Curve*. Variety, 29th November 2022. https://variety.com/2022/film/spotlight/new-mexico-1235444573/
- *'HBO Europe's Sami Western 'Welcome to Utmark' as Broken Down by Writer Kim Fupz Aakeson.* Variety, 1st February 2021. Accessible at: https://variety.com/2021/tv/festivals/hbo-europe-sami-western-welcome-to-utmark-kim-fupz-aakeson-1234897285/
- *'Troll' Becomes Netflix's Most Popular Non-English Film.* Variety, 14th December 2022. Accessible at: https://variety.com/2022/global/global/troll-netflix-most-popular-non-english-film-1235460963/
- *"For en neve dollar mer" Eni evaluering av den statlige støtten til regionale filmfond. Ryssevik*, 2011, Justin and Turid Vaage. Accessible at: https://www.ideas2evidence.com/nb/publications/evaluering-av-regionale-filmfond
- *A Case Study on the Public Value of Online Public Access to Film Heritage*. BFI 2017. Accessible at: https://www.academia.edu/44952922/The_Value_of_Digital_Culture_A_case_study_on_the_public_value_of_online_public_access_to_film_heritage
- *A Case Study on the Public Value Online Public Access to Film Heritage,* Accessible at: https://www.bfi.org.uk/industry-data-insights/reports/britain-film-impact-study
- *Accounting of Culture: A Social Cost Benefit Analysis of the Stan Rogers Folk Festival,* Accessible at: https://socialvalueuk.org/report/accounting-culture-social-cost-benefit-analysis-stan-rogers-folk-festival/
- Albert. Accessible at: https://wearealbert.org/
- *California Film and Television Tax Credit Program 2.0 An Economic Impact Study*, Accessible at: https://deadline.com/wp-content/uploads/2022/03/LAEDC-Report_CA-Film-TV-Tax-Credit-Program-2.0_FINAL_2022.03.14-1.pdf
- *Concept Study on the Modernization of Archive Maintenance and Transfer to Archive Deposit*, Accessible at: https://www.arkivverket.no/arkivutvikling/ressurser/rapporter-om-arkiv/_/attachment/download/cdfd547f-36d1-4907-9181-ccf370411ab2:c54ae59dffa5df4a00b044875ac8dbf62bc2ab0b/MAVOD_hovedrapport_Arkivverket_2017-kopi.pdf
- *Content Spending Levels at Top Media Companies: 2023 Forecast*. Variety, 25th November 2022. Accessible at: https://variety.com/vip/content-spending-levels-at-top-media-companies-2023-forecast-1235440145/
- *Cost–Benefit Analysis in the Evaluation of Cultural Heritage Project Funding*. Institute for Development and International Relations, 2021. Accessible at: https://www.mdpi.com/1911-8074/14/10/466
- *Creative Accounting? Assessing the Economic Impact of the Creative Industries: An Input- Output Approach for the Cardiff City-Region*. Matthews, 2022. Accessible at: https://orca.cardiff.ac.uk/id/eprint/149481/
- *DCMS Rapid Evidence Assessment: Culture and Heritage Valuation Studies - Technical Report*. DCMS, 2022. Accessible at: https://www.gov.uk/government/publications/rapid-evidence-assessment-culture-and-heritage-valuation-studies

- *Evaluating the Effectiveness of State Film Tax Credit Programs*. Ernst & Young, 2012. Accessible at: https://deadline.com/wp-content/uploads/2012/05/motion-picture-assoc-film-credit-study__120510071748.pdf
- *Evaluating the New Zealand Screen Production*. Grant Sapere, 2018. Accessible at: https://www.srgexpert.com/wp-content/uploads/2018/06/Evaluating-the-NZ-Screen-Production-Grant-Final-June-2018.pdf
- *Film as cultural diplomacy: South Korea's nation branding through Parasite*. Seow Ting Lee, 2019
- *Film Tourism in Norway – The Effect Fictional Characters Have on Tourism*. Metcalf, 2018
- *Film Destination Northern Norway*. Antonsen, 2022
- *Global Incentives Index 2022*. Olsberg•SPI, November 2022. Accessible at: https://static1.squarespace.com/static/5f7708077cf66e15c7de89ee/t/63615f3126bb65501aa1b2a4/1667325769870/Global+Incentives+Index+2022-11-01.pdf
- *Global Ireland: Ireland's Global Footprint to 2025*. Government of Ireland, June 2018. Accessible at: https://www.gov.ie/en/campaigns/globalireland/
- *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19.* Olsberg•SPI, 25th June 2021. Accessible at: https://www.o-spi.com/projects/economic-impact-studies-research-and-evaluation-ly9lh
- *Green Book*. UK Government HMRC, 2022
- *Green Production Guide*. Accessible at: https://www.greenproductionguide.com/
- *Guidance Notes on the Instructions for Official Studies.* Norwegian Government Agency for Financial Management, 2018. Accessible at: https://dfo.no/sites/default/files/fagområder/Utredningsinstruksen/Guidance_Notes_on_the_Instructions_for_Official_Studies.pdf
- *How Europe is addressing skills shortages to keep up with the production boom*. Screen Daily, 2nd April 2019. Accessible at: https://www.screendaily.com/features/how-europe-is-addressing-skills-shortages-to-keep-up-with-the-production-boom/5138054.article
- *How to quantify the public benefit of your museum using Economic Value estimates A Resource for Understanding the Economic Value of Museums*. UK Arts Council
- Investigation of incentive schemes for film and TV production. Norwegian Ministry of Culture, 2014. Accessible at: https://www.regjeringen.no/no/dokumenter/Utredning-av-insentivordninger-for-film--og-TV-produksjon/id757435/
- *Investigation of incentive schemes for film and TV production*. Oslo Economics, 10th April 2014. Accessible at: https://www.regjeringen.no/no/dokumenter/Utredning-av-insentivordninger-for-film--og-TV-produksjon/id757435/
- *Irish Public Service Broadcasting: A Contingent Valuation Analysis*. Dublin: Economic and Social Research Institute,2004. Accessible at: http://www.tara.tcd.ie/handle/2262/60047
- *Louisiana Motion Picture, Sound Recording and Digital Media Industries*. Economics Research Associates, 2009. Accessible at: https://www.opportunitylouisiana.com/docs/default-source/Performance-Reporting/era_entertainment_report.pdf?sfvrsn=cfa7d405_2
- *Net Zero + Nature: Our Commitment to the Environment*. Netflix, 30th March 2021. Accessible at: https://about.netflix.com/en/news/net-zero-nature-our-climate-commitment
- *Norway's National Plan related to the Decision of the EEA Joint Committee*. Norwegian Ministry of Climate and Environment, 25th October 2019. Accessible at:

https://www.regjeringen.no/en/dokumenter/norways-national-plan-related-to-the-decision-of-the-eea-joint-commitee-no-269-2019-of-26-october-2019/id2684252/

- OECD Stats: Accessible at: https://stats.oecd.org/index.aspx?DataSetCode=REV
- *Peak TV Tally: According to FX Research, A Record 559 Original Scripted Series Aired in 2021.* Variety, 14th January 2022. Accessible at: https://variety.com/2022/tv/news/original-tv-series-tally-2021-1235154979/
- *Perspectives from the Global Entertainment & Media Outlook 2022–2026*. PwC, 13th June 2022 Accessible at: https://www.pwc.com/gx/en/industries/tmt/media/outlook/outlook-perspectives.html
- *Point of view – Jan Grund: Trust and social economy*. Dagens Perspektiv, February 2014
- *Public Spending Code: A Guide to Economic Appraisal: Carrying Out a Cost Benefit Analysis*, Accessible at: https://www.gov.ie/en/publication/public-spending-code/
- *Public Spending Code: Central Technical References and Economic Appraisal Parameters*, Accessible at: https://www.gov.ie/en/publication/public-spending-code/
- *Quality assurance of applications for state guarantees and subsidies for ol/Pl*, Accessible at: https://www.regjeringen.no/no/dokumenter/rapport-kvalitetssikring-av-soknad-om-st/id748432/
- *Quantifying and Valuing the Wellbeing Impacts of Culture and Sport*. UK Department for Culture and Sport, 2014. Accessible at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/304899/Quantifying_and_valuing_the_wellbeing_impacts_of_sport_and_culture.pdf
- *Quantifying Film and Television Tourism in England.* Olsberg SPI, *2015*. Accessible at: https://www.o-spi.com/projects/blog-post-three-m3jd2
- *Regulations on financial incentives for the production of international films and series in Norway.* Norwegian Film Institute, 18th June 2021. Accessible at: https://www.nfi.no/eng/grantsfunding/the-incentive-scheme/_/attachment/download/d837a9fa-d958-4455-ab2d-2201f7e9562a:b515201ea3807e2d85f657464b5ed2e552feb8fb/Regulations%20on%20financial%20incentives%20Norway%20(1).pdf
- *Report on Tax Expenditures Incorporating outcomes of certain Tax Expenditure & Tax Related Reviews Completed since October 2017*, Accessible at: https://www.gov.ie/en/collection/df7d1-budget-2019/#budget-2019
- *Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2017*, Accessible at: https://www.mass.gov/doc/dor-report-on-the-impact-of-massachusetts-film-industry-tax-incentives-through-calendar-year-2017/download
- *Review IV: Cost Benefit Analysis of Section 481 of the Taxes Consolidation Act 1997 – Film Corporation Tax Credit*. Accessible at: https://www.screenproducersireland.com/resources/policy-and-research/cost-benefit-analysis-s481-2018.pdf
- *Ripple Effects of the Norwegian Incentive Scheme.* Roland Consulting, 2022
- *Supervisor in Socio-Economic Analyses,* Accessible at: https://dfo.no/sites/default/files/fagomr%C3%A5der/Utredninger/Veileder-i-samfunnsokonomiske-analyser.pdf
- *Sweden fishes out SEK 100 million in first round of 25% cash rebate*. Nordisk Film & TV Fond, 10th November 2022. Accessible at: https://nordiskfilmogtvfond.com/news/stories/sweden-dishes-out-sek100-million-in-first-round-of-audiovisual-production-rebates (accessed 15 February 2023)

- *The Appeal of Korea*. Blythe Worthy, Steve Choe, Sangjoon Lee, Benjamin Nickl, Emma Rayward and Lee Sung-Ae, 2020
- *The Cultural Dividend Generated by Ireland's Section 481 Film and Television Incentive*. Olsberg SPI, January 2023. Accessible at: https://www.o-spi.com/projects/ireland-incentive-impact-study-cultural-dividend
- *The Economic and Fiscal Impacts of Connecticut's Film Tax Credit*, Accessible at: https://www.remi.com/wp-content/uploads/2018/01/179-CT-DECD-Film-Tax-Credit-FEB-2008.pdf
- *The Economic Value of Culture: A Benefit Transfer Study*, Accessible at: https://www.gov.uk/government/publications/the-economic-value-of-culture-a-benefit-transfer-study
- *The European Capital of Culture: A review of the academic evidence*, Accessible at: https://pec.ac.uk/discussion-papers/the-european-capital-of-culture-a-review-of-the-academic-evidence
- *The first Kvarner film meetings: HAVC proposes strengthening the Incentive Program in favor of domestic production; MKiM welcomes the idea*. Croatian Audiovisual Centre, 4th April 2022. Accessible at: https://havc.hr/infocentar/novosti/prvi-kvarnerski-filmski-susreti-havc-predlaze-osnazivanje-programa-poticaja-u-korist-domace-proizvodnje-mkim-pozdravlja-ideju
- *The Fjord, the City and the Opera An Evaluation of Bjørvika Urban Development*, Accessible at: https://www.ntnu.no/documents/1261860271/1262010703/116312_Nr28_ENG_WEB.PDF
- *The Green Book Central Government Guidance on Appraisal and Evaluation*, Accessible at: https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent
- *The Green Industrial Initiative.* Norwegian Ministry of Trade, Industry and Fisheries, 7th September 2022. Accessible at: https://www.regjeringen.no/en/dokumenter/roadmap-the-green-industrial-initiative/id2920286/
- *The Korean Wave*. Jin, D. Y, May 26th, 2020. Accessible at: https://www.gjia.georgetown.edu/2020/05/26/the-korean-wave/
- *The storytellers – Ambitions, finances, and structures in the northern Norwegian film industry*. Business School of UiT, January 2021.
- *Urban Sustainability and Rural Strength.* Norwegian Ministry of Local Government and Modernisation, 2017. Accessible at: https://www.regjeringen.no/contentassets/d15e0f19e7d9439ea5c1b08ba888bdd1/en-gb/pdfs/stm201620170018000engpdfs.pdf
- *Utredning av oppgave- og ansvarsfordelingen mellom forvaltningsnivåene på kulturområdet* (KUD-rapport V-1006 B, 2018). Government of Norway 23rd November 2018. Accessible at: https://www.regjeringen.no/no/dokumenter/utredning-av-oppgave--og-ansvarsfordelingen-mellom-forvaltningsnivaene-pa-kulturomradet/id2619838/

15. APPENDIX 4 – ABOUT OLSBERG•SPI AND OUR CREDENTIALS

15.1. Company Profile

Olsberg•SPI ("**SPI**") is an international creative industries consultancy, specialising in the global screen sector.

SPI provides a range of expert consultancy and strategic advisory services to public and private sector clients in the worlds of film, television, video games and digital media. Formed in 1992, it has become one of the leading international consultancies in these dynamic creative screen industries.

The firm's expert advice, trusted vision and proven track record create high levels of new and repeat business from a diverse group of companies and organisations, including:

- National governments, including culture and economics ministries
- National film institutes and screen agencies l Regional and city development agencies and local authorities
- Multi-national cultural funds and authorities
- National and regional tourism agencies
- Established studios and streamers
- Independent companies at all points of the screen business value chain
- National and international broadcasters
- Trade associations and guilds
- Training and skills development organisations
- Publishers and conference organisers.

With expertise in all areas of the fast-moving global creative sector, SPI offers a wide range of services, including:

- Analysis and strategic advice for building healthy and sustainable national and regional industries, and recommendations for public policies to support this
- Mapping and assessment of physical infrastructure, services, and workforce
- Delivering economic impact studies of whole sector activity or of incentives
- Advice on the creation of fiscal incentives for screen productions
- Helping businesses and governments interpret the strategic implications of digital media innovations
- Business development strategies for content companies
- Feasibility studies, marketing, and business strategies for small and large-scale studio facilities
- Evaluations of publicly funded investment schemes
- Acquisition and divestment advice for owners or managers of SMEs
- International cost comparisons for small and large film and television productions
- Strategic advice on inward investment and exports for national and regional public bodies
- Analysing and explaining the links between growth in tourism and a nation's film and television output
- Providing strategic advice for screen commissions, including business and marketing plans
- Keynote speakers at industry events.

Further information on SPI's work can be found at www.o-spi.com and within the SPI Company Brochure.

Please **contact Joshua Dedman** on joshua@o-spi.com for further information about this study.

15.2. Relevant Past SPI Studies

SPI has worked on many relevant assignments around the world. This chapter includes a small selection of the most relevant projects.

British Film Institute – Screen Business 2021

Published in late 2021, this report was an economic contribution study for the UK's screen sector tax reliefs. This ground-breaking and well-received analysis included a detailed breakdown of how the UK's five tax reliefs contribute to the wider economy, and an evaluation of the VFX sector outside the tax relief structures. This was an update of the 2015 and 2018 studies that SPI led. The earlier reports featuring forewords written by the then-Chancellor of the Exchequer (George Osborne in 2015 and Philip Hammond in 2018) and the latest is by Rishi Sunak. Download the report here.

New Zealand Film Commission – Economic Impact Study

In mid-2022, SPI delivered a comprehensive and independent assessment of the economic impact of the New Zealand Screen Production Sector and the New Zealand Screen Production Grant. The Study assessed the contribution of the New Zealand production sector to the economy in terms of jobs and Gross Value Added, and considered the impact and return on investment of the Grant, estimating the production activity it attracts to the country and the domestic production activity it supports. Download the report here.

Ministry of Culture, Ireland – Economic Impact Analysis and Strategic Development of the Audiovisual Sector in Ireland

SPI delivered a substantial analysis of the economic impact of the audiovisual sector in Ireland (defined as film, television, and games), which included a wide-ranging strategic policy analysis to identify how to double the industry size over the following five years. This was built from a wide-range of industry consultations, desk research, and data analysis, and led the Irish government to enact a €200 million, 10-year plan for the growth of the sector, based on SPI's findings. Download the report here.

Norwegian Film Institute – Economic Impact of the Norwegian Film Incentive

SPI undertook in 2017 an evaluation of the Norwegian Film Incentive on behalf of the Norwegian Film Institute. This involved a deep, quantitative evaluation of the budgets for films receiving the incentive, allied with qualitative evaluation – through desk research and consultations – to provide strategic advice for the future of the Incentive, and best practice to market it. Download the report here.

Screen Australia – Measuring the Cultural Value of Australia's Screen Sector

This ground-breaking study assessed the cultural and audience value of the Australian film and television sector. It was launched at the Screen Forever conference in 2016 by Australia's Minister for the Arts, Mitch Fifield. The project underlined the wide range of cultural impacts which Australian screen content has generated over the last century, and their unique ability to inform domestic and international audiences about the nature of Australia as a country.

Screen Ireland – Cultural Dividend of the Screen Sector

Commissioned by Fís Éireann/Screen Ireland, SPI delivered an extensive study examining the cultural dividend generated by Ireland's Section 481 Film and Television Incentive. The first of its kind, the study examines the impact that the Section 481 film and television production incentive has delivered for Irish society, for audiences in Ireland and around the world, and for professionals working in the Irish creative screen industry. The cultural dividend is the collective value of the cultural impact and industry development impacts of Section 481. A wide range of research methods were employed, including surveys, focus groups and analysis of individual film and television case study projects – focusing on the period 2017 – 2021. Download the report here.

Royal Commission of AlUla – Incentive Design and Studio Study

For this growing region of Saudi Arabia, SPI was hired to develop a strategy for attracting incoming productions, include the comprehensive design of an automatic production incentive (cash rebate) system. The study also involved assessing the production infrastructure and advising on the creation of a news sound stage (studio) complex.

Denmark Vision – Analysis of Competitor Countries

In 2019 SPI was commissioned to provide an analysis of public funding to support film and TV production in eight European countries. It covers funding in Belgium, Denmark, France, Germany, Ireland, the Netherlands, Norway, and the UK, and assess the value of this both at a regional and a national level.

The Abu Dhabi Film Commission – Advice on Establishing a Fiscal Incentive

SPI undertook a feasibility study on the creation of a new production rebate incentive. The task included advising on the specific mechanics and processes of setting up and running the scheme, creating a cost/benefit analysis of the proposal as well as establishing a framework for evaluating the impact of the measures in future.

International Sámi Film Institute – Evidence Base and Strategic Planning

SPI is currently carrying out a research and advisory study for the International Sami Film Institute that provides in-depth and comprehensive evidence on the impact and potential of Sámi film and television production. Specifically, the Study involves building an evidence base for the economic, cultural, social, and strategic impacts created by Sámi screen productions. This report will act as an advocacy document to raise the profile of Sámi screen production and the ISFI among regional government and institutional stakeholders, as well as potential industry partners and commissioners, such as global streaming services.

Business Finland – Incentive Customer Needs Analysis

This study provided insights into customer needs and experience in relation to Finland and four comparison countries operating similar incentives including Norway. The study examined customer needs and experiences in each of the countries. It described how the incentive process in each function, and identified strengths and weaknesses in customer experience, as well as critical areas of customer need in relation to the specific incentive process. It also provided general best practice insights from the research into the needs of international producers when applying for incentives.

The European Audiovisual Observatory – Economic Impact Study of Fiscal Production Incentives in Europe

SPI wrote in 2015 a first of its kind, comparative economic impact analysis of Europe's fiscal incentives for the European Audiovisual Observatory. A key aspect of the study was assessing the impact of incentives on foreign investment, both from Europe and the rest of the world, as well as impacts on areas such as state budget, effects on the national audiovisual industry, employment, and other related benefits.

Netherlands Film Fund – Production Incentive Impact Study

In 2018, SPI undertook an analysis of the Netherlands Film Production Incentive, the country's main support mechanism for film and television drama. This study considered the effect of the incentive on the companies and talent operating in the Dutch production and post-production sectors and helped the Film Fund and the sector to contextualise the impacts of the scheme within wider changes that have occurred in the European production landscape.

Netflix Inc. – Global Production Policy and Investments

SPI has been retained since January 2019 by Netflix to advise on its international film production strategy in relation to public policy, regulation, and other instruments in the various countries around the world where it seeks to establish productions. This includes advice on production incentives, workforce and facilities capacity and provision. SPI provides and regularly updates for Netflix a comprehensive database of all the pertinent regulations and operations of the world's leading incentives.

Association of Film Commissioners International – Best Practice in Screen Sector Development

Undertaken for AFCI, this study highlighted a range of successful strategies and policies that have been implemented by established and emerging markets around the world in order to maximise their share of high-value production activity. It examined four areas that are critical in the attraction of international screen productions: automatic incentives; workforce capacity; capacity building in physical infrastructure and services; and film-friendly production environment. Download the report here.

Global Incentives Index – World of Locations

SPI compiles this detailed incentive guide for publication twice annually in Screen International's World of Locations magazine. The index provides detailed information on all national, state and province-level automatic incentives currently in operation. Download the latest edition here.

Motion Picture Association – Global Film Production Incentives White Paper

For the trade association of the major Studios in Hollywood, SPI published in June 2019 a report and commentary on the growth of the film production incentives landscape worldwide. With 97 such systems currently operational, the White Paper outlines how incentives work, and identifies key trends in their usage and formulation. It also looks at impacts created by selected schemes in certain jurisdictions, including across such metrics as production expenditure, additionality, and employment. Download the report here.

Film Commission Poland – New Incentive

SPI analysed the Polish production sector in order to identify the feasibility of introducing a new rebate structure. The report's recommendations were accepted by government and the incentive was introduced in early 2019.

UK's HM Treasury (HM Revenue and Customs) – Evaluation of the UK's Creative Industry Tax Reliefs

SPI is a member of the team (led by Ipsos and including London Economics) hired by HMRC to perform a regular evaluation of the UK's suite of Creative Industry Tax Reliefs – this will be finalised shortly.

Global Screen Production: The Impact of Film and Television Production on Economic Recovery from COVID-19

This major SPI study, published in June 2020, was the first of its kind to measure global expenditure and consequent economic impact of the screen production sector. It found that after several years of ground-breaking growth, spending on screen production reached $177 billion in 2019, driving total global economic impact of $414 billion. Screen production also drives employment across the screen value chain, with 14 million FTE jobs created in 2019. The study found that the impact of COVID-19 on production led to a loss of $145 billion in economic impact over the first six months of 2020. The economic research involved undertaking a meta-analysis of economic impact metrics across 47 separate global studies. Download the report here.

Various US States – Economic Impact of Tax Credits

SPI has carried out, or is currently undertaking, studies of the economic impact of several US States' tax credit programs, including Georgia, Ohio, Connecticut, New Mexico, and Utah. Download the New Mexico report here and Utah report here.

Australia and New Zealand Screen Association (ANZSA) – Economic Impact of the Federal Offsets

Completed in 2018, this comprehensive study analyses the economic impacts of the country's major incentives (Offsets) for domestic film and television productions, 'footloose' projects and postproduction and digital video work. SPI presented the results of the study, together with US Studio executives and the ANZSA, to legislators in Canberra in late March 2018.

16. APPENDIX 5 – ABOUT PROBA RESEARCH

Proba Research is a limited company delivering social science research and advice.

Proba Research was established in 1999, the main motivation being the conviction that science-based knowledge is crucial for the success of both private and government institutions.

Proba Research has broad experience from evaluations and other many other types of analyses, with a particularly strong competence in analysing labour markets, wage formation, education, and welfare policies. Furthermore, Proba Research employees have extensive experience with public sector governance, industrial and macroeconomic analysis, and public finance.

Further information on Proba Research and their work can be found at https://proba.no/.

17. APPENDIX 6 – ABOUT THE NORWEGIAN MINISTRY OF CULTURE AND EQUALITY

The Norwegian Ministry of Culture and Equality is responsible for matters relating to culture, equality and discrimination, the media (films, broadcasting, press and copyright), sports, gaming and lotteries and the voluntary sector.

The Department of Media and the Arts is responsible for the development of national policy relating to freedom of expression, print and digital media, gaming, copyright, film, computer games, music, cultural and creative industries, performing arts and artist support schemes. The department is responsible for legislation in these areas, direct funding of public and private institutions as well as grants schemes managed by public institutions.

The Norwegian Film Institute (NFI) is funded by the Ministry of Culture and Equality and the government's administrative and advisory body for film policy. The NFI manages several grants for the development, production, promotion and distribution of film and promotion of film as a cultural expression. The NFI also manages the Incentive Scheme for film and audiovisual productions.

The objective of the Incentive Scheme is to increase the number of international films and series produced in Norway to promote Norwegian culture, history and nature and improve the experience and skills of the Norwegian film industry, stimulate growth, promote a sustainable Norwegian film industry, and support international cooperation.

OLSBERG • SPI
The strategy consultancy for the creative industries

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